

THE COMMONWEALTH of LEARNING

Commonwealth Educational Media Centre for Asia





EDUCATIONAL BROADCASTING IN THE COMMONWEALTH

With Special Reference to Educational Television



Usha Vyasulu Reddi



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This document is a revised version of the paper circulated at the "International Round Table on Educational Broadcasting in the Commonwealth" held at New Delhi from 26-30, November 2001.

The opinions expressed in this document are those of the author and not necessarily that of the organization she belongs.

ACKNOWLEDGEMENTS

The author would like to acknowledge the contributions of the participants of the "International Round Table on Educational Broadcasting in the Commonwealth" held at New Delhi from *26-30*, November 2001 in the form of comments and deliberations. Mr. Greg Younger-Lewis, Intern at Commonwealth Educational Media Centre for Asia gathered the statistical data given in this document. A special thanks is due to Prof. P. R. Ramanjuam for going through the text and editing the language.

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Cover Design : Arindam Chatterjee, 9810790989

Printed at :

Graphic Shield, B-62/7, Naraina Indl. Area, Phase-II, New Delhi - 110 028 Published on behalf of the Commonwealth Educational Media Centre for Asia (CEMCA) by Dr. Usha V. Reddi, Director, CEMCA, New Delhi.

EDUCATIONAL BROADCASTING IN THE COMMONWEALTH

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1. INTRODUCTION

Media have always formed an important part of modern education since the beginning of the twentieth century. From print to radio, television, and today's Web-enabled elearning, each medium has been seen as a potential solution for the problems, inadequacies and certain ills of education. Invariably, the purpose of inducting media into education has been two-fold: to increase the reach and thereby access; and to enrich the quality of educational content. The birth of a new medium has not however, supplanted the previous one; since each has found its own niche. The growing importance of the print medium in the wake of a wide range of electronic/ digital media is a clear example of this.

The exponential growth of information and communication technologies in the second half of the twentieth century has given educators new opportunities to reconsider the way in which education can be delivered at the doorstep of the learner. As a result, these opportunities have given a new impetus to the discipline of educational communications⁽⁰⁾.

On a continuum of education technologies, educational broadcasting through radio and television is a natural precedent to today's information and communication technologies. Despite the world wide enchantment with the Internet and Web-based learning, radio and television media still retain the comparative advantage of being able to serve dispersed, isolated, and disadvantaged communities aspiring to overcome the barriers of illiteracy and physical distance in many countries.

For heuristic and discussion purposes, this backgrounder focuses on educational television, as opposed to radio. By no means does this exclusion imply that radio is less

 Romisziwski, A.J. (1981) Designing Instructional Systems: Decision Making in Course Planning and Curriculum Design, London: Kogan Page effective. The goal is to make space for a thorough examination of the topic. To do so, we proceed through a presentation of facts and figures, followed by an identification of different kinds of educational broadcasters, a presentation of case studies, and finally, to an overview of the issues and problems perceived by educational broadcasters in the Commonwealth.

A Definition of terms

Educational technology, used interchangeably with instructional technology is both a product and a process ⁽ⁱⁱ⁾. Educational broadcasting is part of the process.

Definitions of educational broadcasting are hazy. All broadcasting can meet some educational need; however, not all educational broadcasting can meet the information and entertainment functions of the media. Therefore, educational broadcasting meets specific objectives and needs, whether these are in the area of development related issues, basic education, or in support of specific educational content. The scope of educational broadcasting is general, targeted at broad audiences, meant to create awareness on issues of public interest, and provide enriching content. The nature of learning from media is thus broad-based, even incidental. Educational broadcasting comes in different, but predominantly, in documentary formats.

Within educational broadcasting is the realm of instructional broadcasting — programming that has: precisely defined target audiences: narrowly defined objectives; stated learning outcomes; target related format and treatment; and evaluation. Educational and instructional programming can exist side by side, or as part of each other.

Our definition of educational broadcasting includes programmes, activities and events that support the educational processes, whether they are of a formal or

(ii) Ibid.

non-formal kind. Educational broadcasting is closely related to the task of educational provision. Once the decision is made as to how the curriculum or course is designed and delivered, then, educational broadcasting programmes can be designed and delivered to support the curriculum. Since most programmes are initially produced in broadcast quality technical standards, the potential of telecasting exists, regardless of whether the programme is originally produced for telecast or not.

Educational broadcasting has been used by many Commonwealth nations as an instrument of state policy in an effort to educate citizens. To some extent, public broadcasters in the Commonwealth have traditionally "been given the mandate to produce programmes with informative, educative, and also entertaining content" (Wessberg: 1999:87), ⁽ⁱⁱⁱ⁾. a view echoed by Page and Crawley (2001:304)^(iv).

Throughout the Commonwealth, educational television has grown by leaps and bounds in the last quarter of the twentieth century, to an extent that every Commonwealth country now has both radio and television operating. However, in most of the countries, public broadcasting remains under government operation and control.

To place educational broadcasting within the context of national media systems in Commonwealth countries, let us look at some salient features of the educational and media systems.

2. BROADCASTING IN THE COMMONWEALTH

2.1 Educational and Media Statistics

From a voluntary organization of former British colonies, the Commonwealth has developed into a gathering of people of many different races and origins, encompassing every possible state of economic and social development, and a rich mosaic of cultures, traditions, and institutions.

Within the Commonwealth are nations of continental size such as Australia, Canada, and India, and some of the smallest island nations in the world, e.g. Saint Kitts and Nevis and Nauru. Population sizes and the densities show a similar diversity, as do linguistic, cultural, religious and ethnic compositions of the societies.

Table 1 shows the Commonwealth countries in terms of education. Adult literacy levels range from a near total literacy in New Zealand to countries with the largest number of illiterates in the world such as India. Public spending on education also shows such imbalances as the above. There are, again, countries such as United Kingdom, Australia, and India with established systems of education at primary, secondary, and tertiary levels and there are countries with few secondary schools and with no tertiary education at all. Commonwealth's mosaic includes some of the world's most powerful economies as well as some of the world's mosaic (Table 1)^(w).

Indices of media penetration include telephony, Internet and PCs, as well as the media such as radio and television. (Tables 2, 3, and 4) Every second person has access to telephones in countries such as Australia, Canada, New Zealand, and Britain while in countries such as Bangladesh

Wessberg, Arne (1999) "Public Service Broadcasting" in UNESCO, World Communication and Information Report, Paris: UNESCO

Page, David and Crawley, William (2001) Satellites Over South Asia: Broadcasting Culture and the Public Interest. New Delhi: Sage

⁽v) COL International (2000) Use of ICT for Distance Education, Annex A. Vancouver: The Commonwealth of Learning.

TABLE - 1 : EDUCATIONAL STATISTICS IN THE COMMONWEALTH

			L STATISTICS IN		1
Country	Adult Illiteracy (%) 1995-98, CW	Public Spending on education (% of GNP) 1996, WB	Gross enrollment ratio – Primary (% of relevant age group) 1996, WB/CW	ratio – Secondary	Gross enrollment ratio – Tertiary (% of relevant age group) 1996, WB/CW
Antigua & Barbuda	5	WD	1990, WD/CW	1990, WD/CW	1990, WD/GW
Antigua & Barbuua Australia	1	5.6	101	148	76
		5.0	94		70
Bahamas	2	2.0		90	
Bangladesh	62	2.9	78	19	6
Barbados	3	7.2	90	85	
Belize	30	6.1	121	49	
Botswana	30	10.4	108	65	6
Brunei Darussalam	10		110	78	
Cameroon	37	2.9	89	27	4
Canada	1	7.0	102	105	90
Cyprus	4	4.4	100	97	
Dominica	6		-	-	
Fiji	8	5.4	128	64	
Gambia	61	6	77	25	2
Ghana	35	3.3	77	37	1
Grenada	2				
Guyana	2	4.1	94	76	
India	48	3.4	100	49	7
Jamaica	15	7.4	100	-	8
	22	6.6	85		2
Kenya Kirih ati		0.0	65	24	Ζ
Kiribati	7		100	01	
Lesotho	29	7	108	31	2
Malawi	44	5.5	89	17	1
Malaysia	16	5.2	102	61	11
Maldives	4	8.4	134	49	
Malta	9	5.2	109	88	
Mauritius	17	4.3	107	65	7
Mozambique	60	-	60	7	1
Namibia	24	9.1	131	61	9
Nauru					
New Zealand	1	7.3	99	114	59
Nigeria	43	0.9	98	33	4
Pakistan	62	3	74	-	3
Papua New Guinea	28	-	80	14	3
Saint Kitts and Nevi		3.3			5
Saint Lucia	18	9.9			
Saint Vincent &	18	7.7			
The Grenadines	10				
	2		117	47	
Samoa		7 5	116	47	
Seychelles	12	7.5	Г1	17	
Sierra Leone	69	-	51	17	2
Singapore	9	3	101	67	39
Solomon Islands	38		97	17	
South Africa	18	7.9	131	94	19
Sri Lanka	10	3.4	109	75	5
Swaziland	23	8.1	122	52	
Tanzania	32	-	66	5	1
Tonga	1				
Trinidad & Tobago	2	9.7	98	74	8
Tuvalu	1				
Uganda	38	2.6	74	12	2
United Kingdom	1	5.4	115	133	50
Vanuatu	36	4.9	106	20	
Zambia	22	2.2	89	20	3
Zimbabwe	15		113	49	7
ZIIIINANMG	10	8.3	113	47	/

TABLE - 2 : COMMONWEALTH COUNTRIES-TELEPHONY

	1.	ABLE -	$\mathbf{z}:\mathbf{CON}$	AMONW	EALTH C	UUNIK	IES-IEL	EPHONI	[-
Country	Mainline	Mainline	Mainline	Mainline	Mainline	Mainline	Digitalisation	Telecom	Telecom	Telecom
	Telephones	Telephones	Telephones	Telephones	Telephones	Telephones	(%) 1998, ITU	Investment	Revnue	Investment
	(000's) 1998,	(000′s) 2000	CAGR (%)	per 100 inhab.	per 100 inhab	per 100 inhab		(US\$ Millions)	(US\$ Millions)	Revnue
	ITU	expected, ITU	1995-98, ITU	1998, ITU	2000, expected	CAGR (%)		1998, ITU	1998, ITU	Ratio
	_				1995-98, ITU			1770,110	1770,110	Katio
Antigua & Barbuda	34.0	40	9.5	46.8	59.16	6.4	100.0	-	-	
Australia	9,580.0	9,967	2.5	51.21	52.46	1.3	95.0	2,844.5	12,941.1	0.22
Bahamas	104.3	120	7.6	35.23	40.25	5.5	100.0	16.2	156.7	0.10
Bangladesh	378.0	454	9.7	0.3	0.34	7.7	66.8	34.5	255.8	0.13
Barbados	113.6	131	8.0	42.4	47.50	7.1	100.0	25.0	176.0	0.14
Belize	31.6	33	3.0	13.75	13.62	0.9	99.6	12.0	40.0	0.30
Botswana	85.6	142	19.8	5.64	7.11	17.4	100.0	36.8	82.7	0.44
Brunei Darussalam	77.7	87	4.5	24.68	28.26	1.0	100.0	-	58.7	
Cameroon	75.2	92	7.1	0.54	0.58	4.7	68.3	35.6	73.9	0.48
Canada	19,206.0	20,265	2.6	63.39	67.55	1.6	99.4	4,033.9	16,919.4	0.24
Cyprus	404.7	448	5.2	58.51	58.17	2.8	88.2	88.8	260.3	0.34
Dominica	18.7	26	5.3	25.23	33.28	4.5	100.0	-	-	
Fiji	77.1	88	6.0	9.68	10.79	4.8	99.7	10.8	61.9	0.17
Gambia	25.6	30	10.1	2.08	2.38	5.9	100.0	5.6	17.4	0.32
Ghana	144.2	245	31.7	0.75	1.22	26.8	70.0	7.3	145.9	0.05
Grenada	27.5	31	5.8	26.28	29.66	2.7	100.0	-	-	0.7
Guyana	59.9	70	10.3	7.05	7.87	9.5	100.0	53.6	79.7	0.67
India	21,593.7	32,061	21.7	2.2	3.16	19.4	99.0	2,405.1	5,051.1	0.48
Jamaica	419.4	708	19.9	16.57 0.92	23.61	<u>19.1</u> 4.7	100.0 56	133.9	427.7	0.31
Kenya Kiribati	271.8 2.8	<u>324</u> 3	3.0 11.4	3.46	1.08 3.98	10.3	100.0	70.9	310.8 3.5	0.23
Lesotho	2.0	23	4.1	0.97	1.02	3.6	99.0	0.8	13.8	0.43
Malawi	37.4	40	2.9	0.35	0.36	-0.3	58.8		32.8	0.00
Malaysia	4,384.0	5,424	9.6	19.76	24.66	6.0	97.0	2,188.9	2,492.1	0.88
Maldives	20.0	26	13.0	7.05	8.68	7.5	100.0	11.1	39.1	0.28
Malta	191.5	208	3.9	49.88	53.95	2.8	100.0	20.6	97.8	0.21
Mauritius	245.4	338	18.3	21.37	28.41	17.4	100.0	45.3	126.4	0.36
Mozambique	75.4	86	7.2	0.4	0.43	4.4	99.0	22.2	63.8	0.35
Namibia	113.9	145	13.2	6.86	7.27	10.7	98.0	49.0	82.1	0.60
Nauru										
New Zealand	1,868.0	1,983	2.8	47.91	49.57	0.4	100.0	302.0	1,838.5	0.16
Nigeria	412.8	531	1.9	0.4	0.41	0.9	42.5	188.4	771.2	0.24
Pakistan	2,757.0	3,384	9.0	1.94	2.29	5.9	92.6	311.4	978.6	0.32
Papua Navy Guinea	47.0	61	7.7	1.14	1.21	5.9	61.0	-	113.6	
New Guinea Saint Kitts	17.2	22	9.2	41.83	52.78	9.0	100.0	3.1	27.0	0.11
and Nevis	Ι/.Ζ	22	9.2	41.03	52.76	9.0	100.0	3.1	27.0	0.11
Saint Lucia	39.5	50	8.9	26.79	29.37	8.4	100.0			
Saint Vincent &	20.5	24	6.0	18.37	21.00	5.6	100.0			
The Grenadines	20.0		0.0	. 5.67	21.00	0.0				
Samoa	8.5	9	2.8	4.87	5.16	1.0	100.0	1.0	9.8	0.10
Seychelles	19.0	23	11.9	24.35	28.59	10.7	100.0	4.7	35.2	0.13
Sierra Leone	17.4	18	1.5	0.38	0.37	1.1	88.9	8.7	2.2	3.95
Singapore	1777.9	2,054	7.6	56.2	64.30	5.5	100.0	751.8	2,915.9	0.26
Solomon Islands	7.9	9	6.6	1.89	2.07	3.0	100.0	5.2	13.8	0.38
South Africa	5075.4	5,885	8.2	11.46	12.52	5.7	82.0	2,738.3	5,971.5	0.46
Sri Lanka	523.5	891	36.5	2.84	4.69	35.6	100.0	152.3	2,143.2	0.07
Swaziland	29.0	37	11.1	3.05	3.28	9.5	100.0	13.7	22.2	0.62
Tanzania	121.8	143	10.5	0.38	0.43	7.6	82.3	254.7	109.9	2.32
Tonga	7.8	11	17.7	7.9	11.03	17.2	84.0	1.2	5.3	0.23
Trinidad & Tobago	264.1	301	8.1	20.58	22.7	7.1	100.0	34.4	212.6	0.16
Tuvalu							90.6			
Uganda	56.9	78	13.5	0.28	0.35	11.1	100.0	2.0	32.8	0.06
U. K.	32.800.0	35,275	3.7	55.64	59.79	3.5	100.0	7,453.7	36,990.9	0.20
Vanuatu	5.2	6	7.0	2.84	2.93	4.5	73.1	-	-	
Zambia	77.7	77	0.4	0.88	0.77	-2.3	50.0	10.8	102.0	0.11
Zimbabwe	212.0	309	17.9	1.72	2.58	11.6		130.0	135.6	0.96

TABLE - 3 : COMMONWEALTH COUNTRIES - INTERNET and PCs

Country	PCs (000's) 1998, ITU	PCs per 100 inhab 1998, ITU	PC CAGR, (%) 1995-98, Derived	Internet Users (000's) 1998, ITU	Internet Users per 100 inhab 1998, Derived	Internet Users CAGR (%) 1995-98, Derived	Internet Hosts 1998, ITU	Internet Hosts per 100 inhab 1998, ITU	Internet Hosts CAGR (%) 1995-98, Derived
Antigua &				2.0	4.50	24.0	175	0.041	
Barbuda	7 700	41.0	15 /	3.0	4.53	26.0	175	0.241	3.0
Australia Bahamas	7,700	41.2	15.6	3,000.0 12.0	16.22 4.32	44.2 64.4	750,000	4.009	34.3 20.3
Bangladesh				12.0	4.32	04.4	401	0.103	20.3
Barbados	20	7.5	10.1	5.0	1.89	530.0	44	0.016	180.2
Belize	6	2.8	10.1	10.0	4.38	330.0	252	0.010	100.2
Botswana	40	2.6	59.4	10.0	0.66		658	0.042	
Brunei Darussalam	8	2.9	07.1	10.0	3.51	128.9	1,195	0.379	97.1
Cameroon	20	0.2		2.0	0.01		3		
Canada	10,000	33.0	20.6	7,500.0	24.78	83.2	1,119,172	3.694	44.2
Cyprus	29	4.1		30.0	4.13	115.4	5,491	0.794	141.5
Dominica				2.0	2.69	74.4	148	0.195	58.7
Fiji		0.3	1	5.0	0.61	314.9	214	0.027	60.3
Gambia	3	0.2		2.5	0.21		10	0.001	
Ghana	30	1	14.5	6.0	0.03	364.2	192	0.001	217.5
Grenada		1	1	2.0	2.03		3	0.003	1
Guyana		1		2.0	0.24		69	0.008	
India		0.3	31.0	500.0	0.05	268.4	13,253	0.001	156.2
Jamaica	2,700	0.5		50.0	1.95	215.0	322	0.013	25.2
Kenya	12	0.3	60.9	15.0	0.05	321.7	686	0.002	243.0
Kiribati	75	0.7		0.3	0.36				
Lesotho	1			0.2	0.01		19	0.001	
Malawi				2.0	0.02		1		
Malaysia	1,300	5.9	17.6	800.0	3.81	171.4	47,852	0.216	125.1
Maldives		1.2		1.5	0.57		109	0.039	
Malta	100	26.0	49.4	20.0	5.39	186.6	1,838	0.479	177.5
Mauritius	100	8.7	40.6	12.5	1.10		575	0.050	
Mozambique	30	0.2	21.8	3.5	0.02	758.4	141	0.001	313.1
Namibia	30	1.9	15.0	5.0	0.31	256.9	2,654	0.160	522.5
Nauru				(00.0					
New Zealand	1,100	28.2	11.2	600.0	16.34	49.4	137,247	3.520	36.8
Nigeria	600	0.6	10.9	4.0	0.05	(00.7	410	0.000	
Pakistan	561	0.4	53.5	61.9	0.05	628.7	3,096	0.002	466.8
Papua New Guinea		10.0		0.1	2 / 7		118	0.003	
Saint Kitts & Nevis	5	12.2		1.5	3.67	(4 4	5	0.012	104.4
Saint Lucia Saint Vincent &	20	13.6		2.0 2.0	1.26 1.78	64.4	23	0.016	184.4
The Grenadines				2.0	ι./δ				
Samoa	1	0.5		0.4	0.23		2	0.001	+
Seychelles	1			2.0	2.56		7	0.001	+
Sierra Leone		+		5.0	0.11		13	0.007	+
Singapore	1,450	45.8	41.2	550.0	17.80	82.8	67,060	2.120	43.3
Solomon Islands	.,	-		2.0	0.50	181.1	20	0.005	30.5
South Africa	2,100	4.7	24.1	1,266.0	3.31	0.1	144,445	0.326	44.1
Sri Lanka	76	0.4	56.0	20.0	0.11	593.4	539	0.003	347.9
Swaziland		-		1.0	0.11	364.2	278	0.029	552.7
Tanzania	50	0.2		3.0	0.01		129	1	1
Tonga		-		0.2	0.20	26.0	1,871	1.890	1132.2
Trinidad&Tobago	60	4.7	33.9	20.0	1.54	116.9	1,944	0.152	228.2
Tuvalu		1	1	1	1				
Uganda	30	0.2	44.2	4.0	0.02	88.2	113	0.001	24.9
UK	15,500	26.3	12.5	8,000.0	13.58	74.7	1,449,315	2.459	48.8
Vanuatu		-		0.1	0.06		78	0.043	
Zambia		1		3.0	0.03	55.4	303	0.004	63.8
Zimbabwe	110	0.9	49.4	10.0	0.09		1,031	0.008	1

TABLE - 4 :	COMMONWEALTH	COUNTRIES -	• MEDIA
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Country	TVs (000,s) 1998, ITU	TVS per 100 inhab 1998, ITU	TV CAGR (%) 1995-98, Derived	TV Broadcasting Ntworks 1997, CIA	Radios (000's) 1997, CIA	Radios per 100 inhab 1997, Derived	Radio Broadcast Stations 1997, CIA
Antigua & Barbuda	31	45.2	4.7	2			6
Australia	11,840	63.9	0.8	104	25,294	136.7	608
Bahamas	259	89.6	58.5	1	200	72.0	7
Bangladesh	850	0.7		11	6,065	4.9	26
Barbados	75	28.3		1			5
Belize	40	18.0	3.6	2			13
Botswana	40	2.7	4.6		226	14.9	27
Brunei Darussalam	196	63.8	4.2	2	284	99.6	13
Cameroon	1,100	8.1	4.6	1	6,000	42.9	22
Canada	21,450	71.5	4.3	80	32,276	106.6	376
Cyprus	110	16.7	1.6	49	500	68.9	40
Dominica	13	17.5	9.1		45	60.5	5
Fiji	75	9.7	2.3		ļ		8
Gambia	4	0.4		1	190	16.3	7
Ghana	2,200	11.5	102.5	15	12,500	70.1	27
Grenada	35	32.5	32.6	2	80	81.1	1
Guyana	50	5.9	12.6	3	398	47.0	8
India	66,000	6.9	5.0	562	111,000	11.6	303
Jamaica	813	32.3	1.7	7	1,973	76.9	8
Kenya	620	2.1	10.3	8	5,000	17.7	33
Kiribati	2	2.2		1	15	18.0	1
Lesotho	50	2.4	56.7		66	3.2	7
Malawi	23	0.2			1,011	9.7	27
Malaysia	3,600	16.6		27	8,080	38.5	31
Maldives	10	3.9		1	28	10.8	3
Malta	196	51.8	5.5	2	189	50.9	12
Mauritius	260	22.8	7.4	13	401	35.4	2
Mozambique	70	0.4	11.1	1	700	3.7	33
Namibia	50	3.2	3.6	28	223	13.7	44
Nauru Nauru	1.045	F0.1	0.5	1	4	105.4	· · · · ·
New Zealand	1,845	50.1	0.5	743	3,868	105.4	66
Nigeria	7,000	6.7	20.5	<u>.</u>	17,200	14.6	124
Pakistan	12,500	8.8	64.7	<u>29</u> 3	10,200	7.4	47
Papua New Guinea Saint Kitts and Nevis	10	2.4		4	<u>401</u> 25	9.0	33
	31			3	104		5
Saint Lucia Saint Vincent &	1	21.1				65.4	
The Grenadines	18	10.2		4	76	67.6	2
Samoa	12	6.9	19.7	6	76	43.9	1
Sevchelles	15	19.0	2.3	11	50	64.1	3
Sierra Leone	120	2.6	18.0	2	1,159	25.1	2
Singapore	1,100	34.8	0.6	4	2,244	72.6	17
Solomon Islands	6	1.4			38	9.4	4
South Africa	5,399	12.5	8.7	556	7,500	19.6	180
Sri Lanka	1,700	9.2	12.3	21	3,.856	20.8	17
Swaziland	100	10.7	3.6	9	200	21.0	13
Tanzania	650	2.1	13.0	4	8,432	26.8	16
Tonga	5	5.1	35.7	1	66	67.5	1
Trinidad & Tobago	419	33.1	0.3	4	700	53.8	11
Tuvalu					4		1
Uganda	525	2.6	1.6	9	2,431	11.8	10
United Kingdom	38,000	64.5	2.0	947	70,000	118.8	750
Vanuatu	2	1.3		1	49	27.5	2
Zambia	1,200	13.7	26.0	9	1,889	19.9	16
Zimbabwe	350	2.9	6.5	16	1,072	9.3	26

or Malawi most people have never used a telephone. Access to the Internet and PCs is also severely limited in the developing countries of the Commonwealth.

If one compares the figures relating to computer based **information-communications technology** (ICTs) access with statistics relating to media penetration, it is clear that radio and television enjoy an access and reach far in excess of today's ICTs. This is probably because the purchase of a transistor radio or a television set does not require support services, as is the case of telephone access for a dial up Internet access. A one-time investment for a radio or television yields a longer-term benefit with very little maintenance cost for the user.

Media penetration, in terms of radio and television is varied. Data from the developed Commonwealth countries of Australia, Canada, New Zealand, and United Kingdom show high levels of media penetration — at least one in every two persons has access to television.

Within Africa, except in South Africa and Zimbabwe, the lack of political support and related resources for communication are manifest in the lack of a robust telecommunications infrastructure. It is one of the many paradoxes of the continent, that while it possesses around 12 per cent of the global population, Africa owns a mere two per cent of the global telephone network. The number of television sets per hundred inhabitants ranges from .02 in Malawi to 12.5 in South Africa. The figures are somewhat better in the case of access to radio^(vi).

Such disparities are also part of the Asian panorama. Data show a range of television penetration, from seven sets per hundred in Bangladesh to 35 per hundred in Singapore. In India, there are about six television sets per hundred inhabitants, but unlike in some other countries, there is a pattern of community viewing in India, implying that media penetration may be higher than merely the reach in terms of ownership or per head ratio.

Island nations in the Caribbean and in the South Pacific show patterns similar to the other developing countries of the Commonwealth. In countries such as the Bahamas, Jamaica and Trinidad and Tobago, figures show that one in every three persons has access to television; while other such island nations as Kiribati or the Maldives, less than one in every fifty persons has access to a television set.

Four important aspects of media reach merit a mention here. *First*, the growth of television, especially in the 1990s has been spurred by the exponential growth of satellite communications and the impact of globalization. Viewers in countries hitherto exposed to one or two television channels have suddenly had access to a plethora of channels delivered by satellite and cable right into their homes. Much of the content of the channels is international in nature; produced in one country; broadcast via satellite uplinks from a second to audiences in a third country. Thus, countries like Singapore, Malaysia, and Sri Lanka that limit exposure to international channels for their own audiences, nevertheless provide the uplink earth stations for channels from other countries.

Second, with the phenomenal growth of the Internet and the World Wide Web, television is no longer the cynosure of all eyes. It has taken second place in the priorities of governments and international donor agencies, as they see new ICTs as the new solutions. Evidence of this is clear in that much of the literature on television, with special reference to its educational potential predates the 1990s. It has proved difficult for this author to find analytical studies on educational television after the 1990s. Much of today's literature deals with issues of convergence of radio and television with the Internet and other web-based technologies, rather than look at radio and television as stand alone media.

 ⁽vi) Darkwa, Osei and Mazibuko, Fikile "Creating Virtual learning Communities in Africa: Challenges and Prospects" First Monday. http://www.firstmonday.org/issues/issue5_5/darkwa/

Third, at the turn of the century, evidence of the growing "digital divide" and reports of inadequate infrastructure and other facilities on the ground are prompting educators to take a fresh look at the time-tested media of radio and television to provide outreach and access to isolated and dispersed populations. Radio, in the form of local community radio, has once again been recognized as a successful, low cost medium. Educational television is yet to follow suit. These two factors make it all the more important to examine media structures and policies to determine nations' emphasis on educational use of television.

Fourth, convergence of ICTs and broadcasting, coupled with increasing technological options at lower costs are compelling factors causing a rethinking of ways and means of producing and delivering content. New options are emerging (e.g. satellite based radio and digital television) providing opportunities for examining issues relating to policy, structures, and collaborations afresh.

2.2 Media Policies and Structures

Existing media policy and the structures of media in a given society determine the use of educational television. Other than in the United States, most international broadcasting systems developed as non-commercial public service broadcasters. Supported by public funds, these broadcasters have been seen as a universal service, aimed at providing programming that, in addition to education, also directly affects the quality of life of its viewers. For example, educational television, sometimes seen as synonymous with developmental programming, would show programmes on agriculture, nutrition, health, and literacy, as is the case of Botswana^(viii) and Maldives^(viii).

In much of the Commonwealth, broadcasting has been a government monopoly patterned on the British Broadcasting Corporation but modified to suit regional and local needs,

particularly in relation to the extent of government control and operation. Ownership of these public broadcasting services varies from being an outright arm of the government, as in Pakistan, to a quasi government corporation generating its own operational revenues such as the South African Broadcasting Corporation or as in Canada. A mixed structure exists in India where operational funds from government are supplemented by revenues generated by the broadcaster.

Media policies and structures range from the "open skies" policies in Australia, Canada, and India (where the public broadcaster competes with the private channels within broad regulatory limits) to strictly regulated systems such as in Malaysia and Singapore. Broadcasting systems in several countries such as Sri Lanka, Maldives, Malawi and Botswana are completely state-owned and operated as such. In such instances, the state owned system sometimes rebroadcasts signals from the international satellite to cable networks such as CNN, ESPN, BBC WORLD, etc.

3. EDUCATIONAL BROADCASTING

The unique political and educational realities determine the kind of educational broadcasting supported by the government in different Commonwealth countries. There are different kinds of educational broadcasting systems in the Commonwealth, ranging from state owned systems to autonomous broadcasters operating in a media marketplace. Instances of private initiatives in educational broadcasting are nearly impossible to find.

3.1 Educational Broadcasting as part of a National System

National broadcasters across the Commonwealth are seen to play an important role in educational broadcasting. In India, *Doordarshan*, the Indian national television broadcaster, is a major partner in educational television, both in the satellite and the cable based *Gyan Darshan*

⁽vii) http://www.undp.org/dpa/frontpagearchive/2002/january/ 4jan02/

⁽viii) http:/www.comminit.com/pds11.../sld-879.htm

(an exclusive educational television channel) as also by broadcasting educational content on its terrestrial channels. In other Commonwealth countries, autonomous public broadcasters such as Canada's TV Ontario, Access Alberta, and the Open Learning Agency of British Columbia undertake this function (See Case studies). In Australia, it is the Special Broadcasting Service Corporation, reaching over 18.8 million Australians and over 90 per cent of the population that engages in educational broadcasting. ABC's Schools Television Service also makes an important contribution in supporting both teachers and students' learning experiences^(IX).

In sub-Saharan Africa, education, information, and entertainment have continued to be the main functions of radio and television broadcasting in Africa. There have been efforts to utilize broadcasting to espouse values and ideas on equality, rights, democracy, economy, development, and cultural integration, but success has not been significant because of government restrictions on what is transmitted^(x). In Botswana, Radio, TV programming focuses on getting people to discuss social issues; and in collaboration with Brazil, Botswana is developing interactive television programmes that help teachers facilitate classroom discussions on potentially sensitive HIV and AIDS issues.

In South Africa, there have been major initiatives by the South African Broadcasting System in the use of public broadcasting for educational reconstruction and development (see Case Study).

There is much variation in other parts of Africa. For example, both Kenya and Nigeria have television systems but the importance given to educational television is minimal. Another contrasting example is in Asia, most national television broadcasters claim to include educational programming in their telecasts. The extent of such coverage ranges from 61 per cent in Singapore (informational/educational content); 9.5 per cent in Bangladesh; 9.6 per cent in Pakistan; to 17 per cent in Sri Lanka.^(xi)

In India, the national television broadcaster, *Doordarshan*, is actively involved in both directly telecasting educational content (about 9.6 per cent of the total telecast)^(xii) and as an active partnership in the national educational channel (see Case Study).

Data and figures are not as readily available for countries in the Caribbean or the South Pacific or the rest of Africa. However, what emerges from an intensive web search is that there are some examples worth noting, such as in Samoa, which is attempting to improve the educational experience of students with Australian aid.^(xiii)

3.2 Case Studies

3.2.1 Case Study One: Australia^(xiv)

Australia has a dual commercial/non commercial broadcast system with the government's Australian Broadcasting Commission and the Special Broadcasting Service (SBS). There are 48 licensed commercial television services in Australia, broadcasting from major capital cities with some focusing on regional areas. Typically, regional focus networks are affiliated with a metropolitan network for nonlocal-programming. Australia's indigenous commercial broadcaster Imparja broadcasts out of Alice Springs in the Northern Territory, and features a mix of major networks and indigenous programming.

(xiii) http://www.undp.org/info21/public/review/pb-revma.html

⁽ix) http://abc.net.au/schoolstv

⁽x) "Radio and TV in Africa" http://www.oneworld.org/ndima/index.htm

 ⁽xi) Summarized from Country Profiles included in Goonasekhara, Anura and Holady (1998) Asian Communication Handbook. Singapore : AMIC

⁽xii) Ibid.

⁽xiv) Information has been drawn from various links in http://www.educationau.edu.au websites

ABC-TELEVISON is Australia's only national, noncommercial television service. It operates to cover 99 per cent of the country and provides a high level of Australian news, current affairs, drama, arts, documentary and sporting programmes. There are production studios in all state and territory capitals operating round the clock. The Special Broadcasting Service Corporation provides multilingual radio and television services that inform, educate, and entertain.

Established to give voice and exposure to multicultural Australians, SBS provides programmes drawn from over 400 national and international sources.

ABC's Schools Television provides resources for students and teachers, both at national and regional levels. The technologies used include interactive television to link schools and teachers on a region wide basis. An outstanding feature of the transmissions is the capacity to use the government Westlink Service to distribute teaching and learning programmes at a fraction of the normal commercial cost. Programmes are transmitted for four hours each week, using a satellite system that provides for a one way video, two way audio interaction.

Australia also uses interactive television in Victoria and uses broadcast television extensively for remote communities. The Open Learning Development Services, within the Open Access Support Centre in Queensland, deploys VHF and UHF television transmitters and receivers to deliver programmes to remote rural communities, in order to meet a wide range of educational objectives of life long learning of communities at affordable costs.

The *Reading-Writing Roadshow* was a television series of 20 programmes that first went on air nationally in 1994. Transmission took place twice a week and was supported by a set of activities and materials. Presented in a magazine style, each episode included a drama segment in which the main teaching took place. The programmes, supplemented by a workbook, were targeted at a wide range

of viewers who spoke English but who experienced some literacy difficulties, especially those people who were at home and not already enrolled in literacy classes. The television series had been on air twice, as on August 1995.

A 1995 study commissioned by the Open Learning Technology Corporation of Australia identified different trends in technology and education and highlighted the importance of several issues for consideration. The trends included access and equity, universal services, market potential, and charted the direction of technology use in education in Australia to meet the challenges posed by convergence.

3.2.2 Case Study Two: Botswana

Botswana Television, a non-commercial station that is part of the Department of Information and Broadcasting Government of Botswana started its telecast in July 2000. There is no commercial television station in Botswana and there is no cable television. A pay satellite service, MultiChoice, headquartered in South Africa, broadcasts commercial stations from Botswana's southern neighbours.

Audience size for both regular and educational broadcasting is approximately 2.3 TV sets for 100 inhabitants; and languages of broadcast are Setswana and English.

Mmualebe is a 30-minute studio based discussion that gets people to discuss mainly social issues affecting Botswana. *Mmualebe* is a concept embedded in Botswana's social behaviour and encapsulates the concept of democracy. Through this programme, BTV seeks to spread social debates as widely as possible.

In collaboration with Brazil, Botswana is developing interactive television programmes to help teachers facilitate classroom discussion on potentially sensitive HIV and AIDS issues. The project funded by UNDP seeks to bring together South-South cooperation using the highly successful Brazil television formats into an educational context.(xv)

3.2.3 Case Study Three: The Canadian Experience — Autonomous Institutions involved in Educational Broadcasting

Educational broadcasting in Canada has evolved into a unique system that reflects the Canadian reality. Five distinct factors can be identified as playing a critical role in defining Canadian educational broadcasting. *First*, a look at the map of Canada explains why British Columbia, Alberta, and even Ontario required direct broadcasting via satellite to reach remote, sparsely populated regions in mountainous terrains. The same principle can be used to explain the fibre-optic network of the Canadian plains or the four-province Atlantic Services Network.

Second, population density in Ontario and Quebec justify using economies of scale and diversity of media.

Third, the pattern of small, lightweight, low-cost production facilities did away with the need for large production and distribution facilities such as those at U.K. Open University (UKOU) and constitutes the third factor influencing the growth of educational communications.

Fourth, the telecommunications experiments during the 1960s and 1970s paved the way for the growth of services such as ACCESS Alberta, the KNOWLEDGE NETWORK of the West, TVOntario's Northern Service which have moved from an era of subsidization to full payment.

The *fifth* factor is the political nature of federal provincial relations in the field of telecommunications and explains partly why the word "educate" does not appear in the

Canadian Broadcasting Corporation (CBC) mandate. CBC was not designed to fill a formal educational role because, as a federal body, it is not authorized to work officially in education (Swan, 1984:1). CBC broadcasts only informative programmes designed to broaden horizons of adult viewers and listeners.

The political nature of the issues also explain partly why Saskatchewan's broadband fibre-optic network is a closed circuit communication system for the province and why Manitoba only shared part of TVOntario's signal during the period of experimentation. And each of the agencies described is a provincially mandated body operating within the province, even if audiences receive its signals across provincial borders.

Responding to the challenge of television and preceding the HERMES and ANIK satellite communications experiments, four provinces moved to establish provincial educational broadcasters to meet provincial educational needs. These were ACCESS in Alberta, The Open Learning Agency in British Columbia, TVOntario in Ontario and Radio Quebec. The respective provincial governments saw these agencies as providing a vehicle for meeting the public access requirements to broadcast educational materials. Three of these agencies, focused on in this backgrounder, are involved in educational television.

With technology convergence leading the way, Canadian agencies have moved toward the use of newer media. This has involved technology change, but more importantly has led to the restructuring of these agencies to address new realities and needs. However, focus of this backgrounder will be on the involvement of these agencies in educational television.

TVONTARIO (TVO): (The Ontario Educational Communications Authority, OECA). Established in 1970, TVOntario is a provincially mandated educational broadcaster, licenced by the CRTC to operate educational television networks in English and French. The mandate

⁽xv) http://www.undp.org/dpa/frontpagearchive/2002/january/ 4jan02

included the "right to acquire, publish, distribute, and preserve whether for a consideration or otherwise, such audio visual materials, papers, periodicals, and other library matter as relate to any of the objects of the Authority" (Rothe, 1986:10). The scope of operational autonomy was designed to include: broadcasting in English and French; educational design servicing; consulting services on the use of OECA; community development activities, educational communications research; policy contributions on education; and cable system services to remote communities. In 1974, OECA established a network of transmitters and named them TVOntario. At present, its signal reaches 97 per cent of Ontario's population via cable and off air, not including those who also capture TVOntario's signal via satellite. Every week, TVO counts two million loyal viewers of its English programming. The OECA receives its operating grants from the Ministries of Culture, Recreation, Education, Colleges and Universities.

The focus of TVOntario's efforts have been on "access and opportunity to all wishing to learn" and on creating dynamic learner driven systems. It has, therefore, collaborated with the institutions of higher education in Ontario to develop, design, and produce any number of courses, in addition to serving as a broadcaster, reaching all parts of the province.

The creation of the Learning Solutions Group in which TVOntario, in collaboration with colleges, universities, professional bodies, is one of the partners, has lead to dynamic learner driven systems. It accomplishes this by addressing topics through a variety of ways, such as interactive television and computer conferencing.

TVOntario does not offer any credit courses on its own but it offers broadcast services that support the distance education offerings of Ontario universities through the production and broadcast of telecourses.

The **Independent Learning Centre** (ILC) came under the auspices of TVOntario at the end of this fiscal year 1970. The ILC provides Ontarians with the opportunity to acquire

a high school diploma through distance education. This most certainly puts TVOntario in the education business.

Learning and Skills Television of Alberta (LTA): In a forward-looking partnership with the provincial government, Alberta Learning, educational institutions and other stakeholders in the province, LTA purchased and privatized the provincial educational television broadcaster, Access Network.

Officially launched September 1, 1995 the new ACCESS introduced a new style and flair for educational television, as well as a radically new financing model.

The new ACCESS was not to be financed through government grants. Revenues were to be generated through the sale of airtime, sponsorships, advertising, and the sale of educational products and services.

The privatization and successful operation of ACCESS has resulted in the introduction of new national television specialty services originating from the ACCESS facilities in Edmonton. In September, 1999, LTA launched Canada's only national educational television specialty service, Canadian Learning Television. In December, 2000, four new national digital television channels were licensed to LTA -BookTelevision, The Law & Order Channel, CareersTV, Academy Television - the first two of which were expected to launch in September, 2001.

Increasingly, television programming is integrated with other interactive multi-media. New digitized facilities will be able to meet the increasing opportunities for online interactivity and learning and to better serve learners in Alberta, and right across Canada.^(xvi)

Knowledge Network: Knowledge Network's mission is to deliver high quality, relevant, credible, and compelling educational programming accessible to all British

(xvi) http://www.accesslearning.com

Columbians via TV and the Web. As BC's public educational broadcaster, they also offer access to targeted audiences for educators who provide the information British Columbians need to adapt to their changing world.

By offering programming that enriches and educates, Knowledge Network creates television-led, life-long learning opportunities for British Columbians. From kids' shows and how-to programs to documentaries and international specials, Knowledge Network offers meaningful television.

With an inventory of nearly 8,000 hours of productions, Knowledge Network's line-up offers a premium choice of shows. Topics cover just about every interest and subject, including arts and music, social and political issues, science and technology, nature and environment, history and culture, dramas, and children and youth programming.

Knowledge Network, a not-for-profit organization, is funded through a combination of sources. Knowledge Network has an average weekly reach of 1 million viewers for the Vancouver Extended Market (Spring 2002 BBM Canada). Dramas, nature and history programs such as Heartbeat, Wild Encounters and Historylands are popular with viewers.

As B.C.'s public educational broadcaster enters its third decade of broadcasting, its core business continues to be the creation of provocative, engaging programs for British Columbians^(xvii).

There are also other models of educational broadcasting in Canada. Tele-Quebec provides educational and general interactive programmes to its audiences. Carleton University uses a studio to tape to cable pattern to distribute classroom; other institutions use technology for interactive and instructional television fixed services (ITFS) in a synchronous mode to deliver courses; interactive television is used for telemedicine in Newfoundland, Nova Scotia, and New Brunswick.

(xvii) http://www.knowledgenetwork.ca

Almost all educational television initiatives have used the opportunities offered by convergence to provide an alternative learning space through online lifelong learning.

3.2.4 Case Study Four: A National Broadcaster in Educational Broadcasting — INDIA

The foundation of Indian broadcasting lies in the country's network of radio and television stations that contribute the bulk of the telecast programmes. Specifically, the satellite based network with high and low power transmitters have been located all over the country and more than 40 production centres form part of one of the largest television systems in the world. The structure of **AKASHVANI** (All India Radio) and **DOORDARSHAN INDIA** (Indian television) is presently two-tier, with national and regional stations. With increased capacity on the latest INSAT (Indian Satellite system) satellites, there are a variety of services offered from national network and metro services to services in various languages.

The Indian broadcaster has, since its inception, been an active partner in educational broadcasting. Both the broadcasting organisations (Akashvani or All India Radio; and Doordarshan or Indian television) and other governmental agencies have been involved in the production of educational programmes, with transmission, however, remaining within the exclusive control of the former.

Doordarshan started as an educational experiment in 1959. The aim was to provide information to viewers with the purpose of influencing attitudes. The first educational experiment was with higher secondary schools in Delhi covering such subjects as Physics, Chemistry, Hindi, Current Affairs, and Geography.

Doordarshan's role in education really increased substantially from 1975 when the Satellite Instructional Television Experiment (SITE) was conducted. SITE was a year-long multipurpose communication project designed to study the effectiveness of television as a medium for education and information. A major focus of the SITE experiment was on school education and teacher training, especially for teachers in geographically dispersed areas. Broadly educational in character, programmes produced and broadcast during this one-year experiment addressed a wide range of issues from developmental to specific teacher training.

Today, Doordarshan is a major player in educational broadcasting, providing educational content on its huge terrestrial network, as well as by partnering with GYAN DARSHAN, India's satellite to cable educational channel, along with the Ministry for Human Resource Development and other educational media production centres in the country.

Envisaged as Doordarshan's educational channel, GYAN DARSHAN now broadcasts 24 hours a day, with original and repeat programming generated in the many educational and governmental agencies in the country. In essence, it is a cooperative venture with the Indira Gandhi National Open University as a nodal agency for coordinating the activities and up-linking the educational content. The programme mix is a blend of core curriculum based programmes in the areas of primary, secondary, higher, open and distance education, extension, technical and vocational education along with general mosaic programmes in areas of health, hygiene, arts, culture, environment, conservation, science popularization, etc.

The content for the channel comes from various eminent and premier organizations in the country such as media centers of universities (for higher education); the central and state institutes of educational technology (for school education); open universities and national open schools for distance and open learning; government ministries and autonomous bodies for non-formal education. All agencies are represented on the decision making body for GYAN DARSHAN. Private sector involvement in educational broadcasting in India has been limited, and while it exists, not much data are available indicating the extent of reach, content and effectiveness of such efforts^(xviii).

3.2.5 Case Study Five: Mauritius College of the Air^(xix)

Mauritius, a small African nation in the Indian Ocean, has been using radio and television as important delivery mechanisms in education. With an objective to ensure broadcasting services of information, education, culture, and entertainment, the Mauritius Broadcasting Corporation has been producing and broadcasting radio and television programmes on a wide range of subjects in different languages. Programmes are mainly purchased from foreign suppliers while the corporation produces a fair number of programmes.

As part of the government's effort to provide quality education, an Act of Parliament established the Mauritius College of the Air (MAC) in 1971. It grew out of a joint venture between the Ministry of Education and Culture of Mauritius and the International Extension College of the United Kingdom.

At the heart of the college's activities are the printed course materials. The television programmes produced in conjunction have tried to bring into the classroom examples of applied learning and have added an element of excitement and stimulation to the normal learning process. However, a variety of reasons, such as shortage of airtime, the decreasing student enrollments, have had a negative effect on the use of the costly medium of television more extensively.

(xix) http://www.undp.org/info21/public/review/pb-revma.html

⁽xviii) from author's personal experience in Indian educational television

3.2.6 Case Study Six: The South African Broadcasting Corporation^(xx)

In South Africa, the use of the public broadcasting has been fostered and developed with a strategic approach to implementing educational broadcasting. This strategic approach is meant to ensure reach and access, relevance, pedagogical soundness, building educational production capacity, and developing end user's capacity to access the material.

The success of SABC today is reflected in the fact that, in spite of growing competition, SABC Television reaches almost 13 million viewers of a total adult population of 14.4 million regular viewers.

By including the public broadcaster, the South African Broadcasting Corporation (SABC), in a collaborative partnership with educational stakeholders, a new partnership has developed in SABC Education. In this, national and provincial government departments, nongovernmental organizations, and local production sectors have contributed to a common goal of reconstructing and developing the education and training system.

To address the challenge of suitable timings for educational content, given that SABC is a public broadcaster dependent upon commercial advertising for 85 per cent of its revenue, a range of innovative formats for educational television have been developed, combining entertainment with education in a way that engaged audience and competes with other entertainment programmes for audience ratings successfully.

School materials are supported by print material to supplement the broadcast programme and teacher training.

Funding comes through the Department of Communication and other departments who contribute to the funding of other projects of the SABC.

The building of the partnership between SABC and the department of Education is through an ongoing involvement in each other's organizational activities.

The television series, *Yizo Yizo* deals with the social crises facing schools in South Africa. The strategy for the series includes 13 weeks of prime time TV drama on SABC 1, 13 weeks of radio talk shows on radio metro, encouraging discussion on the key issues raised by the TV drama. In addition, one million youth print magazines have been distributed to schools around the country and teacher guides have been placed in newspapers.

Soul Buddyz 2 is a new series of a popular children's drama produced by Soul City. This 26 episode series continues with the same Soul City-IHDC winning edutainment formula on the health and well being of children aged 8-12. A massive campaign brings the spotlight on children in rural areas who are generally not catered for in television programmes.

Gazlam is a hard-hitting, no holds barred 26 part educational drama series that explores love, relationships against the backdrop of HIV/AIDS. The serial follows the lives of selected young people and explores their lives, relationships and social issues involved.

There are other series, such as the examples given here. The focus of all the series is not only merely providing content. It is clearly to provoke thought and debate with superb quality of programming coupled with massive multimedia campaigns to turn the spotlight on key social issues. Thus, these are examples of innovative ways in which television can be used very effectively for educational purposes.

⁽xx) Summarized from Kwape, Mashala (2000) "The Use of public broadcasting in the service of educational reconstruction and development: A South African Perspective" Carfax publishing Company.

3.2.7 Examples from Small States: Cyprus, Fiji, Malta, Namibia, Samoa

Despite their audience sizes and limited reach, some small states in the Commonwealth have moved toward providing educational content on television.

Cyprus^(xxi): The Cyprus Broadcasting Corporation, a non profit semi state organization which derives its revenue from government subsidy and advertising provides the Cypriot public with information and entertainment as well as cultural and educational programmes.

The Anadolu University Open Education Faculty, Turkey, has used television for reaching students in higher education throughout the country. The project of the Turkish Republic of Northern Cyprus offers higher education to the Turks through television broadcast. Both content and student support are offered through teleconferencing.

Fiji^(xxii): Fiji I, the free to air channel is a full service television channel offering local news, public affairs, children's programming. Educational television is provided through the collection and broadcast of educational material from around the world and Fiji. Topics covered include science and technology, art and craft, cooking, fashion, people, and places.

Also in Fiji is Community Television (CTV), a noncommercial, non-denominational registered charitable organization that broadcasts educational and informational television programmes to a multi-ethnic community of about 95000. Production and transmission of programmes is done through a small group of volunteers and consists of programming on non formal education areas such as health, agriculture, environment, gender issues, human rights, music lessons, etc; in as many as seven languages. Some programmes are acquired free, other are domestically produced^(xxiii).

Malta^(xxiv) : In Malta, the edutainment channel Education 22, targets all age groups and is managed by television teacherproducers. The channel brings to each Maltese household a package of educational products presented in such way as to supplement the school format. There is a balanced mix of local and foreign programmes aired on this channel.

Namibia^(xxv): The Education Section at Namibia Broadcasting Corporation was launched in 1985. Its main focus has been to air informal and formal radio education programmes for preschool children, children in lower and higher primary education, adult education and for out of school youth. Developing some of its own programmes, NBC also purchases a number of radio and television programmes from other countries and independent producers. A special programme is the *Sunshine Club*, a series of programmes covering health topics such as malaria, AIDS, etc.

Samoa: The American Samoa Government Television station provides educational and non -commercial NBC, ABC, CBS, CNN television broadcasts. Programmes include topics such as health, agriculture, environment, tourism, women's issues, education, news and religion and children's programmes.

4. CRITICAL ISSUES/ PROBLEMS IDENTIFIED

Today's globalized scenario consists of new economic and media realities: of media saturation juxtaposed with increasing disparities in the distribution of and access to

⁽xxi) http://www.cybc.com.cy http://www.pio.gov.cy/pio/eng/media/cybc.htm http://tojde.anadolu.edu.tr/tojde3/2/mediahatxt.htm

⁽xxiii) http://www.openchannel.se/fiji/index.htm

⁽xxiv) http://www.education.gov.mt/edu/education_22.htm

⁽xxv) http://www.saide.org.za/worldbank/countries/namibia/ nbc.htm

⁽xxii) http://www.fijitv.com.fj

knowledge; of a situation where education has to compete with multiple other learner priorities; rapidly changing technologies realities, and a growing digital divide. Issues that confront educational broadcasters range from funding to technology, from content to management and operations to distribution.

4.1 Funding

By its very nature, educational broadcasting is a noncommercial activity, and generally does not attract advertising revenues. In most instances, public funded institutions are mandated with the production of educational materials, in both print and non-print formats.

Funding overshadows all other issues. Cost is the biggest barrier to the use of educational broadcasting. Findings indicate that funding for educational broadcasting remains an issue across the Commonwealth. This may appear to be less of an issue in the developed Commonwealth countries as compared to some African Asian countries — but it nevertheless is an overpowering factor determining the success of educational broadcasting.

Up-front costs of technologies and services remain high. This, coupled with rapid obsolescence of technology and decreasing audience sizes, makes media choices difficult, especially where multiple media have to be used. Adding to the confusion is an abundance of carriers with varied capability, involved in delivery of educational materials in formal and informal settings (audio conferencing, audiographics, interactive video conferencing by compressed video, cable, and satellite, live and interactive television voice and data services). Complicating matters even further is the competition for the attention of policymakers currently enchanted with the new ICTs.

Funding is today the determining factor in government decisions to use broadcasting for educational purposes.

4.2 Hardware

The high costs of establishing educational production and broadcast centers, coupled with the rapid obsolescence of technology, compounded by lack of common standards and technical formats are making technology choices difficult for educational planners. Even the developed countries of the Commonwealth are still using equipment and technology long after its expected lifespan. In some Asian and African countries, some of the technology currently being used became outdated and obsolete as much as a decade ago.

Findings indicate that, in most parts, the Commonwealth lacks an infrastructure for broadcasting purposes. Asian and South Pacific infrastructure is good, but it could be better used. In Africa, infrastructure availability is patchy at best.^(xxvi) More infrastructures, especially in telecommunications is needed. Television still has a poor reach and radio remains the most readily accessible medium.

4.3 Software

Software issues have two dimensions: availability and relevance. While the developed Commonwealth and Asia can boast of software availability, there is limited information about what is available in Africa or in the Commonwealth Caribbean, or the South Pacific. More alarming in much of Africa and the Caribbean is the dearth of activity in this area. Under such circumstances, the question of relevance becomes even more important, especially with reference to cultural, linguistic, ethnic and religious sensitivities. To what extent the educational programmes generated from one region are relevant, to other regions in terms of curriculum, language, and culture remains a moot point. Further, the pedagogical value of existing programming also does not seem to have been demonstrated widely.

⁽xxvi) Williams, Roy. (2000) *Diffusion of Appropriate Educational Technology in Open and Distance Learning in Developing Commonwealth Countries. Final Project Report.* Vancouver, The Commonwealth of Learning.

4.4 Human Resources

All regions face a lack of skilled personnel, either in academia, production or engineering, or management. Skilled personnel are available either in the national broadcasting systems or in the private sector. India, among the developing countries, seems to be the exception, with a wealth of skilled manpower in educational broadcasting.

For educational broadcasting to succeed, academics need much more exposure and support, if they are to be able to develop materials and use the technology effectively. However, academics from across all regions are the least exposed to the language and grammar of the medium, despite academics being given the most important place in the production process. The communications and knowledge gap between academics and production personnel is wide, and this needs to be narrowed through greater collaboration and teamwork for quality improvement.

4.5 Management and Administration

Media, operating, either independently, or as part of an educational system have their own managerial and administrative dynamics. They are closer in requirements to industry than they are to education. As such, they are target and production bound, needing differently defined norms of management and administration.

With few exceptions, existing public broadcasters in Commonwealth countries follow patterns of implementation that are essentially government or quasi governmental, and leave much to be desired. A top down managerial system with any number of layers, bureaucratic procedures, complicated administrative and financial norms and processes, endless delays in decision-making etc. make a mockery of the management and administration of media. When education is integrated into media as part of educational broadcasting, the situation can get worse as academics and subject specialists accustomed to the "collegial culture" come face to face with a production culture where their knowledge of learner needs, is questioned by the packaging styles of highly creative and surcharged producers. A common understanding of education, social reality, and media production techniques, (which so much stands out in the South African case study), comes slowly and after long, continuous association between media persons and social scientists — a luxury that few educational broadcasters can afford.

4.6 **Operations**

Media operations resemble those of other telecommunications industries. A hungry monster that devours programming, television has to meet precise minute-to-minute deadlines and to combine such precision with attention to detail, both of the content and the technicalities. Just like the public power utility, a system mistake or failure can create a public furore in an operational system that is always in the limelight, faulted for the slightest failure but given credit only on rare occasions.

4.7 Distribution

Distribution of educational television content, as well as sharing of educational television content across countries and cultures are rare, and are one of the weakest links in the chain of educational television in the Commonwealth. Very little is known of what is produced, and much of what exists is largely culture bound. Marketing and sharing of programmes between media systems can go a long way in fostering a South-South dialogue. But most of what is marketed is pre-packaged content from the United States and other Western powers, and often not in tune with regional and local cultural realities. Copyrights, technical standards and costs further limit the possibility of distribution and sharing of educational content. There is great scope for the development of mechanisms for programme distribution and exchange among Commonwealth educational broadcasters and production houses.

4.8 Inter-institutional Cooperation and Collaboration

At present, a large number of countries and institutions are working on their own, sometimes in geographic areas where their jurisdictions overlap. Given that there is a common language in the Commonwealth, opportunities exist for international, regional, national, and institutional cooperation and collaboration in educational broadcasting, resulting in cost efficiencies and economies of scale.

Creating new methods of developing materials, while providing for local initiatives to originate content, are paramount if educational broadcasting and distance and open learning are to survive and grow. New "consortia" methods of course development, programme production, addressing issues of relevance, quality, and academic equivalence, and credit banks to enable learners to build up credits for use in any participating institution, time and cost sharing on existing and new delivery media to reduce redundancy, developmental and operating costs are some of the issues to be addressed as part of long- and shortterm strategic planning.

5. CHANGING SCENARIOS AND RETHINKING PRIORITIES

The audiovisual sector is one of the fastest growing service sectors in the world today. Backed up by technological progress, especially the convergence of the information and communication technologies and digitization, consumers worldwide have access to a multiplicity of entertainment and information channels. Technological progress has also reduced governments' ability to restrict and control the entry of foreign content into domestic markets. This is as much of significance for the entertainment as it is for the education sector. Policies such as restricting access through regulatory mechanisms and controlling the extent of indigenous content through legislation are being reviewed in both developed and developing countries, specially under pressure from legal and illegal forms of content distribution as technologies such as CAS (Conditional Access System), piracy, and video on demand allow transborder flows of media content.

Despite its fast growth, the production of television content is an expensive affair, requiring heavy capital investments and time. Access to international markets and to joint productions is becoming increasingly as much necessary as to share and recoup costs of production. In situations of heavy financial and time investment, small players such as educational media systems in developing countries will invariably suffer just as public funded educational institutions are facing the competition from private sector multinational software developers. Economies of scale facing will make it increasingly difficult for institutions in the developing countries to use these technologies successfully.

Equally important are issues of cultural and contextual relevance, copyright and protection of intellectual property. With a surfeit of content from the developed countries flooding the market, the only way for a small institution in a developing country to survive will be to creatively produce and share content of high quality that directly focuses on the location, time, and problem specific needs of target beneficiaries.

Sharing and exchange of programming content, joint teams for production of integrated learning materials so as to reduce cost, as also to increase relevance, and develop niche markets through brand building and positioning are critical aspects of educational broadcasting to be addressed. Also necessary will be an appropriate copyright and income generation mechanism for the development of this sector, besides the development and exchange of training materials and programmes through different modes of delivery.

The task of applying the technologies in a creative, flexible and rugged manner must be carried out, so that the challenge of multinational broadcasting can be met. This can be done through the promotion of community level broadcasting services, which produce some content of their own, source content from similar agencies throughout the world, and adopt and adapt materials, both in the form of pre-produced programmes as also in the form of raw content that can be reshaped and repackaged for local use.

All this signifies that it is time for a paradigm shift in the way educational broadcasting is developed and shaped. The opportunities for the Commonwealth, a group of nations with shared history and values and to some extent a shared language of English, are clearly visible.

CONCLUSION

The purpose of this background paper is to draw our attention to some of the dimensions, case studies,

issues and problems that confront educational broadcasting. The paper is by no means exhaustive, and we expect that there will be gaps of knowledge, which obviously need to be filled as information becomes available.

We request you to go through the document, identify such gaps in our knowledge, and to provide us with some information to fill such gaps and correct any inaccuracies. By doing so, we will be able to incorporate such information so that an overview of educational broadcasting in the Commonwealth is possible.

We believe that even by presenting an overview, we shall have made a major contribution to the sharing of knowledge, experiences, and wisdom to further strengthen the educational broadcasting that exists in the Commonwealth. **THE COMMONWEALTH of LEARNING (COL),** Vancouver, Canada established The Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi in 1994. The Commonwealth of Learning (COL) is an intergovernmental organisation created by Commonwealth Heads of Government to encourage the development and sharing of open learning/distance education knowledge, resources and technologies. COL works with Commonwealth nations to improve access to quality education and training.

COL MISSION

Recognising **KNOWLEDGE** as key to cultural, social and economic development, The Commonwealth *of* Learning is committed to assisting Commonwealth member governments to take full advantage of open, distance and technology-mediated learning strategies to provide increased and equitable access to education and training for all their citizens.

CEMCA MISSION

In consonance with the *mission* of the Commonwealth *of* Learning, the Commonwealth Educational Media Centre for Asia promotes the meaningful, relevant, and appropriate use of information and communication technologies to serve the educational and training needs of Commonwealth member states of Asia.



THE COMMONWEALTH of LEARNING Commonwealth Educational Media Centre for Asia

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