

Government of the Cook Islands



2021 Education Statistics Report



Table of Contents

FOREWORD AND INTRODUCTION	4
2021 AT A GLANCE	5
SCHOOLS IN THE COOK ISLANDS	6
COOK ISLANDS EDUCATION SYSTEM	7
EARLY CHILDHOOD EDUCATION (ECE) Enrolment Performance Personnel	8
PRIMARY EDUCATION	12 16
SECONDARY EDUCATION	22 24 27 27 28
INCLUSIVE EDUCATION	32
COOK ISLANDS GOVERNMENT SCHOLARSHIP SCHEME	33
TERTIARY EDUCATION	34
TEACHER QUALIFICATION	35
MINISTRY OF EDUCATION BUDGET	36
1. 2021 Schools in the Cook Islands by Region, Island, Status and Level	39 40 41
5: School Teachers and Staff by Region	42

Foreword and Introduction

Kia Orana tatou katoatoa,

I am pleased to introduce the 2021 edition of the Cook Islands Ministry of Education Statistics Report. The Ministry continues to prioritise better use of data at all levels of education to inform decision-making – from the next learning steps for a student in the classroom; to changes in policy and funding mechanisms. Informed decision-making that focuses on an outcome of quality education is based on good information. Valid and reliable data underpins such information.

This report covers student outcomes for the 2020 academic year and 2021 enrolment and participation data. Other sections of the report include finance and programme-based data.

Information in this report is produced from the Education Management Information System (EMIS) and is supported by data provided by internal divisions within the Ministry of Education. Data for this report are collected annually from schools.

Student assessment and the National Certificate of Educational Achievement (NCEA) data is provided for 2020. Fiscal information is expressed for the financial year ending 30th June. The Ministry of Education acknowledges the contributions made by all the schools, providers, ministry divisions, regional and international agencies who continue to support the collection and analysis of data for this Education Statistics Report.

The Cook Islands Education Statistics report is available to all our stakeholders. We sincerely hope that such data and information prove helpful to researchers, policy-makers, those who provide services and support as well as to the community at large.

Meitaki Atupaka e Kia Manuia.

Ms Danielle Tungane Cochrane Secretary of Education <u>Ministry of Education</u>



Education in the Cook Islands at a Glance 2021

2021

Learning for Life

Early Childhood Education (ECE)

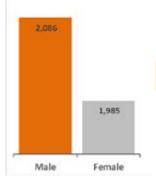
- 437 students
- 52% male
- 20 teachers

Primary Education

- 1,737 students
- 53% male
- 115 teachers

Secondary Education

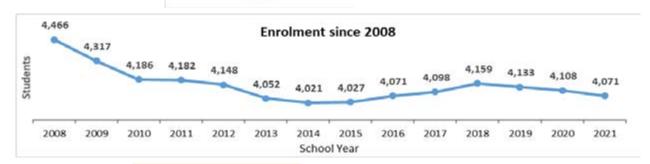
- 1,897 students
- 49.7% male
- 109 teachers



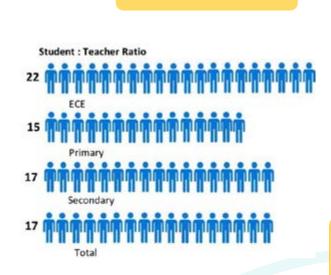
Number of Students

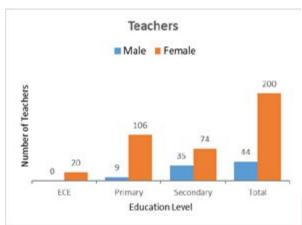
Students Government Private 21% 79%

Education	Gross	s Enrolm	ent %	Net Enroment %		
Level	Male	Female	Total	Male	Female	Total
ECE	87	84	86	87	82	84
Primary	111	106	109	100	100	100
Secondary	95	94	95	87	88	88









244 Trained Teachers

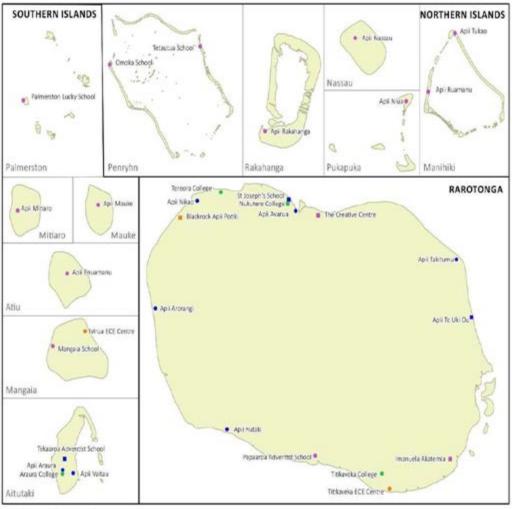
122 TEACHER AIDES SUPPORTING STUDENT LEARNING

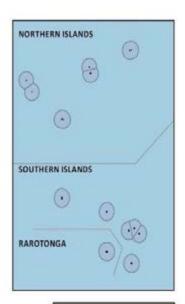
31 EDUCATION PROVIDERS

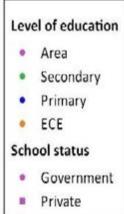
Schools In The Cook Islands

Education in the Cook Islands is mainly provided by government institutions. There are 31 providers including 1 standalone ECE Centre, 11 Primary Schools (10 of which have ECE Centres attached), 4 Secondary Schools, 14 Area Schools¹ (all with ECE Centres) and a Tertiary Institute.

Figure 1: Map of the Cook Islands







*Islands are not drawn to scale

In the Cook Islands Maori language, the word Apii means School. Other useful terms relating to education include;

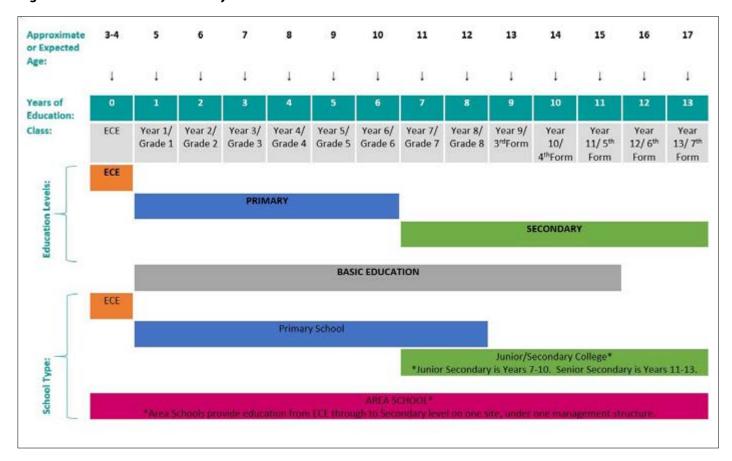
- Apii to teach, learn, practice
- Apii Potiki Early Childhood/ Pre-school
- Kura Apii Curriculum
- Tamariki children
- Pu'apii Teacher
- Tauira Student, Pupil
- Tamou to learn
- Tuatua Talk, say, speak, converse
- Vaitoanga Kite assessment

- Revera levels
- Pa Enua Outer Islands
- Pa Enua Tokerau Northern Group Islands
- Pa Enua Tonga Southern Group Islands
- Akakoukouanga summary
- Akakoroanga aim
- Akameitakianga acknowledgement
- Paunuanga evaluation
- Tamanakoanga suggestion

¹ An Area School is a school that provides education from Early Childhood through to secondary level on one site and under one management structure.

Cook Islands Education System

Figure 2: Cook Islands Education System



All 8 private schools, made up of 5 Church and 3 Independent schools, receive 100% of the equivalent allocation to government schools from the national education budget, for teachers and operations funding, based on their enrolment. All Government and Private Schools are required to be open to both educational review and financial audit.

Governance of Public Schools sits with the Ministry of Education. However, each school has its own stakeholder committee, the School Committee, which makes decisions on individual school policy, strategic plans and annual goals. Governance of Private Schools sits with a School Board.

The Cook Islands Tertiary Training Institute (CITTI), established in 2013, provides full and part-time vocational programmes and various community education courses in Rarotonga and the Pa Enua.

EARLY CHILDHOOD EDUCATION (ECE)

Enrolment Performance

Figure 3: Early Childhood Education Students by Region and Gender 2021

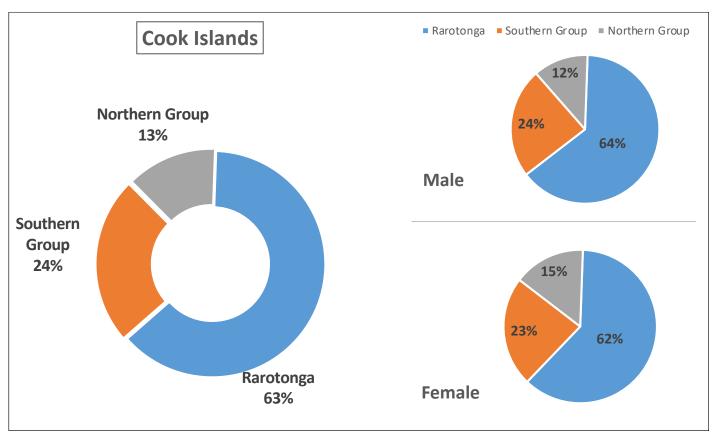


Table 1: Student Enrolment Rates in ECE for Years 2017 - 2021 (%)

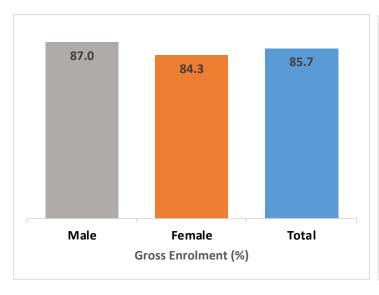
Year		GER		GPI		NER		GPI
	Male	Female	Total		Male	Female	Total	
2017	99.0	96.0	98.0	1.0	99.0	96.0	97.0	1.0
2018	90.1	95.6	92.8	1.1	89.8	95.6	92.6	1.1
2019	74.0	88.3	80.7	1.2	73.6	88.3	80.5	1.2
2020	79.0	96.0	87.0	1.2	77.0	95.0	86.0	1.2
2021	87.0	84.3	85.7	1.0	86.6	82.0	84.0	0.9

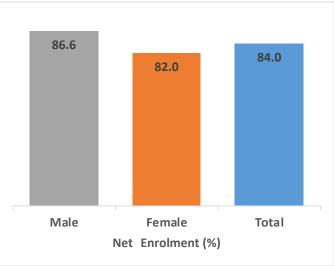
The Gender Parity Index or GPI measures progress toward gender equality in education. This is measured at ECE level by the participation and engagement of females in relation to males. A GPI of 1 indicates an equal number of females to males in ECE. As a general rule, a value less than 1 shows a gender disparity in favour of males. A value greater than 1 indicates a gender disparity in favour of females.

The 2021 Gross Enrolment Rate or GER total is 85.7% showing a decrease from the 2020 rate of 87%. The 2021 NER is 84% showing a 2% decrease from 2020.

EARLY CHILDHOOD EDUCATION (ECE)

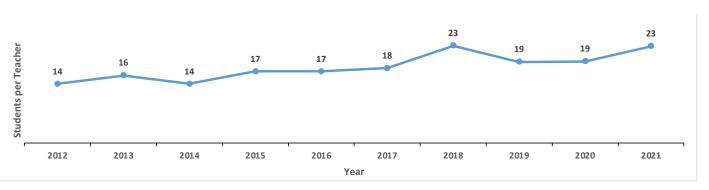
Figure 4: Gross and Net Enrolment Rates by Gender - 2021





Gross enrolment rates at ECE level count all students enrolled at ECE regardless of age, compared to the age-appropriate population. The usual age of enrolment for children at ECE is 3 to 4 years, and this data may also include 5-year-olds transitioning into Year 1. The Gross enrolment rate indicates that 87% of male children aged 3-4 years are enrolled at ECE; 84.36% for female. In total, the 2021 gross enrolment rate for ECE is 85.7%. The net enrolment indicates the number of age-appropriate students enrolled compared to the general population of 3-4 year olds. In total, we have a net enrolment rate of 84%.

Figure 5: Early Childhood Education Student Teacher Ratio for Years 2012 - 2021 (%)



In total, there are 437 students enrolled at ECE across the various schools both public and private. There are 228 males and 209 females. Figure 6 shows an increase in the number of students enrolled at ECE in the Northern group region but decreases in both Southern group and Rarotonga.

(Data is indicative of population stats)

EARLY CHILDHOOD EDUCATION (ECE)

Figure 6: Early Childhood Education Enrolment by Region for Years 2017 - 2021

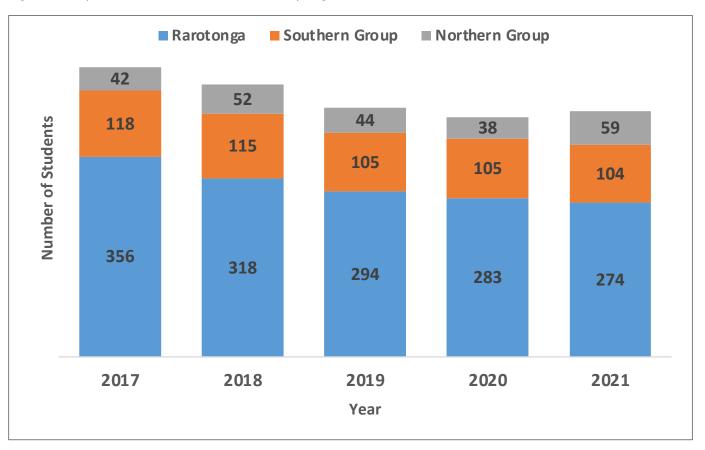


Table 2: Number of ECE Students by Region, Provider Type and Gender - 2021

Region and Status	Total	Male	Female
RAROTONGA	274	146	128
Government	163	92	71
Private	111	54	57
SOUTHERN GROUP	104	55	49
Government	71	38	33
Private	33	17	16
NORTHERN GROUP	59	27	32
Government	59	27	32
Private	20	12	0
COOK ISLANDS	437	228	209

Table 2 shows a higher ECE enrolment in government schools across the region compared to Private Schools. There are no private ECE centres currently in the northern group. The Northern Group has greater female student enrolment than male at ECE level.

In total, there are 437 students enrolled at ECE public and private schools. There are 228 males and 209 females, and this shows an increase in the total number of enrolments at ECE in 2021 compared to 2020.

PERSONNEL

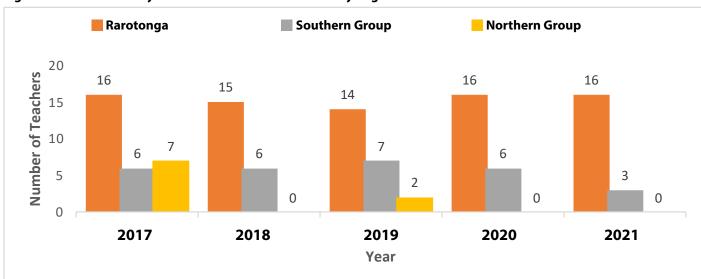


Figure 7: Number of Early Childhood Education Teachers by Region for Years 2017 - 2021

Figure 7 shows the number of ECE teachers by region. There are no changes noted to the number of ECE teachers in Rarotonga from 2020 to 2021. There is a decrease in the number of ECE teachers in the Southern Group and no new ECE teachers have been employed in the Northern group between 2020 and 2021.

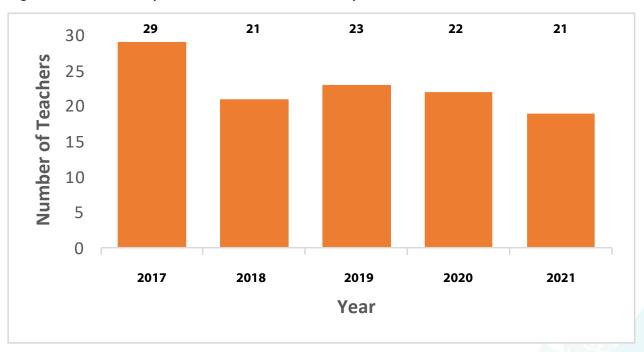


Figure 8: Number of Early Childhood Education Teachers by Qualification for Years 2017 - 2021

Figure 8 shows the number of qualified teachers since 2017.

The Ministry of Education continues its partnership with the University of the South Pacific, Cook Islands campus, encouraging teachers to upskill and work towards completing a first degree. The Ministry of Education bears the cost of study to ensure well qualified and resourced teachers as per the Education Master Plan 2008 – 2023 (EMP). Courses are usually delivered using mixed modality, including face to face and online lectures.

PRIMARY EDUCATION

ENROLMENT PERFORMANCE

Figure 9: Primary Education Students by Region and Gender - 2021 (%)

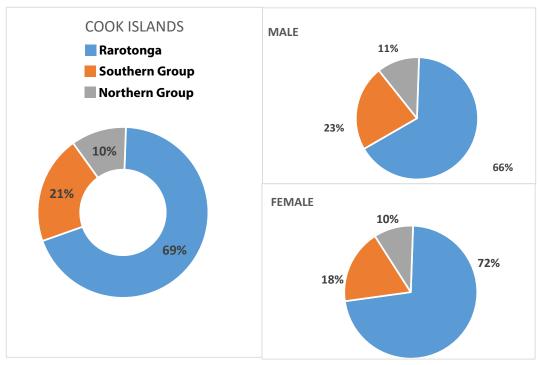


Figure 9 shows that the highest proportion of student enrolment remains in Rarotonga, followed by the southern and northern group populations.

Figure 10: Gross and Net Enrolment Rates by Gender - 2021 (%)

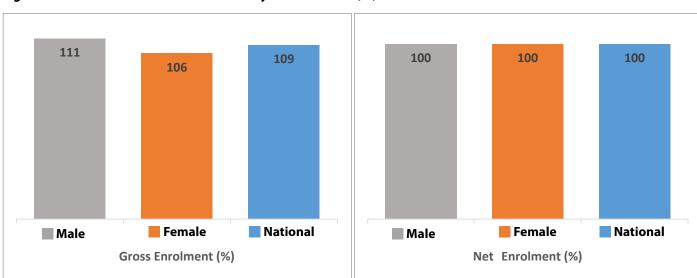


Figure 10 shows the GER for primary education and counts all students at an education level regardless of age, compared to the age-appropriate population. This count includes all children in Years 1 to Year 6. A GER outcome that exceeds 100% indicates that a country is, in principle, able to accommodate all of its school-age population but does not indicate the proportion already enrolled. GER may include children who are over 10 years of age.

The Net enrolment for primary education indicates the number of age-appropriate students enrolled at school compared to the general population of 5 – 10 year olds. The 100% rate is an indication that all 5-10 year olds are at school. This is due to legislation that mandates compulsory attendance in the Cook Islands from 5 years of age, free education in the Cook Islands for all public schools and accessibility to schools in country.

PRIMARY EDUCATION

Table 3: Student Enrolment Rates in Primary Education for Years 2017 - 2021 (%)

Year	Gros	s Enrolment	(%)	GPI	Ne ⁻	t Enrolment	(%)	GPI
	Male	Female	Total		Male	Female	Total	
2017	110	103	107	1	100	100	100	1
2018	104	102	103	1	100	100	100	1
2019	112	110	111	1	100	100	100	1
2020	113	114	113	1	100	100	100	1
2021	111	106	109	1	100	100	100	1

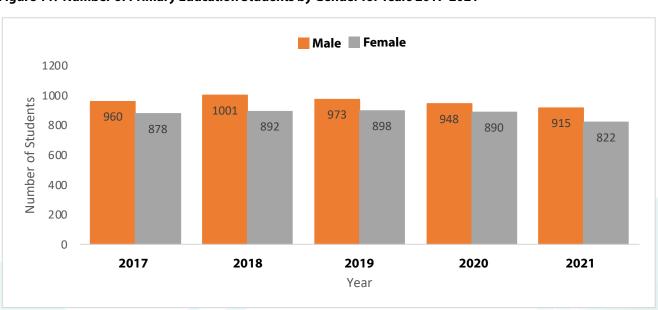
Table 3 indicates continued GPI in favour of males in 2021. (See page 8 for GPI description)

Table 4: Number of Primary Students by Region, Provider Type and Gender - 2021

Region and Status	Total	Male	Female
RAROTONGA	1,199	605	594
Government	808	398	410
Private	391	207	184
SOUTHERN GROUP	356	207	149
Government	289	163	126
Private	67	44	23
NORTHERN GROUP	182	103	79
Government	182	103	79
Private	-	-	-
COOK ISLANDS	1,737	915	822

Table 4 shows a total primary school population of 1,737 in the Cook Islands which is a decrease from the 2020 population of 1,838. There are 93 more males enrolled at primary school level than female.

Figure 11: Number of Primary Education Students by Gender for Years 2017-2021



PERSONNEL

Table 5: Primary Education Teachers by Region and Gender - 2021

Region	Female	Male	Total
Rarotonga	68	6	74
Southern Group	24	2	26
Northern Group	14	1	15
National	106	9	115

Table 5 indicates that the majority of the primary education workforce are women. Similar to ECE and primary level education enrolment numbers, the greater proportion of teachers are located in Rarotonga, where the larger population of the country is, followed by the southern group, then the northern group schools.

Table 6: Number of Primary Education Teachers by Region for Years 2017 - 2021

Region	2017	2018	2019	2020	2021
Rarotonga	80	77	67	71	74
Southern Group	20	27	29	28	26
Northern Group	17	18	16	16	15
National	117	122	112	115	116

Table 6a: Primary Education Proportion of Students per Teacher by Region for Years 2017 - 2021

Region	2017	2018	2019	2020	2021
Rarotonga	16	17	20	18	16
Southern Group	20	15	13	14	14
Northern Group	11	10	11	12	12
National	16	16	17	16	15

Table 6a indicates the average student teacher ratio for primary level education is 1:17. In the southern group, the student teacher ratio is 1:15 and in the north, the average student teacher ratio is 1:11.

Figure 12: Primary Education Student Teacher Ratio for Years 2012 - 2021

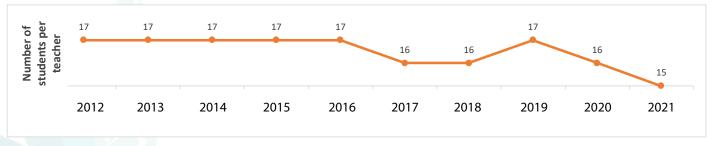


Figure 12 shows an average student teacher ratio of 1 to 17 from 2012 to 2021 for primary education.

The Ministry of Education continues to strengthen ongoing priorities for Primary Education, including:

- a) National monitoring and assessment to inform literacy and numeracy support and programmes.
- b) A focus on Cook Islands Reo Maori Oral language development and, in particular, language acquisition from ECE to Year 8.
- c) A focus on developing relevant pedagodgy for teaching Cook Islands Maori as a second language in Rarotonga Schools.
- d) A focus on strengthening teacher, and; leadership capacity

In addition to the above, the following foci will contribute to the completion of the Cook Islands Education Master Plan 2008 – 2023:

- 1. Quality Leadership in Education.
- 2. Quality teaching with a focus on improved pedagogy.
- 3. Cook Islands Maori language and culture.

PRIMARY LITERACY

The 2020 Year 4 English and Cook Islands Maori literacy achievement results are to be expected and are indicative of a recent review on assessment delivery and consistency. Education review findings uncovered a high variation of tools being used across Cook Islands primary schools leading to data collection and analysis inconsistencies.

The Literacy data provided in this report represents reading data only and is shown as a progression against a national target that was previously set in the EMP in 2008. Targets are set and published in the Education Master Plan 2008 - 2023 (EMP) and the Education Statement of Intent 2020 - 2023.

PRIMARY NUMERACY

New assessment tools and approaches for numeracy are currently being implemented and trialled for a selection of Cook Island schools and, in particular, the introduction of Developing Mathematical Inquiry Communities (DMIC). The DMIC programme facilitates leading to data collection and analysis inconsistencies and focuses on applying an inquiry approach to pedagogical practice in primary-level classrooms.

Table 7: National Year 3 Numeracy Achievement Levels (%) by Region and Gender At (3) and Above (4) - 2020

Region	Male	Female	Total
Total (National)	62	75	68
Rarotonga	66	74	70
Southern Group	57	79	66
Northern Group	47	67	50

Table 7 indicates a Year 3 achievement percentage by region and gender. The results show students who are achieving AT (3) and ABOVE (4) on the Cook Islands Student Achievement banding of 1 – 4; by region and by gender. Overall, the results are improving. The incompatibility of previously set targets and assessment methods have been addressed in 2019 with the standardisation of assessment tools at this level, to ensure consistency of data received from schools to show progression against Numeracy targets set in the EMP.

Figure 13: National Year 3 Numeracy against the annual targets for Years 2016 - 2020

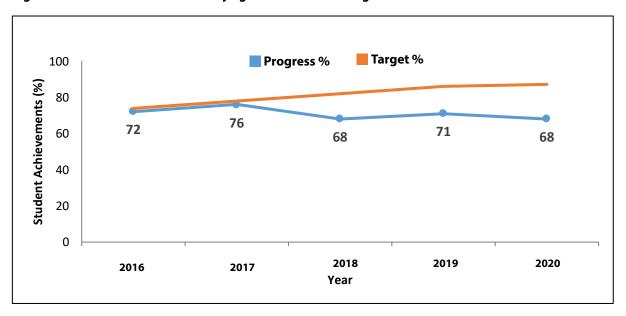


Figure 13 shows the Year 3 Numeracy rate against an incremental target as set in the 2008 – 2023 EMP. The National average rate of achievement for Year 3 remains between 65% and 70%.

Figure 14: National Year 3 Numeracy Achievement Rate by Region for Years 2016 - 2020

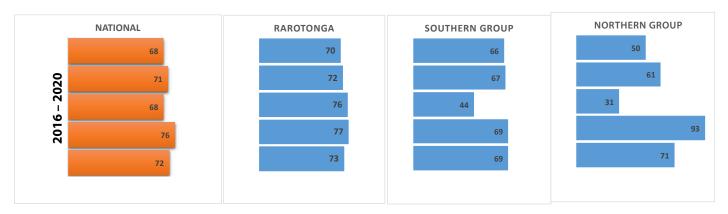


Figure 14 results are expected and are indicative of resourcing and programme delivery at Year 3 throughout Cook Islands schools. The greater percentage outcomes in smaller schools are representative of smaller cohorts of children and averages remain consistent across each region. The National Year 3 Numeracy rate averages at about 70%; similarly for Rarotonga. The southern group results show an average of 65%.

Table 8a: National Year 4 Maori Literacy Achievement (%) by Region and Gender - 2020

Region	Male	Female	Total
National	62	63	62
Rarotonga	65	64	65
Southern Group	54	54	54
Northern Group	58	71	63

Table 8b: National Year 4 English Literacy Achievement (%) by Region and Gender - 2020

Region	Male	Female	Total
National	40	60	51
Rarotonga	49	66	57
Southern Group	32	49	41
Northern Group	19	56	35

Figure 15: National Year 4 Maori Literacy Achievement Progress (%) for Years 2016 - 2020

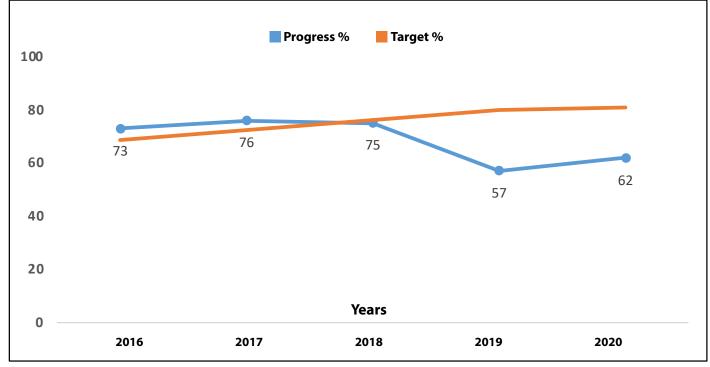


Figure 15 shows a National Year 4 Maori Literacy achievement progress against incremental targets as set in the 2008 – 2023 EMP. A decrease in progress is noted from 2018.

The Cook Islands Maori literacy data represented here are the National results for reading. The tool used to assess Cook Islands Maori reading levels is called Te Vaito'anga Kite Tatau (TVKT). In 2020, the TVKT was reviewed and adjusted. Since then, the Ministry of Education has continued to provide in-school support for teachers to become familiar with the revised tool. This work will continue through to the end of 2023.

The Ministry of Education continues to prioritse the monitoring of progression and achievement for Cook Islands Maori literacy and recognises this a primary need for Education in the Cook Islands. The statistics currently show a non-favourable trend, particularly since 2018, where our data has shown significant decrease in National achievement for Cook Islands Maori literacy.

The Ministry of Education continues with the following strategies to support Cook Islands Maori literacy:

1) The continuation of support for the revised TVKT tool.

Student Achievement (%)

- 2) The continuation of curriculum support for Cook Islands Maori language and literacy.
- 3) A focus on developing quality school language policies that align with the Ministry of Educations Te Au Reo i roto i te Turanga Apii or Languages in Education Policy (AM 02 001)
- 4) A focus on assisting schools with in-school language/literacy programmes that suit the context of their school.
- 5) A focus on developing pedagogical strategies for learning Cook Islands Maori as a second language, beginning with relevant literature review and research.
- 6) The continuation of Cook Islands Maori resource development, books catering to the reading levels of the TVKT tool.

Figure 16: National Year 4 English Literacy Achievement Progress (%) for Years 2016 - 2020

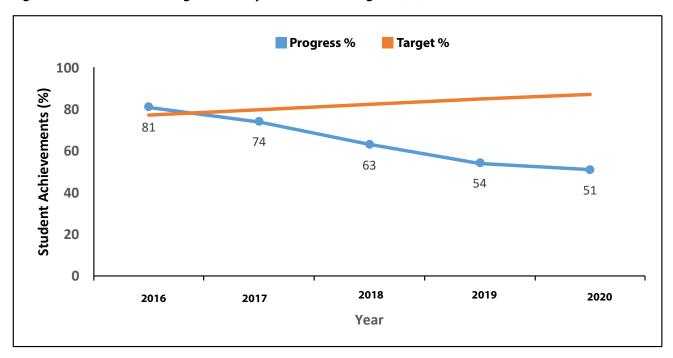


Figure 16 shows the National Year 4 English Literacy Achievement progress by percentage. There is a trending decline in achievement progress from 2016 to 2020. These results are expected and are indicative of the most recent changes made to assessment delivery and consistency across schools for Year 4 literacy achievement.

Figures 17 (a): National Year 4 Student Literacy Achievement (%) by Region for Years 2016 - 2020

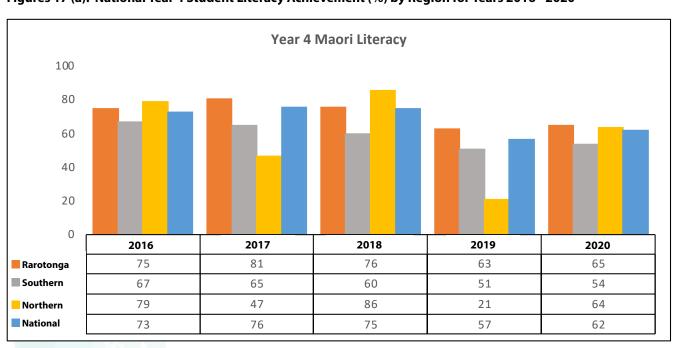
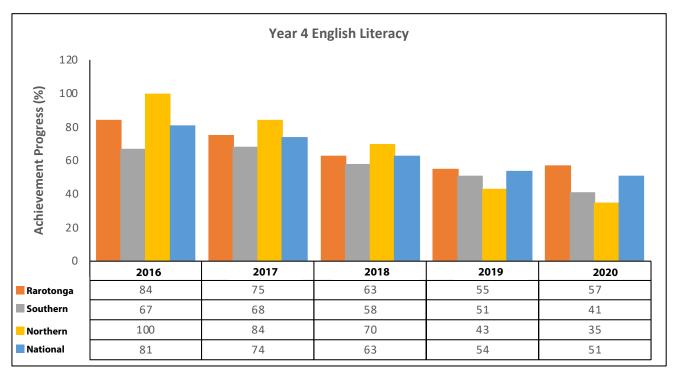


Figure 17 (a) shows Year 4 Maori Literacy achievement by region. There has been a decrease in achievement for Rarotonga and the Southern Group since 2017. An increase in achievement is noted for northern group in 2018 but has significantly decreased again in 2019. The national data shows an average achievement of 65% across the region.

Figures 17 (b): National Year 4 Student Literacy Achievement (%) by Region for Years 2016 - 2020



The Year 4 English Literacy data indicates decrease in achievement across the region from 2016 to 2020.

Table 9: National Year 8 Maori Literacy Achievement rate (%) by Region and Gender - 2020

Region	Male	Female	Total
National	38	55	46
Rarotonga	36	49	43
Southern Group	50	82	63
Northern Group	13	50	31

The Year 8 National Maori Literacy Achievement data has provided the needed direction for a renewed focus on supporting Maori language and literacy attainment through policy and programme development and support. As the level of proficiency is set in the EMP, the Ministry of Education recognises the need to improve Maori literacy

planning at Primary level with a focus on policy guidance and programme planning in ECE through to Year 8. The Maori language survey conducted by MoE in 2019 and 2020 has recognised the need to revisit the delivery of the oral language strand at the primary level. The focus has been written language for learning, with an overwhelming number of teachers now resorting to teaching language through reading.

Figure 18: National Year 8 Maori Literacy Achievement (%) by Region Years 2016 - 2020

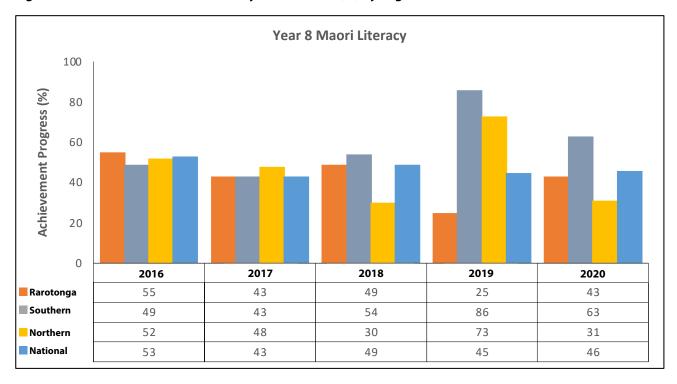


Figure 18 shows that there has been a continued decline in Cook Islands Maori literacy since 2016. These results can be attributed to the recognition of Cook Islands Maori as a second language for most (or majority) of Rarotonga students. The southern group and northern group Year 8 cohorts however, show a positive result in achievement in 2019.

Figure 19: National Year 8 Maori Literacy Achievement Progress (%) for Years 2016 - 2020

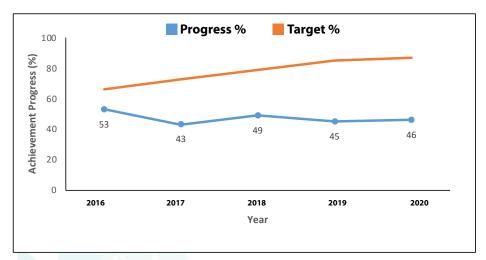


Figure 19 shows the National Year 8 Maori literacy achievement progress % from 2016 to 2020. The results show a clear decline in achievement but is a snapshot representative of Reading data only. These results can be attributed to the recognition of Cook Islands Maori as a second language for most (or majority) of Rarotonga students. A revised

tool is currently being shared with schools in 2021. The Ministry of Education is expecting to see improved results for Year 8 Maori literacy by 2025 through a targeted focus on the Oral language strand and improved monitoring of Maori literacy achievement across all levels.

Figure 20: National Year 8 English Literacy Achievement Progress (%) for Years 2016 - 2020

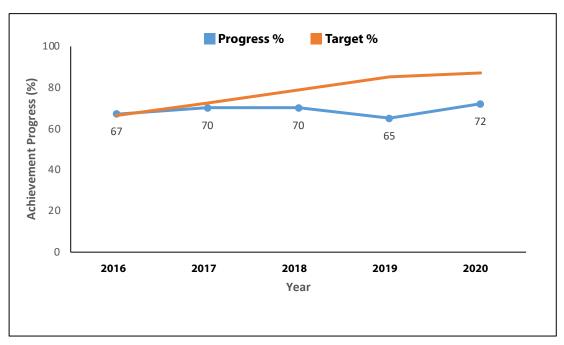


Figure 20 shows a declining trend in achievement since 2016 to 2020 and as mentioned above for Primary Education, is indicative of discrepancies noted in assessment tools in Primary schools. Improved results are expected by 2025.

Table 10: Year 8 Numeracy Progress Years 2016 - 2020

Year	Numeracy Progress (%)	Numeracy Target (%)
2016	38	73
2017	35	78
2018	40	81
2019	38	85
2020	35	87

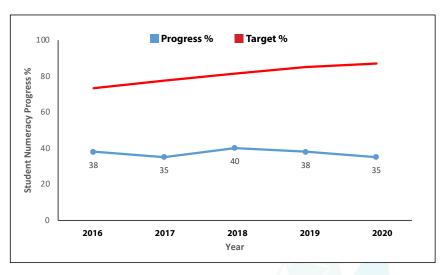


Figure 21: National Year 8 Numeracy Achievement Progress (%) for Years 2016 - 2020

Figure 21 and Table 11 show the 2020 Year 8 Numeracy results, as shown above. The results here show the proportion of students progressing toward using a Strategy Stage 7 in Mathematics by the end of Year 8. Although the table looks concerning, the results reflect Progressive Achievement Tests (PA)) National assessment stanine results converted into a Strategy stage which is the goal set in the EMP. In 2020, we have 35% of Year 8 students using a Strategy stage 7 in Mathematics, a positive result considering that this is the expected level of proficiency for a Year 8 student as stipulated in our EMP.

SECONDARY EDUCATION

ENROLMENT PERFORMANCE

Figure 22: Distribution of Secondary Education Students by Region 2021

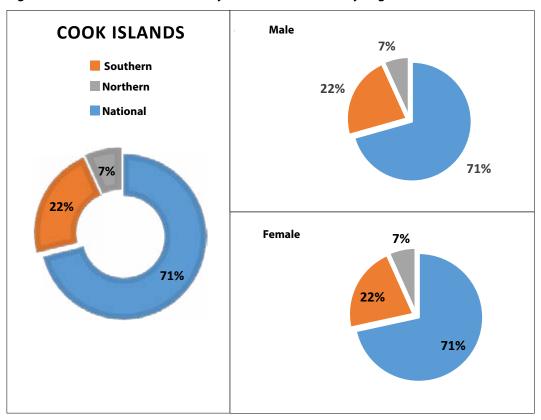


Figure 22 shows the distribution of secondary education students by region in 2021. Similar to the results of ECE and primary education, the highest proportion of students are located in Rarotonga, followed by the southern group and then the northern group populations.

Figure 23: Secondary Education Student Enrolment Rates - 2021

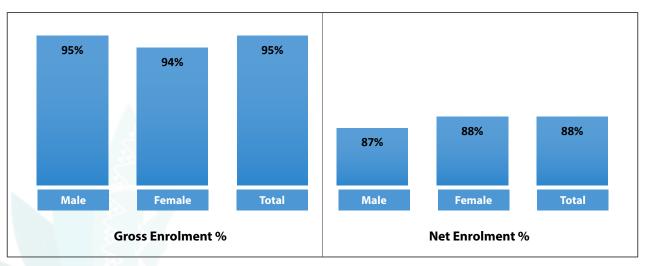


Figure 23 shows Secondary Education Student Enrolment rates for 2021. The Gross enrolment rate shows that 95% of the total secondary aged population are enrolled at school. The net rate shows a total of 92% of secondary school aged students enrolled which has increased from 88%.

SENIOR SECONDARY RETENTION

Figure 24: National Student Retention at Senior Secondary Level Years 2017 - 2021

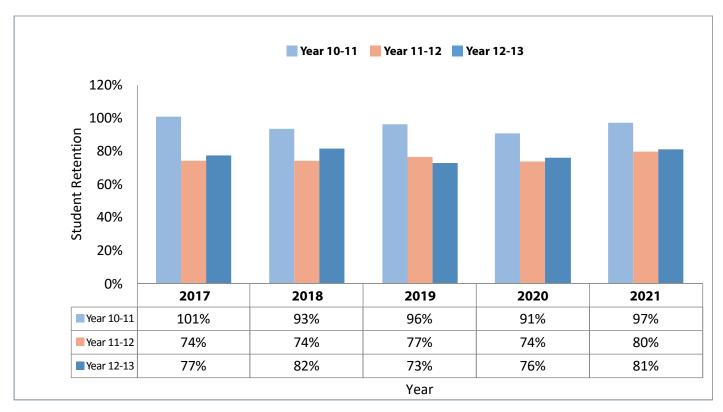
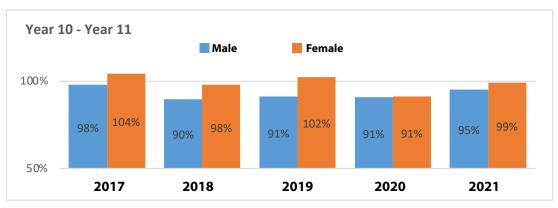
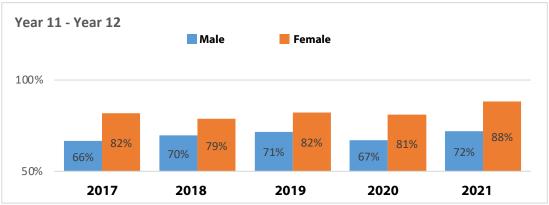


Figure 24 shows National student retention at the Senior Secondary level from 2017 – 2021. Providing Secondary education that engages young people and retains them in school is an ongoing focus for the Ministry of Education. As a result of schools strengthened pastoral care systems and the broad scope of programmes available, the rate of early leaving exemptions for 15-year-olds is low. The results show a higher proportion of students staying in school through to year 13.

SENIOR SECONDARY RETENTION

Figure 25: National Student Retention at Senior Secondary Level by Gender 2017 - 2021





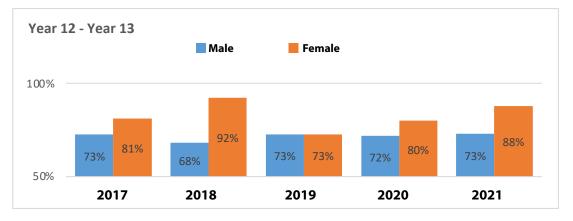


Table 11: Number of Secondary Students by Region, Status and Gender - 2021

Region and Status	Total	Male	Female
RAROTONGA	1,349	666	683
Government	1,081	523	558
Private	268	143	125
SOUTHERN GROUP	420	213	207
Government	420	213	207
Private	ı	ı	-
NORTHERN GROUP	128	64	64
Government	128	64	64
Private	-	1	-
COOK ISLANDS	1,897	943	954

SENIOR SECONDARY RETENTION

Figure 26: Number of Secondary Education Students by Gender for Years 2017 - 2021

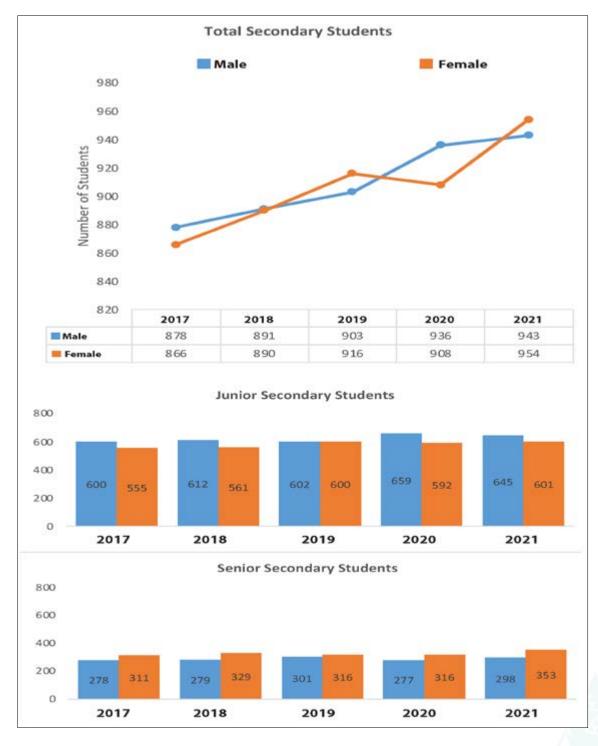


Figure 26 shows the number of secondary education students by gender for the Years 2017 – 2021.The data shows an increase in the number of female students in 2021 compared to male.

Table 12: Number of Secondary Education Students by Region for Years 2017 - 2021

Region	2017	2018	2019	2020	2021
Rarotonga	1,256	1,284	1,302	1,334	1,349
Southern Group	361	374	395	393	420
Northern Group	127	123	122	117	128
National	1,744	1,781	1,819	1,844	1,897

PERSONNEL

Table 13: Number of Secondary Education Teachers by Region and Gender - 2021

Region	Female	Male	Total
Rarotonga	48	24	72
Southern Group	22	10	32
Northern Group	4	1	5
Total	74	35	109

Table 14: Number of Secondary Education Teachers by Region for Years 2017 - 2021

Region	2017	2018	2019	2020	2021
Rarotonga	85	79	84	86	72
Southern Group	32	30	30	31	32
Northern Group	6	6	9	5	5
National	123	115	123	122	109

Table 15: Secondary Education Student: Teacher Ratio for Years 2017 - 2021

Region	2017	2018	2019	2020	2021
Rarotonga	15	16	16	16	19
Southern Group	11	12	13	13	13
Northern Group	21	21	14	23	26
National	14	15	15	15	17

Figure 27: National Secondary Education Student: Teacher Ratio for Years 2012 - 2021

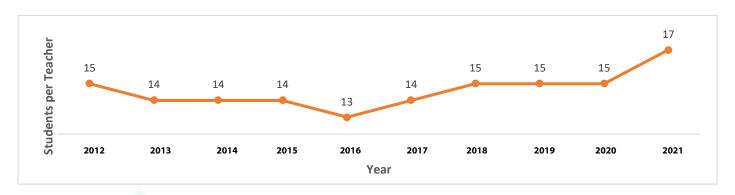


Figure 27 shows the National Secondary Education student: teacher ratio with an average of 1 - 15 students from 2012 to 2021.

NATIONAL CERTIFICATE OF EDUCATIONAL ACHIEVEMENT (NCEA)

The Cook Islands use the New Zealand Qualification of National Certificate of Educational Achievement (NCEA) as the senior secondary national qualification. The qualification has three levels of attainment which aligns with the final three years of secondary schooling.

National NCEA by Participation

NCEA results by participation show only those students undertaking a programme of study that contains enough credits to be eligible for the award of the qualification.

Figure 28: NCEA Level 1 to Level 3 National Results by Participation Years 2016 - 2020

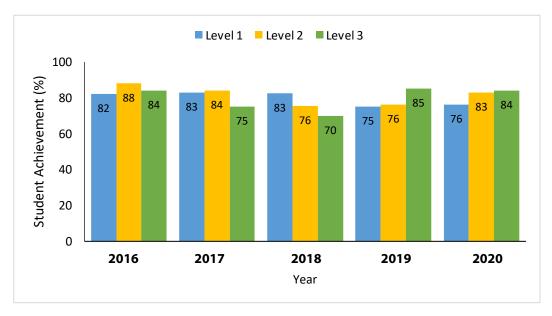
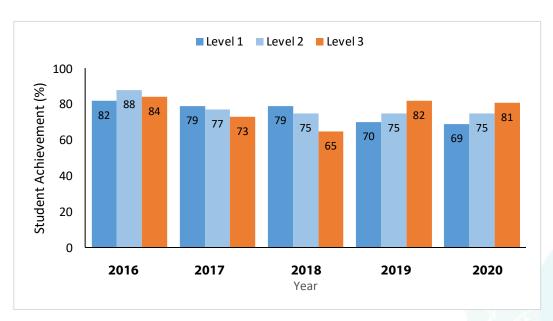


Figure 29: NCEA Level 1 to Level 3 National Results by Enrolment Years 2016 - 2020



NATIONAL NCEA ACHIEVEMENT PROGRESS

The Ministry of Education continues to see pleasing rates of achievement across all levels, with a significant increase at Level 2. Variations are expected between cohorts of students and while remaining on track, close monitoring of achievement continues.

Figure 30: NCEA Level 1 Achievement Progress Years 2016 - 2020

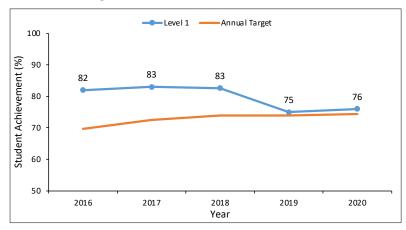


Figure 31: NCEA Level 2 Achievement Progress Years 2016 - 2020

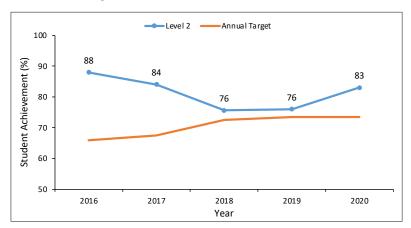


Figure 32: NCEA Level 3 Achievement Progress Years 2016 - 2020



Figures 30, 31 and 32 confirm that Cook Islands NCEA levels are achieving above the set targets of the EMP 2008 – 2023 with the exception of Level 3 in 2018. An improvement is noted however for Level 3 in 2019 which is encouraging. This data shows that NCEA is tracking progressively against the National targets for NCEA level 1 -3.

NATIONAL NCEA LITERACY AND NUMERACY

Figure 33: NCEA Level 1 Cook Islands Maori Literacy Progress against annual targets 2016 - 2020

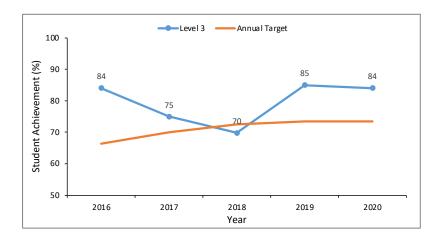


Figure 34: NCEA Level 1 Literacy Progress against annual targets 2016 - 2020

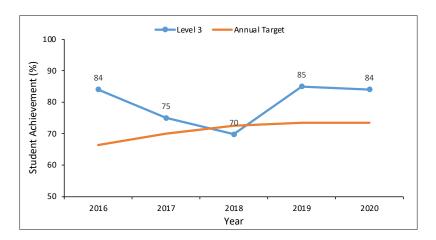
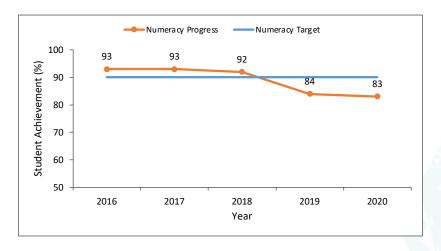


Figure 35: NCEA Level 1 Numeracy Progress against annual targets 2016 - 2020



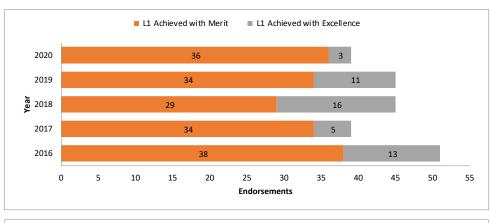
The NCEA level 1 results for Maori and English Literacy continue to show high achievement in 2020. The level 1 Numeracy result shows a decrease in achievement from 2018.

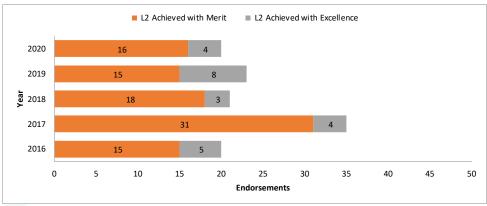
NCEA ENDORSEMENTS

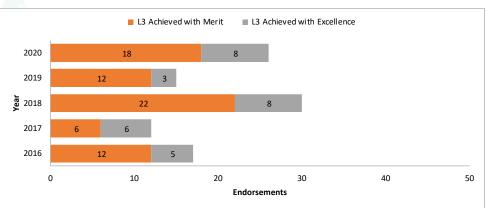
Table 16: Number of NCEA Certificates Level 1 to Level 3 Merit and Excellence Endorsements Years 2016 - 2020

Year	2016	2017	2018	2019	2020
Merit Endorsemen	ts				
Level 1	38	34	29	34	36
Level 2	15	31	18	15	16
Level 3	12	6	22	12	18
Excellence Endorse	ements				
Level 1	13	5	16	11	3
Level 2	5	4	3	8	4
Level 3	5	6	8	3	8

Figure 36: Number of National Certificate of Education Achievement Level 1 to Level 3 Student Results Endorsed with Merit or Excellence for Years 2016 - 2020







NCEA COURSE ENDORSEMENTS

Figure 37: NCEA Courses Endorsed (%) with Excellence by Level 2016 - 2020

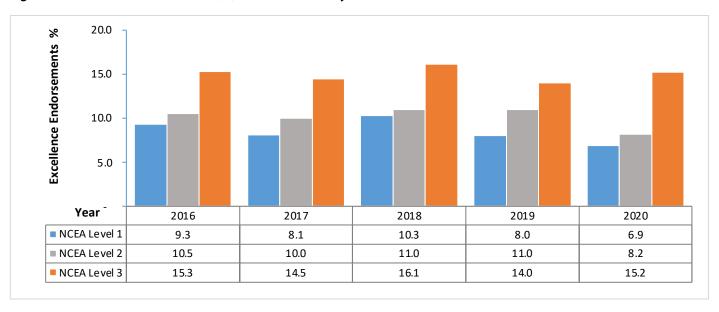
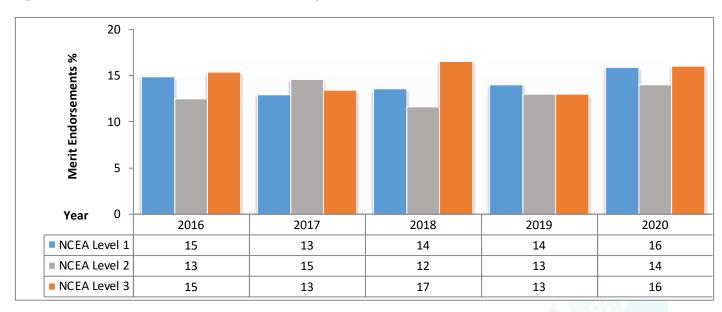


Figure 38: NCEA Courses Endorsed (%) with Merit by Level - 2016 - 2020



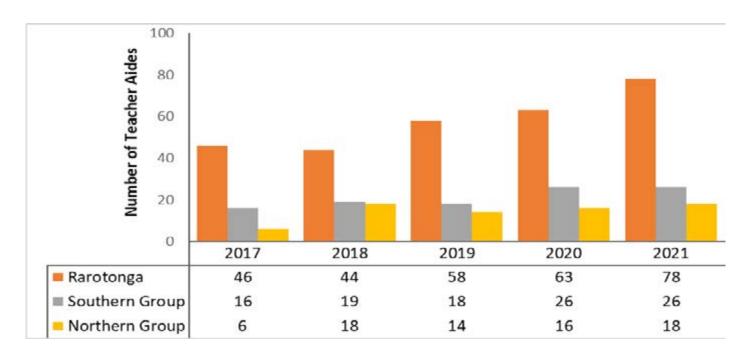
INCLUSIVE EDUCATION

Personnel

Table 17: 2021 Inclusive Education Teacher Aides by Region, School Status and Teaching Support

Dogion		Total	
Region	Private	Public	
Rarotonga	47	31	78
Southern Group	1	25	26
Northern Group	-	18	18
Total	48	74	122

Figure 39: Number of Teacher Aides by Teaching Support Years 2017 - 2021

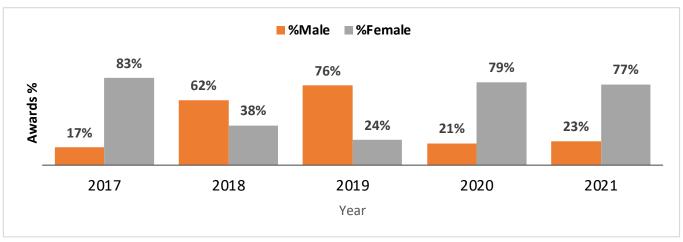


Wide community support and understanding of Inclusive Education (IE) remains a key goal for the Ministry of Education. Teacher Aide support is one critical step towards providing either individual students or groups of students with additional learning support while in the classroom. The data presented is the total number of Teacher Aides across all three programmes of support provided by the Ministry of Education to schools (both Government and Private), and includes:

- 1) One-on-one teacher aides working with one student with an individual education plan (IEP).
- 2) Group teacher aides providing remedial learning support to a group of students in support of the teacher.
- 3) School support teacher aides providing resource support and assistance across learning programmes. The allocation of teacher aides is based on student need, so there is no concern with the decline. The majority of teacher aide opportunities exist for children with high learning needs and ongoing budget support by the Ministry of Education to ensure adequate provision of teacher aides and resource support.

COOK ISLANDS GOVERNMENT SCHOLARSHIP SCHEME

Figure 40: Scholarship Awards and Graduates by Gender Years 2017 - 2021



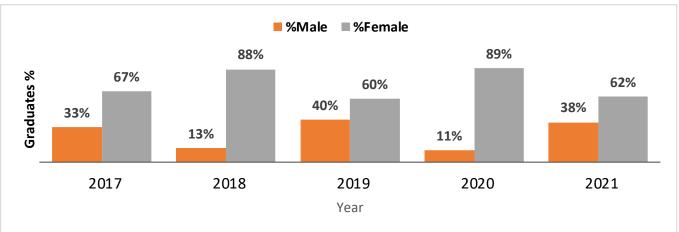


Table 18: Number of Graduates by Programme Years 2016 - 2020

Programme	2016	2017	2018	2019	2020
Masters Degree	1	3	-	1	-
Post Graduate Diploma	-	-	2	7	-
Bachelors Degree	7	13	3	-	7
Diploma	1	-	-	-	1
Certificate	-	-	-	1	-
Total	9	16	5	9	8

Te Reinga Akataunga'anga scholarship scheme, provides scholarship and study support options for both domestic and international studies. While the number of male and female awardees is showing a significant switch in numbers from previous years, it should be noted that graduate numbers remain higher for females than males.

A return on investment for the Cook Islands is evident in the number of successful completion of scholarships.

TERTIARY EDUCATION

Table 19: CITTI January to December 2021 Enrolment Report

				Total Enrollments		FTE			
Course #	Course Names	Level	Credits	Male	Female	Total	Male	Female	Total
Trades									
1	New Zealand Certificate in Automotive Engineering	3	120	<u> </u>	0	24	24	0	24
2	Building Construction Allied Trades Starter *	2	12	25	7	32	3	1	3
3	Electrical Engineering Starter **	2	7	17 16	4	21	1	0	1
	New Zealand Certificate in Electrical Engineering (Theory)	3	120	16	0	16	16	0	16
5	Plumbing Starter ***	2	8	24	5	29	2	. 0	2
Hospitality									
	New Zealand Certificate in Cookery	3	60	7	1	8	4	1	4
	Introduction to Food and Beverage Service	2	40	1	5	6	0	2	2
8	Food Safety	2	40	24	17	41	8	6	14
9	City and Guilds Certificate in Food and Beverage Service (Introduction	3	60	15	: 4	19	8	2	10
10	City and Guilds Certificate in Food and Beverage Service (Introduction City and Guilds Certificate in Customer Service (foundation)	2	54	54	87	141	24	. 39	63
11	City and Guilds Certificate in Body and Spa Therapy City and Guilds Certificate in Food Preparation	3	60	0	16	16	0	8	8
12	City and Guilds Certificate in Food Preparation	3	63	6	6	12	3	3	6
Business				<u> </u>					
13	NZ Certificate in Business (Introduction to Team Leadership)	3	48	11	18	29	4	7	12
14	NZ Certificate in Business (First Line Management) NZ Certificate in Business (First Line Management)	3	48	12	. 22	34	5	9	14
15	NZ Certificate in Business (First Line Management)	4	60	13	22	35	7	11	18
16	NZ Diploma in Business (First Line Management)	5	120	2	19	21	2	19	21
	Total			251	233	484	110	107	217

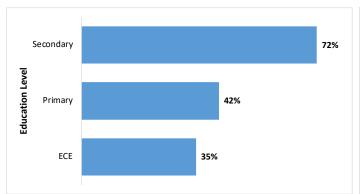
Table 19 shows the types of courses offered at the Cook Islands Trades and Tertiary Institute (CITTI) between January to December 2021. Also provided in this table is the number of total enrolments by gender and Full-Time Equivalence (FTE) by gender. FTE measures the total number of fullt-time or part-time students participating in courses for a duration of time.

In 2021, from January to December, there was a total enrolment of 217 students participating in active study at CITTI, 110 male students and 107 female. Our data shows that the most popular courses are the City and Guilds Certificate in Customer Service (foundation) course, followed by the New Zealand Certificate of Automotive Engineering (Level 3) and the New Zealand Certificate in Electrical Engineering Theory (Level 3) course. Second to these in popularity are the NZ Diploma in Business (First Line Management) and the NZ Certificate in Business (First Line Management) courses.

TEACHER QUALIFICATION

Figure 41: 2021 Teachers with a Degree or Higher by Education Level

Figure 42: 2021 Teachers with a Teaching Certificate by Education Level



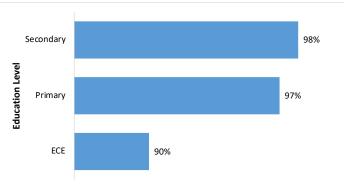


Figure 43: Teachers with a Degree or Higher (%) for Years 2017 - 2021

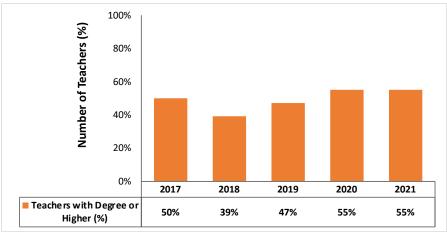
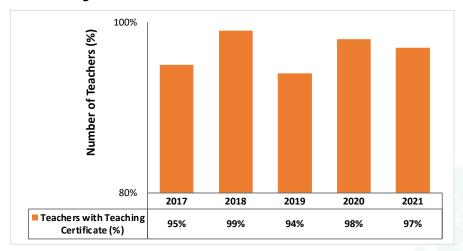


Figure 44: Teachers with a Teaching Certificate (%) for Years 2017 - 2021



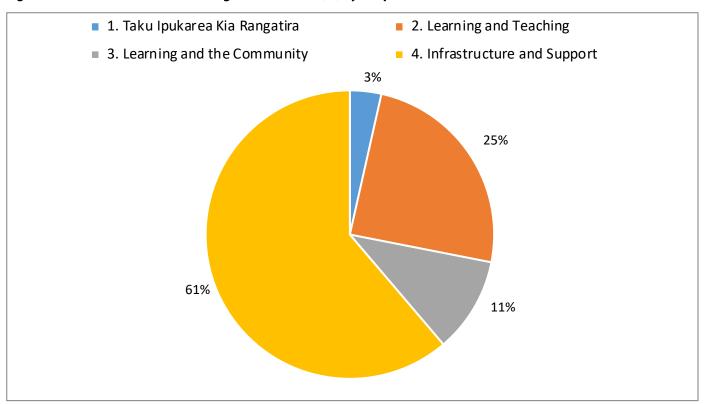
The Ministry of Education is pleased with the steady increase in qualified teachers, as illustrated in the data provided. The increase is attributed to successful recruitment of qualified and experienced teachers, according priority to returning qualified Cook Islands teachers. The increase is also indicative of the continued financial support for employees still working toward their first degree and, ultimately, those completing further qualifications.

MINISTRY OF EDUCATION BUDGET

Table 20: 2020/2021 Education Budget by Output (\$NZ,000)

Outmit	Fiscal Year 2020/2021				
Output	Gross Appropriation	Administered Payments	Total		
1. Taku Ipukarea Kia Rangatira	693,930	-	693,930		
2. Learning and Teaching	1,550,161	3,290,709	4,840,870		
3. Learning and the Community	741,161	1,365,000	2,106,161		
4. Infrastructure and Support	12,039,487	26,325	12,065,812		
Total	15,024,739	4,682,034	19,706,773		

Figure 45: 2020/2021 Education Budget Distribution (%) by Output



- **1. Taku lpukarea Kia Rangatira** Approximately \$693,930 of MoE appropriation is utilised to support the growth of the cultural and creative programmes within the schools.
- **2. Learning and Teaching** Approximately \$1,550,161 of MoE appropriation is spent on personnel and resources that supports the growth of the cultural and creative programmes within the schools.
- **3. Learning and Community** The Ministry appropriates \$2.1m to support inclusive education, Te Kakaia and inter- agency collaboration for tertiary education programmes.
- **4. Infrastructure and Support** The Ministry appropriates \$12.0m for personnel, training & development, health & safety and ICT equipment.

MINISTRY OF EDUCATION BUDGET

Table 21: Education Administered Payments and Capital Expenditure

Description	2017/2018	2018/2019	2019/2020	2020/2021
Tertiary Training Institutions (CITTI)	759,855	759,855	1,209,855	1,160,000
University of the South Pacific (Contributions)	285,000	205,000	205,000	205,000
Government Funded Scholarships	910,000	660,400	660,400	780,000
Private School Funding	2,147,027	2,229,709	2,510,709	2,510,709
Aitutaki Bus Service	-	-	26,325	26,325
Capital Budget	360,000	360,000	360,000	360,000

Table 22: Education Budget as Percentage of Nominal GDP

Year	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Government Appropriation to Ministry of Education	, , ,	18,857,622	19,588,429	20,130,303	19,895,611	19,706,773
Nominal GDP	\$418,364,000	427,310,000	447,269,000	458,222,000	505,541,000	431,776,000
%	4.4	4.4	4.4	4.4	3.9	4.6

APPENDICES

Appendix 1: Schools In The Cook Islands By Region Island, Status And Education Level - 2021

REGION	ISLAND	SCHOOL STATUS	EDUCATION LEVELS
Rarotonga	Rarotonga	Government:	
		- Apii Arorangi	ECE – Year 8
		- Apii Avarua	ECE – Year 8
		- Apii Nikao	ECE – Year 8
		- Apii Rutaki	ECE – Year 6
		- Apii Takitumu	ECE – Year 6
		- Tereora College	Year 9 – Year 13
		- Titikaveka College	Year 7 – Year 11
		- Cook Islands Tertiary Institute	Adult Education
		Private – Church:	
		- Imanuela Akatemia	ECE – Year 13
		- St Joseph's Primary	ECE – Year 6
		- Nukutere College	Year 7 – Year 11
		- Papaaroa Adventist School	ECE – Year 10
		Private – Independent: - Blackrock Apii Potiki	ECE
		- Apii Te Uki Ou	ECE – Year 8
		- The Creative Centre	Adult Inclusive Education
Southern Group	Aitutaki	Government:	Addit melasive Eddeation
Southern Group	Altataki	- Apii Araura	ECE – Year 6
		- Apii Vaitau	ECE – Year 6
		- April Valtau - Araura College	Year 7 – Year 13
		Private – Church:	real / — real 15
			ECE – Year 6
	Mitiana	- Tekaaroa Adventist School	ECE — Year o
	Mitiaro	Government:	FCF Vac: 11
	Λ+i	- Apii Mitiaro	ECE – Year 11
	Atiu	Government:	FCF Veer 12
	Mauke	- Apii Enuamanu	ECE – Year 13
	Mauke	Government:	ECE – Year 11
	N. 4 : -	- Apii Mauke	ECE — Year II
	Mangaia	Government:	FCF V 13
		- Mangaia School	ECE – Year 12
No while a way Construction	N 4 = : . : . :	(ECE satellite unit at Ivirua)	
Northern Group	Manihiki	Government:	FCF V 11
		- Apii Ruamanu	ECE – Year 11
	D 1	- Apii Tukao	ECE – Year 9
	Penrhyn	Government:	F.C.F. V. 11
, ARA		- Omoka School	ECE - Year 11
		- Tetautua School	ECE – Year 9
	Rakahanga	Government:	505 V 10
130		- Apii Rakahanga	ECE – Year 10
35 A	Pukapuka	Government:	
		- Apii Niua	ECE – Year 11
	Nassau	Government:	
		- Apii Nassau	ECE – Year 11
35	Palmerston	Government:	
1 5		- Lucky School	ECE – Year 11
72.		(Island Administration)	

Appendix 2:- Number of Students by Region, School and Year Level

APPENDICES

Appe			_,	INC					uuen		•		٠.٠	,															_				AL
Total	2,886	216	157	461	440	27	75	126	106	89	168	196	728	97	880	120	218	96	93	109	154	61	29	342	41	19	28	12	58	12	147	25	4,108
Secondary	1,334	53	37	121	116	1	25	126	31	1	-	1	728	97	393	-	218	ı	1	51	90	25	6	117	6	∞	7	5	24	4	52	8	1,844
Primary	1,269	135	66	300	279	1	42	ı	62	70	127	155	1	1	382	66	ı	69	69	46	53	29	17	187	26	11	14	7	28	9	82	13	1,838
Year 13	139	-	ı	ı	1	ı	9	1	1	ı	1	ı	132	1	11	-	4	ı	1	9	1	1	-	ı	I	ı	1	ı	1	1	ı	1	150
Year 12	166	1	1	ı	1	1	4	ı	1	1	1	1	162	1	37	-	19	I	1	6	6	1	-	2	ı	ı	1	2	1	ı	1	1	205
Year 11	167	1	1	ı	1	1	П	15	1	ı	1	ı	128	23	53	1	34	ı	1	8	∞	3	-	18	2	ı	1	ı	5	ı	8	2	238
Year 10	509	-	1	ı	1	1	2	24	3	ı	1	ı	163	17	79	-	39	ı	1	6	23	7	1	16	1	П	2	ı	4	ı	8	1	304
Year 9	194	1	1	1	1	1	3	27	9	ı	1	ı	143	15	81	-	48	1	1	11	16	2	1	32	3	4	1	T	5	ı	14	4	307
Year 8	219	32	16	09	49	ı	4	30	10	ı	ı	ı	1	18	68	-	38	ı	ı	4	17	5	4	27	1	ı	m	ı	9	ĸ	13	1	314
Year 7	240	21	21	61	29	1	5	29	12	1	1	1	1	24	64	-	36	1	1	4	16	2	3	22	2	3	1	2	4	1	6	1	326
Year 6	228	26	19	54	52	ı	9	1	11	13	23	24	1	ı	69	22	I	12	11	9	13	2	3	31	I	4	2	П	4	ı	18	2	328
Year 5	227	26	12	26	50	ı	7	1	15	13	23	25	1	ı	99	13	ı	12	14	6	11	2	2	37	5	ı	2	Ω	6	ı	13	5	330
Year 4	228	29	17	58	09	1	2	1	6	6	20	24	1	ı	9	15	ı	10	6	12	2	5	4	33	7	4	n	ı	3	2	14	ı	321
Year 3	225	17	15	45	44	1	5	1	10	14	27	48	1	ı	72	18	1	10	20	9	6	2	4	30	4	2	3	2	9	2	10	T	327
Year 2	195	23	14	42	44	ı	12	1	7	10	22	21	1	1	48	16	1	6	9	9	9	3	2	21	m	П	1	T	2	ı	10	3	264
Year 1	166	14	22	45	29	1	10	1	10	11	12	13	1	ı	67	15	1	16	6	7	6	6	2	35	7	ı	n	ı	4	2	17	2	268
ECE	283	28	21	40	45	27	∞	ı	13	19	41	41	1	1	105	21	1	27	24	12	11	7	3	38	9	1	7	1	9	2	13	4	426
REGION	RAROTONGA	Apii Te Uki Ou	Apii Arorangi	Apii Avarua	Apii Nikao	Blackrock Apii Potiki	Imanuela Akatemia	Nukutere College	Papaaroa Adventist School	Apii Rutaki	St Joseph's School	Apii Takitumu	Tereora College	Titikaveka College	SOUTHERN GROUP	Apii Araura	Araura College	Tekaaroa Adventist School	Apii Vaitau	Apii Enuamanu	Mangaia School	Apii Mauke	Apii Mitiaro	NORTHERN GROUP	Apii Ruamanu	Apii Tukao	Apii Nassau	Palmerston Lucky School	Omoka School	Tetautua School	Apii Niua	Apii Rakahanga	COOK ISLANDS



Appendix 3: Student Enrolment by Age, Sex and Level

Age									TOTAL STUD	ENT ENR	OLMENT							
Level	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19+	Total
ECE	213	217	7														-	437
Year 1	-	8	229	2	_			_					_		_		_	239
Year 2	_	_	60	212	11	_	_	_	_		_	_	_	_	1	_	_	284
Year 3			-	56	193	10											_	259
Year 4				-	79	229	18										_	326
Year 5		_	_	_	1	75		23	_			_		_		_	_	315
	-	-	-	-	1	1	216	241	- 15	- 1	-	-	-	-	-	-	-	
Year 6	-	-	-	-	-	1	56		15	1 9	-	-	-	-	-	-		314
Year 7	-	-	-	-	-	-	1	73	243		-	-	-	-	-	-	-	326
Year 8	-	-	-	-	-	-	-	-	46	255	19	1	-	-	-	-	-	321
Year 9	-	-	-	-	-	-	-	-	2	45	223	28	-	-	-	-	-	298
Year 10	-	-	-	-	-	-	-	-	-	1	50	220	30	-	-	-	-	301
Year 11	-	-	-	-	-	-	-	-	-	-	-	37	210	45	3	-	-	295
Year 12	-	-	-	-	-	-	-	-	-	-	-	-	19	147	23	-	1	190
Year 13	-	-	-	-		-	-	-	-	-	-	-	-	16	138	8	4	166
Total	213	225	296	270	284	315	291	337	306	311	292	286	259	208	165	8	5	4,071
	1								FEN	//ALE							Ī	
Age	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19+	Total
Level	,	7	,	Ü	,	٥	,	10		12	13	14	13	10	1,	10	13.	Total
ECE	99	104	6	_	-	_	_	-	_	_	_		_	_	_	-	-	209
Year 1	-	2	121	2	_	_	_	_	_	_	_	_	_	_	_	-	_	125
Year 2	_		30	94	3	_	_	_	_	_	_	_	_	_	1	_	_	128
Year 3	_		-	29	102	1			_					_		_	_	132
Year 4	_			-	40	102	6		_					_	_	_	_	148
Year 5					-	41	106	2									_	149
Year 6						41	26	112	2								_	140
	_	-	-	-	-	-		44	122	4	-	•	-	-	•	-	-	171
Year 7	-	-	-	-	-	-	1	44			-	-	-	-	-	-	-	
Year 8	-	-	-	-	-	-	-	-	18	115	5	-	-	-	-	-		138
Year 9	-	-	-	-	-	-	-	-	1	19	112	14	-	-	-	-	-	146
Year 10	-	-	-	-	-	-	-	-	-	-	27	104	15	-	-	-	-	146
Year 11	-	-	-	-	-	-	-	-	-	-	-	22	104	21	2	-	-	149
Year 12	-	-	-	-	-	-	-	-	-	-	-	-	10	85	11	-	1	107
Year 13	-	-	-	-		-	-	-	-	-	-	-	-	10	79	4	4	97
Total	99	106	157	125	145	144	139	158	143	138	144	140	129	116	93	4	5	1,985
A 5 0									М	ALE								
Age	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19+	Total
Level																		
ECE	114	113	1	_	-		_		_					_	_	-	_	228
Year 1	-	6	108	_	_	_	_	_	_	_	_	_	_	_	_	-	_	114
Year 2	_		30	118	8	_	_	_	_	_	_	_	_	_	_	-	_	156
Year 3	_		-	27	91	9			_					_	_	_	_	127
Year 4				-	39	127	12	-									_	178
Year 5	_	_	_	_	1	34	110	21	_	_	_	_	_	_	_	_	_	166
		_	_	_	_				12	1		_		_		_	_	
Year 6 Year 7				-	-	1	30	129 29	13 121	1	-	-	-	-	-	-	-	174 155
	-	- /		-	-	-	-	29		140	- 14	- 1	-	-	-	-		
Year 8	-		11/2	-	-	-	-	-	28	140	14	1	-	-	-	-	-	183
Year 9	-	-	\ -	-	-	-	-	-	1	26	111	14	-	-	-	-	-	152
Year 10	-	-		λ.	-	-	-	-	-	1	23	116	15	-	-	-	-	155
Year 11	- 0	-7/	-	1	-	-	-	-	-	-	-	15	106	24	1	-	-	146
Year 12	-	-	-)	-	-	-	-	-	-	-	-	-	9	62	12	-	-	83
Year 13	-	-	-	-	-	-	-	-	-	-	-	-	-	6	59	4	-	69
Total	114	119	139	145	139	171	152	179	163	173	148	146	130	92	72	4	-	2,086

Appendix 4: Enrolments By Level 2008 - 2021

APPENDICES

APPENDICES

Appendix 5: School Teachers and Staff by Region

ECE P			Ę				Teacher Aide	Teacher Aide	Volunteers		- Ca
15	rillary	Primary Secondary	<u> </u>	Primary	Secondary	Administration and Property	(Student Support)	(School Support)		CITTI Staff	School
	64	81	1	7	4	20	41	22	-	-	255
	7		,	1	,	1	1	1	1	-	10
3	14	4		П		2	2	2	1	1	28
7	12	5		П	,	2	9	1	1	1	29
Т	က			П	,	2	1	1		1	∞
3	9			1	1	2	e	1	1	1	16
7	10			1	1	2	7	2	1	•	23
7			П	1	1	ı	ı	2	1	ı	5
⊣	2	1		•	1	2	ı	5	1	1	11
		6		ı	П	Н	13	1	1	1	24
⊣	က	2	ı		Н	ı	1	ı	1	1	7
⊣	7		ı	1	ı	Н	7	2	1	ı	19
_		52			⊣	8	1	5	1	ı	61
		8	ı	•	1	2	2	1	-	1	14
9	25	52		3	5	8	17	9	-	3	102
1	7			1	1	1	1	-	-	-	11
	4	4		1	Н	Н	2	2	ı	2	16
Н	2	2		i	Н	П	3		1	ı	10
	2			ı	Н	ı	П	1	1	ı	2
⊣	8			1	ı	Н	П	3	1	1	10
		14		ı	Н	2	4	2	1	ı	23
7	4	9		i	Н	2	4			П	20
1	3			1	ı		П	1	1	1	7
	11	3	-	2	2	9	2	14	4	-	47
	1	•		1	-	ı	ı	1	-	1	3
	4	n		i	Н	2	2	3	1	1	16
_	1	,		T		Н	ı	2	1		2
	1	1	i	Н	ı	1	ı	2	1	1	4
	П	1	ı	Н	ı	П	ı	н	,	i	4
	ı	1		1	ı		ı	2	3	1	9
	2			1	Н	2	1	Т	ı	1	9
	1	ı	ı	1	,	1	•	2	-	ı	3
21	100	110	1	15	11	34	09	45	4	3	404
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		25 7 7 7 7 8 8 3 11 11 11 100 1	2 1 3 2 7 52 8 8 7 4 4 2 2 2 2 2 2 3 14 4 6 3 14 4 6 3 14 4 6 3 14 1 1 - 1 1 1 - 1 1 1 - 1 1 1 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1 1	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1	2 1 1 - 1 - 1	25	25



