

## STUDENTS' CIVIC ACHIEVEMENT

### 3.0 Introduction

In the IEA CIVED study, a 38-item test in Part 1 of the student questionnaire assessed the general civic knowledge of students. The total civic knowledge scale was made up of items in two subscales, a civic content subscale and a civic skills subscale. Civic content refers to the content knowledge of civic principles or pivotal ideas such as the knowledge of what constitutes a democracy. Civic skills refer to the interpretive and thinking skills needed to make sense of civic related information such as the skills needed to make sense of a newspaper article or political cartoon. Only 16 of the 38 items in this scale were released by the IEA for use by researchers. To test the total civic knowledge of students in the present study (CESL - Civic Education, Sri Lanka) therefore, these 16 items of which 9 were civic content (Type 1) items and 7 civic skills (Type 2) items were used.

In this chapter, following upon an introduction to the test items in section 3.1, the data on achievement of Sri Lankan students in the civic knowledge test is presented and analyzed relative to the achievement of the international student sample, using mean scores to items (section 3.2). Sri Lankan students' mean scores by selected school and out of school variables are presented and analyzed in sections 3.3 and 3.4 respectively.

### 3.1 Domain sub-categories covered by test items

The 16 test items were in 6 broad categories:

1. Democracy and its defining characteristics (2 items)
2. Institutions and practices in democracy (6 items)
3. Citizenship rights and duties (3 items)

4. National identity (1 item)
5. International relations (2 items)
6. Social cohesion and diversity (2 items)

An example of a content item in category 1 that tested the ability of students to identify defining characteristics of democracy is given in Figure 3.1.

**Q6.** In a democratic political system, which of the following ought to govern the country?

- A. Moral or religious leaders
- B. A small group of well educated leaders
- C. Popularly elected representatives
- D. Experts on government and political affairs

*Correct answer: C*      *SL average: 74*      *International average: 71*  
(total sample n. 2619)

**Figure 3.1: An item requiring demonstration of knowledge of content**

An example of a skill item in category 4 that tested students' interpretive skills is given in Figure 3.2.

**Q15.** What is the message or main point of this cartoon? History textbooks...

- A. are sometimes changed to avoid mentioning problematic events from the past
- B. for children must be shorter than books written for adults
- C. are full of information that is not interesting
- D. should be written using computer and not a pencil

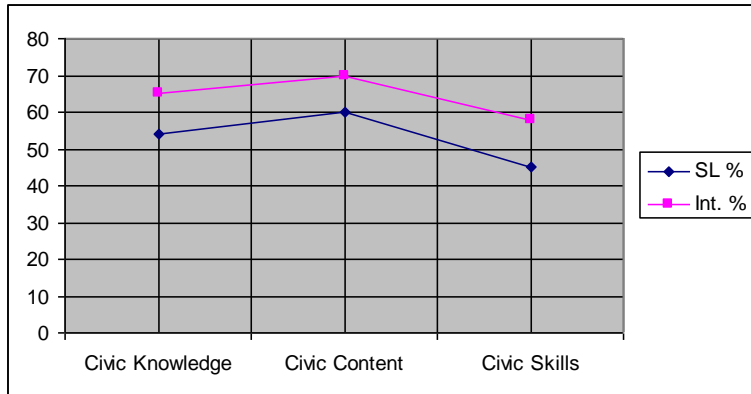
*Correct answer: A*      *SL average: 48*      *International average: 58*  
(total sample n. 2610)

**Figure 3.2: An item to measure skills in the interpretation of civic-related material**

In Table 3.1, the Sri Lankan (SL) students' composite mean scores for all 16 items in the general civic knowledge test, for the 9 civic content and, 7 civic skills items in the sub-scales respectively are presented, relative to comparable mean scores of the international (INT) student sample.

**Table 3.1: Students' total mean scores in civic knowledge, content and skills**

Total mean scores	SL %	INT . %
Civic Knowledge	54	65
Civic Content	60	70
Civic skill	45	58



In total civic knowledge, the mean score of students in the SL sample is 11 percentage points below the comparable mean score of the international student sample. The lowest mean score of the SL student sample is in

**Graph 3.1: Students' total mean scores in civic knowledge, content and skills**

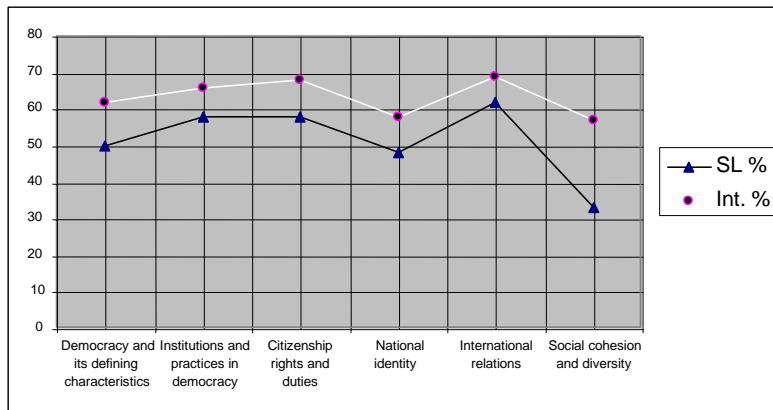
civic skills – 45 percent, which has brought down the composite civic knowledge score to 54 percent. The analysis of item scores (see discussion preceding Figures 3.3, 3.4, 3.5) shows that SL students have scored the lowest mean scores, 21, 25 and 26 percent respectively for items 13, 16 and 8. Two of these, Q 13 and Q16 are skill items.

### 3.2 Mean scores of students in the CESL and international CIVED study in each item category

Table 3.2 presents the composite mean scores of items in each of the six categories.

**Table 3.2: Students' composite mean scores in each item category**

Total composite mean scores by categories	SL %	INT. %
Democracy and its defining characteristics (items 6, 8)	50	62
Institutions and practices in democracy (items 5, 9, 10, 11, 1, 16)	58	66
Citizenship rights and duties (items 2, 12, 4)	58	68
National identity (item 15)	48	58
International relations (items 14, 7)	62	69
Social cohesion and diversity (items 3, 13)	33	57



**Graph 3.2: Students' total composite mean scores in each item category**

The mean scores of the SL student sample in all categories are below the comparable international mean scores. The difference in category mean scores is lowest in International relations and highest in Social cohesion and diversity. The response patterns of SL students to the three items Q13, Q16 and Q8 are analyzed, in an attempt to understand why the vast majority of students failed to give the correct answer to these three items, whereas the mean scores for all other items range between 40 and 85 (see Table 3.3).

Item 13 is in the sub-category social cohesion and diversity, and this item deals with the issue of pay equity/discrimination in employment. Students' interpretive skill of what is discrimination in a particular context is being tested in this item. The pattern of student answers indicate that the vast majority of students have not demonstrated the required interpretive skill in this particular context, for their response percentages to each of the 3 incorrect answers are higher than their response percentage to the correct answer.

Q13. Two people work at the same job but one is paid less than the other. The principle of equality would be violated if the person is paid less because of ...		
		SL students' response %
A.	fewer educational qualifications	25
B.	less work experience	26
C.	working for fewer hours	28
D.	gender	21
<i>Correct answer: D</i>		
<i>SL average: 21</i>		<i>International average: 50</i>
<i>(total n: 2623)</i>		

**Figure 3.3: A skill item in the sub category - social cohesion**

Item 16 is an example of a skills item asking students to identify the difference between facts and opinion, a critically important analytical skill that should be developed in educating students for

good citizenship. The different responses to this item are shown in Figure 3.4. The highest percentage response to this item has been to answer D. Apparently the proposition in this statement may have appealed to students more, distracting them from the task in hand, which was to differentiate between fact and opinion. The response pattern of Sri Lankan students to this skill item points to the need to challenge students' critical thinking in focused, practical learning contexts. There is another item in this set of 16 test items – item 14, that asks students to differentiate between opinion and fact (Table 3.3); to this item too, only 40 percent have indicated the correct response, which is the fourth lowest average response to a single item in this test.

Q16. Three of these statements are opinions and one is a fact. Which of the following is a FACT?		
		SL student response %
A.	People with very low incomes should not pay taxes	16
B.	In many countries rich people pay higher taxes than the poor	25
C.	It is fair that some citizens pay higher taxes than others	12
D.	Donations to charity are the best way to reduce differences between the rich and the poor	47
<i>Correct response: B    SL average: 25    International average: 49</i>		
<i>(total n. 2617)</i>		

**Figure 3.4: A skill item in the sub category - institutions and practices in a democracy**

In item 8, by selecting the correct response, students would be demonstrating the knowledge of basic properties of democratic governments, and their ability to apply it to the proposition by selecting the criteria most likely to create an undemocratic process of governance. As in responding to item 16, the highest percentage of respondents to a single given answer in this item, 35 percent to answer B, seem to have been carried away by the similarity of the context presented therein to the Sri Lankan political context, thus distracting them from the task in hand. The pattern of answers of students to this item show that there is confusion in their minds as to the basic properties of democratic governments and ambiguity as to criteria most likely to create an undemocratic process of governance. This is understandable, given the political climate in the country, and the blatant attempts by politicians to pursue totally undemocratic processes of governance in the name of democratic rule. The response of 14 year olds in Sri Lanka to this item, as shown in Figure 3.5, is therefore hardly surprising.

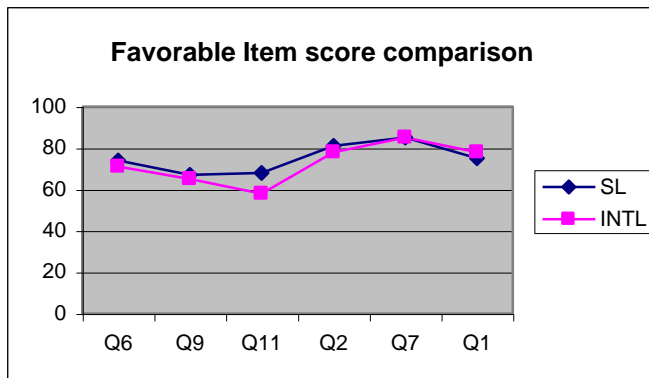
Q8. Which of the following is most likely to cause a government to be called non-democratic?		
		SL student response %
A.	People are prevented from criticizing the government	26
B.	The political parties criticize each other often	35
C.	People must pay very high taxes	27
D.	Every citizen has the right to a job	12
<i>Correct answer: A SL average: 26 International average: 53</i>		
<i>(total n. 2602)</i>		

**Figure 3.5: An item in the sub category - democracy and its defining characteristics**

The mean scores of the SL and international student samples for each of the 16 items in the test are presented in Table 3.3.

**Table 3.3: Mean scores of students to the 16 items in the test of civic knowledge**

Category	Sub-categories	Short titles for items	SQ no.	SL %	INT. %
Democracy and its defining characteristics	Identify defining characteristics of democracy	...who ought to govern in a democracy	6	74	71
	Identify limited and unlimited government, undemocratic regimes	...what makes a government non - democratic	8	26	53
Institutions and practices in democracy	Identify characteristics and functions of elections and parties	...function of having more than one political party	5	63	75
	Identify qualifications of candidates for positions and making up one's mind during elections	...which party issued political leaflet	9	67	65
		...what issuers of leaflet think about taxes	10	48	71
		...which policy issuers of leaflet are likely to favor	11	68	58
	Identify basic character of law	...an accurate statement about laws	1	75	78
Understand basic economic issues and their political implications	...a fact, (not an opinion) about laws	16	25	49	
Citizenship rights and duties	Identify general rights, qualifications and obligations of citizens in democracies	... a political right	2	81	78
	Understand role of mass media in democracy	...result if large publisher buys many newspapers	12	44	57
	Identify network of associations and differences of political opinion	...why organizations are important in democracy	4	50	69
National Identity	Recognize that every nation has events in its history of which it is not proud	...main message of cartoon about history textbooks	15	48	58
International relations	Recognize international economic issues and organizations	...an opinion, (not a fact) about the environment	14	40	53
	Recognize major inter-governmental organizations	...major purpose of United Nations	7	85	85
Social cohesion and diversity	Recognize groups subject to discrimination	...an example of discrimination in employment	3	45	65
		...an example of discrimination in pay equity	13	21	50



Sri Lankan students have obtained mean scores higher than or equal to the international mean scores in 5 items, as shown in Graph 3.3. These are items 6, 9, 11, 2 and 7. In item 1, the mean is very close to that of the INT' students

**Graph 3.3: Favorable item score comparison**

It is best that the responses of Sri Lankan students to the test items in the six categories indicated in Table 3.2 are considered in totality with other items in the student questionnaire in the same categories. Items in the six categories that probe their perceptions, attitudes, and behaviors are contained in Part 3 of the student questionnaire. In most of the latter items, Sri Lankan students' responses compare very favorably with comparable international student responses.

### 3.3 Students' mean civic scores by school variables

Table 3.4 presents the students' mean scores by three of the variables identified for purposes of data analysis in the present study, school type, medium of instruction and province.

**Table 3.4: Students' mean civic scores by school variables**

Students' mean civic scores, by selected school variables			Total civic knowledge	Civic content	Civic skills	
School type	Number of schools by Type	Ratio of school types in sample				
	1AB (n.44)	33	61	68	52	
	1C (n.46)	34	51	58	43	
	T2 (n.35)	26	47	53	39	
	Pri. (n.8)	6	61	67	53	
Medium of instruction*	Number of Schools	133				
	Sinhala	114 (n.2040)	55	61	47	
	Tamil	43 (n. 620)	49	57	40	
Province	Number of schools	Ratio of schools				
	Western	33	23	54	61	45
	Central	23	16	53	59	44
	Southern	17	12	55	62	47

Northern	11	08	46	53	37
Eastern	10	07	49	56	40
North Western	15	11	56	62	49
North Central	09	06	53	59	46
Uva	11	08	56	63	47
Sabaragamuwa	12	09	58	66	49

\* the 24 bi-media schools are aggregated in both SM and TM totals; altogether there were 90 SM, 19 TM, 24 Bi-Media schools; approx. 10 students from each media were selected for the sample from each bi-media school.

There is a statistically significant difference at the .05 level in students' total civic knowledge mean scores by school type and medium of instruction. By school type the highest mean scores have been obtained by 1AB and Private schools, followed by 1C and Type 2 schools respectively. Medium-wise the Sinhala medium schools have scored higher than the Tamil medium schools. Province-wise Sabaragamuwa has scored the highest (58 percent), followed by Uva, North Western and Southern provinces respectively.

A similar pattern of differences in achievement by school type and medium of instruction is noted in students' achievement at the General Certificate of Education Ordinary Level and Advanced Level examinations, and in the Grade 4 achievement test conducted in 2003, by NEREC as well. Differences in achievement by school type have been focused on consistently, in the findings of national level research conducted over the years, which disparity is reflected in total civic knowledge scores students have obtained in the CESL study as well.

Item 13 in the student questionnaire listed 13 (13a -13m) 13 different organizations/associations and requested students to indicate their membership in each; also, to list others, if any, of which they are members. These other organizations were subsequently categorized and coded as 13n - 13r. A few of these organizations are community based; however, the majority were school based and therefore, in the present analysis, membership in organizations is considered as a school related variable. The civic score means of students by number of memberships is indicated in Table 3.5, and by frequency of participation in meetings/activities, in Table 3.6.

**Table 3.5: Students' memberships in organizations**

Category	N	%	Total score	Content score	Skill score
No memberships	284	11	50	56	42
Membership in 1 organization only	1357	51	52	59	43
Memberships in 2-4 organizations	891	34	58	64	50
Memberships in 5-7 organizations	110	04	56	61	50
Memberships in 8-13 organizations	13	05	65	72	56



Memberships in organizations is positively correlated with civic scores; the total score for example increases relative to the number of memberships held, with a slight variation in this pattern in the category of memberships in 5-7 organizations.

**Table 3.6: Students' mean achievement scores, by frequency of participation in organizations**

Variable	Percentage	Total Civic knowledge	Civic content	Civic skills
Never or almost never	8.8	49	55	41
A few times each month	50.2	55	61	46
1-3 days a week	21.5	56	62	47
4 or more days a week	13.4	53	60	44

How frequently students participate in meetings/activities of the organizations/associations they are members of would be an indicator of how active the students and the organizations are, in the respective area of activity. Apparently, the students who participate 1-3 days' a week or a few times each week, relative to those who participate more often or not at all, show higher civic mean scores. The finding therefore is that memberships in organizations and active participation devoting a fair percentage of time each month to activities conducted by organizations is positively correlated with civic scores.

### **3.4 Students' civic mean scores by out of school variables**

In Part two of the student questionnaire, data was obtained on demographic, socioeconomic and the out-of-school contexts of student participants. A measure of the impact of these variables on students' civic test scores is obtained by correlating students' mean scores in the test of civic knowledge with some of the selected variables.

For purposes of this investigation, the educational qualifications of parents, the number of books in the home and whether a daily newspaper is available in the home have been selected as indicators of home literacy. Indicators of family and home environment are the number of people living at home with the student, and whether a parent or guardian lived with the student at home on a regular basis. Civic test scores have also been correlated with the number of years of further education the student expects to complete, time spent with friends after school and, in media use.

The civic achievement mean scores of students are presented in Table 3.7 by the variables gender, ethnicity and religion.

**Table 3.7: Students' civic achievement mean scores by sex, ethnicity and religion**

Variable	Categories	Percentage	Total Civic knowledge	Civic content	Civic skills
Sex	Male	45.7	58	61	46
	Female	52.1	54	60	45
Students' Ethnicity	Sinhalese	72.7	56	62	47
	Sri Lankan Tamil	16.3	48	55	39
	Indian origin Tamil	3.0	54	62	43
	Muslim	6.9	60	60	42
	Other	0.2	60	74	43
Students' Religion	Buddhism	70.1	56	62	47
	Hinduism	14.2	49	56	40
	Islam	7.0	51	59	41
	Catholicism	4.8	53	61	43
	Christianity	3.1	51	57	43
	Other	.0	63	78	43

By the demographic variables of gender, ethnicity and religion, there is a significant difference in test mean scores of students. By gender, the males have scored higher than the females in sample, by ethnicity, the Muslims and Sinhalese, and by religion, the Buddhists have scored higher in total civic mean scores.

In Table 3.8, the Sri Lankan students' civic achievement mean scores are presented by home literacy.

**Table 3.8: Students' civic mean scores by home literacy**

Variable	Categories	Percentage	Total Civic knowledge	Civic content	Civic skills
Number of books in the home	0-10	31.1	51	57	43
	11-50	24.7	56	63	47
	51-100	14.2	58	64	50
	101-200	8.5	57	65	47
	More than 200	10.7	60	67	52
Receives a daily newspaper	yes	65.6	54	60	46
	no	33.3	55	62	45
Parents' highest level of education	<b>Mother</b>				
	Pr. not completed	3.4	46	52	38
	Completed Pr.	11.5	50	55	41
	Some Secondary 6-11	20.8	53	60	49
	Senior Secondary 12-13 (A.L)	10.0	61	69	51
	Voc/Tech Quals.	6.0	62	68	53
	Bachelor's degree	3.7	65	72	55
	Postgrad. degree	1.4	63	67	58
	<b>Father</b>				
	Pr. not completed	3.3	44	49	38
	Completed Pr.	10.9	48	54	41
	Some Secondary	17.8	53	60	45
	Completed Senior Secondary (A.L)	8.4	59	66	49
	Voc/Tech Quals.	11.6	62	69	54
	Bachelor's degree	3.5	64	71	55
	Postgrad. degree	2.1	61	67	53

A positive correlation of civic mean scores with the variable home literacy is clearly indicated in respect of the number of books in the home and the educational qualifications of the mother and father. The more the number of books in the home, the higher the civic mean scores of students, except for a slight variation in this pattern in respect of the category of 101-200 books in the home. Similarly, the civic mean scores of students are positively correlated with parents' highest educational qualifications, with scores increasing progressively from Senior Secondary to higher levels, with slight variations in the pattern at the highest level.

The educational aspirations of students themselves have been correlated with civic mean scores and the findings are presented in Table 3.9.

**Table 3.9: Students' civic mean scores by expected years of further education**

Variable	Categories	Percentage	Total Civic knowledge	Civic content	Civic skills
Expected length of further education	0 years	0.5	49	50	34
	2 years (to sit O.L)	11.8	45	52	36
	4 years (to sit A.L)	22.7	52	59	43
	Till qualifications for employment are obtained	24.4	58	65	49
	Till a degree is earned	19.0	58	65	51
	Don't know/cannot say	19.8	53	60	44

Those students who expect to continue their education till they earn a degree or qualifications for employment have the highest mean civic scores, relative to those who expect to stay on for a lesser number of years.

Indicators of family and home environment, for purposes of the international civic education study and the present study are the number of people living at home with the student, and whether a parent or guardian lived with the student at home on a regular basis. How these two indicators are correlated with civic mean scores is shown in Table 3.10.

**Table 3.10: Students' civic mean scores by family and home environment characteristics**

Variable	Categories	Percentage	Total Civic knowledge	Civic content	Civic skills
Number of parents/guardians living at home most or all the time	Both parents	19.1	51	57	42
	Female only	2.8	52	58	44
	Male only	13.0	56	62	47
	None	50.7	57	64	48
Total number of people in the home	1-2	1.3	59	66	49
	3	6.4	59	64	51
	4	24.6	57	64	47
	5	30.5	56	62	47
	6	19.0	52	58	44
	7-10	14.9	50	56	41
	More than 10	1.0	42	47	36

While students from small households of up to 3 members seem to have an edge over those with 4-5 members in respect of higher civic scores, 6 or more people in the home apparently is correlated negatively with civic mean scores.

Item 5 in the student questionnaire requested students to indicate whether 'any of these people live at home with you most or all of the time', and students were expected to say yes or no to each: 'Mother or a female guardian', 'Father or a male guardian'. As reported in Table 3.10,

approximately 51 percent had reported that a parent/guardian of neither sex lives with them at home, 'most or all the time'. This percentage of responses is excessively high and is not confirmed by other comparable research data. Even with the fairly high rates of parental migration for overseas employment, it is unlikely that homes with 14 year olds would be left with neither a male nor a female adult parent/guardian. It is possible that there was ambiguity in the wording of the statement 'live at home with you most or all the time'. In the case of families in which both are working parents, the students may have considered the percentage of time the parents are at home with them, in responding to this item. Only 19 percent respondents say they have both parents 'living at home most or all the time', and another 13 percent are with only the male parent/guardian. These statistics certainly need further verification, and no interpretation of data is therefore attempted.

The frequency of time spent in various out of school activities such as spending time with friends after school and in media use may be a factor impacting on civic test scores. The findings, in correlating these two variables with civic scores, are presented in Table 3.11.

**Table 3.11: Students' civic mean scores, by frequency of time spent in various out of school activities**

Variable	Categories	Percentage	Total Civic knowledge	Civic content	Civic skills
Time spent after school with friends	Never or almost never	16.6	55	61	48
	A few times each month	32.0	52	60	43
	1-3 days a week	27.2	57	64	48
	4 or more days a week	22.8	53	59	44
Time spent outside the home with friends in the late evening	Never or almost never	72.6	57	63	48
	A few times each month	16.4	50	57	41
	1-3 days a week	5.6	47	54	37
	4 or more days a week	4.7	43	49	36
Time spent watching television or videos on school days	No time	19.1	52	58	44
	Less than an hour	24.9	52	59	44
	1-2 hours	42.5	56	62	47
	3-5 hours	10.8	57	65	47
	More than 5 hours	1.7	57	64	48

Students who spend some time with friends after school (1-3 days a week), but never or almost never outside the home in the late evenings have the highest civic mean scores by time spent after school with friends. Similarly, some television and video viewing, even in the highest category of more than 5 hours on school days, seems to be correlated with higher civic mean scores, relative to very little or no viewing.

### 3.5 Summary

In the comparison of SL students' mean scores for the test items with INT students' comparable mean scores, in civic knowledge, content and skills, the achievement of Sri Lankan students was seen to be lower, by 11, 10 and 13 percentage points, respectively. The data when analyzed by composite mean scores for five of the six categories, the difference in percentage points ranges between 7 and 12, and in the sixth category, Social cohesion and diversity, the difference is 24 percentage points. The SL students have fared poorly in items that test their interpretive skills in particular, such as in the two items in the social cohesion sub-category that call on them to identify discrimination in employment and in pay equity. A recurring critique of the learning teaching process in schools in the national system in Sri Lanka has been that acquisition of content knowledge takes precedence over students' analytical skills development. The need to engage students more in learning activities that call upon their thinking, interpretive, discrimination and related skills has been reiterated over time, for e.g. in Chief Examiners' reports of the General Certificate of Education Ordinary Level and Advanced Level examinations. The need to challenge students' critical thinking in focused, practical learning contexts is highlighted, in the findings on student performance in the 'test' section.

The students' civic mean scores by selected school variables has highlighted the differences in student achievement by school type and medium of instruction, which has been a consistent finding in national level research studies and, in student achievement in public examinations such as the General Certificate of Education Ordinary Level and Advanced Level examinations. The 1AB and Private schools in the sample have a 10 percentage points lead in the civic knowledge mean score - 61, over the school type with the next higher mean score of 51, 1C schools. The comparable mean score of the Type 2 schools is 47. The mean scores in civic knowledge, civic content and civic skills respectively of the 1AB (61, 68 and 52) and Private schools, (61, 67 and 53) compare well with the international mean scores of 65, 70 and 58. The challenge therefore is to bring the 1C and Type 2 schools to the level of 1AB schools. Likewise, the medium-wise difference in achievement needs to be addressed urgently.

In the analysis of SL students' mean scores by memberships and participation in organizations, a positive correlation is shown between the variables. The finding therefore is that memberships

in organizations and active participation devoting a fair percentage of time each month to activities conducted by organizations is positively correlated with civic scores.

By demographic variables such as gender, ethnicity and religion, there is a significant difference in test mean scores of students. By gender the males, by ethnicity the Muslims and Sinhalese and by religion the Buddhists have scored higher.

The selected out of school variables, particularly home literacy and, family and home environment variables were found to correlate positively with mean scores. Students in whose homes there were more books, whose parents' educational qualifications were G.C.E.A.L or higher, and students who expected to continue studies till they obtained a degree or the necessary qualifications for employment, had higher mean scores than others. Likewise, students from smaller families had higher mean scores than those from relatively large families. Students who spend a reasonable amount of time with friends after school and, engage in TV/Video viewing - even fairly heavily on school days - record higher mean scores than those who do so very sparingly. Home literacy, family and home environment, time spent with friends and, in using media clearly impact on civic knowledge of students.