The importance of reading competencies in educational achievement at all levels has been recognised by educators. The perceived decline in reading competencies of first year students at the National University of Samoa (NUS) has been a point of discussion, as various teaching and learning strategies have been proposed to address these problems. The methodology of this research project is qualitative and quantitative. Research tools included: reading age assessments, a questionnaire, interviews, as well as application of the reading programme, Science Research Associates (SRA) reading laboratory, to lift levels of achievement. In this paper, the research is contextualised and the main findings are discussed in detail. Key findings are that: students spent little time reading, that in many homes there were few reading materials and that students' reading ages were under-developed.

INTRODUCTION

The importance of literacy, and reading in particular, has long been recognised in Samoa. As early as 1828, the Islanders were taught the art of reading in English by missionaries using the Bible and lesson cards. The novelty of the experience, in addition to the promise and reward of teaching others in turn, excited the male islanders enough to take up the challenge with great zeal. By 1834, the Samoan language was committed to writing, a medium presumed to be "secure from interference" (Colwell 1914:477) and the Bible was translated in 1835, printed and circulated throughout the land. Benjamin Dank (Colwell 1914:477) described the Samoan Bible as the "most perfect translation" of all the South Sea versions, and the Samoan language as, "the softest, the most polite ... the finest and the most complete" of all the Polynesian dialects. However, according to missionary George Brown, it was unfortunately "deficient in abstract terms" (Colwell 1914:115).

For a century and a half, young Samoans attended pastors' schools and were taught to read and write using the Bible. Formal schooling started with primer one to standard four and progressed to secondary schools that were established by the government in the early 1950s with assistance from New Zealand and mainstream Christian churches. In the last quarter century, three universities and a polytechnic have provided for the tertiary needs of Samoa. Overall, Samoans have been exposed to reading and writing for over 180 years. One would expect that with the lengthy exposure to printed matter, reading and writing would be well and truly entrenched practices in the culture.

Up until 1990, Samoa enjoyed a reported 90 per cent literacy rate for almost half-a-century. However, the 1992 United Nations Educational, Scientific and Cultural Organization's (UNESCO) Pacific Islands Literacy Levels (PILL) report, a regional study of literacy in six Pacific Island nations, raised the alarm about the decline of literacy in Samoa. Furthermore, the Samoa Observer (1996) reported a significant decline in literacy standards in the primary levels in Samoa. Afamasaga (2005) noted a
connection between low literacy and numeracy skills. Samoa Primary Education Literacy Level (SPELL) tests at Year 4 and 6 were introduced to monitor national standards and "to identify students who are not achieving minimum competencies in both literacy and numeracy in schools" (148). The UNESCO report had serious ramifications for the country as a whole and success at the tertiary level in particular.

Nation (1997) commented that success in reading and its associated skills, most notably writing, makes learners come to enjoy language learning and to value their study of English. Elley (1992) in a study of reading achievement of 200,000 children in 32 countries, found that the time children spend reading is related to their achievement levels. In reviewing the 'book flood' project in Fiji in 1991, he found that striking increases were made in measures of language use, language knowledge and academic performance.

The importance of reading materials and valuing reading in the home has been noted by Gunderson (1991). He also noted that students at the secondary level and beyond "do not have time to waste" so whatever programmes or methods are chosen to promote improvement in attitude towards and competencies in reading, the teacher must be sure that students are "actively engaged" in learning (Gunderson 115). This is also supported in a review of 250 major studies between 1986 and 1998 (Black and William, cited in Alton-Lee 2003) that found that of the four factors salient to improvement of learning, one major factor was "to be actively involved in their own learning and assessment" (Black and William, cited in Alton-Lee 2003:88).

"Academic success at tertiary level is a multi-dimensional phenomenon that includes language proficiency, learning and study strategies, and certain personal characteristics (Stoynoff 1997:56). Prolific comparative, multi-ethnic research studies exist that document the high percentage of low achievement and high failure rates in countries where English is both the language of instruction and the second language for students at tertiary level.

Much available research attests to shared common factors that describe the lack of academic success at both secondary and tertiary levels by many ethnic majorities and minorities. Deficient home, cultural, cognitive, linguistic and other skills necessary for academic success are some factors that have been documented in studies by Gibson & Ogbu (1991), Jones (1988) and McNaughton (1995). These studies also note the negative effect of mismatches between children's early learning experiences and school.

According to a study by Jones and Manu'atu (2002), Samoan students' high failure rate at high schools and at university was attributable to "not sitting exams, not submitting coursework or withdrawing from the course altogether". A similar study by Anae et al (2002) noted the lack of preparation at secondary level to meet the demands of academic studies at tertiary level, especially by students from low decile schools in New Zealand. Pitt and MacPherson (1994), who explored the impact of Samoan parents' cultural practices and traditional values on formal education, noted the lack of direction, inadequate facilities and parents' unrealistic goals for their children, to be contributing factors to their children's poor academic performance.

Referring to specific studies on academic skills such as reading and writing, Fanene (2007) in her research on essay writing problems of New Zealand born Samoans, added fluency in Samoan as irrelevant to academic success, especially where the language of instruction and communication is English. This conclusion clearly contradicts the established view of superior performance transfer to the second language following mastery of the first language or mother tongue. Furthermore, Fanene noted the increasing number of Samoan students matriculating at universities but failing to translate this into comparable increases in academic achievement or completion rates. This is confirmed by Scott (2004) in his analysis of degree level and
undergraduate completion, which showed the lowest rate during the period of 1998-2002.

SETTING THE SCENE

The universality of low achievement and failure at formal education is thus not unique to Samoa. It is a global problem that poses great concern at the personal, professional and institutional levels for any country and needs to be formally addressed. In Samoa, over 2000 Year 13 students sit an annual Pacific regional examination, Pacific Senior Secondary Certificate (PSSC), which allows them to matriculate at their local university. In the last twenty years, the number of students passing PSSC with an aggregate of 4-15 had increased from 60 to 350 and a further 250 with aggregates of 20, qualifying under what may be considered elsewhere as ‘special admissions’. All these students enrol in the various pre-degree courses in English, depending on their English mark derived from the Year 13 PSSC regional examination. As a result, Grades 1-4 students enrol in HEN004 Foundation English, and any students with a grade above this, enrol in HEN001 English Language Skills, and/or HEN003 Progressive English.

For the past decade, lecturers and tutors have noticed a weakness in English, in oral presentations and written assignments. These are addressed by the concerned tutors in their courses with little success due to time constraints. An analysis and comparison of past performance rates, and strategies to increase these pass rates, is a clear indication of the need for the department to research, the reading competencies and associated difficulties of students. There has not been any formal in-depth study or research in this area in Samoa, and so this is the first formal research into the arena of reading as a vital academic skill at tertiary level.

An analysis of the Diploma of Education cohorts in the early 2000s showed that 46 per cent were admitted into the programme below the stated entry criteria of Grade 5 for PSSC English. Since reporting this finding to the relevant faculty and then to the university senate and council, the total aggregate entry criteria for this programme has been upgraded and the stated subject entry of English Grade 5 has been maintained. This is a step in the right direction for overall improvement.

An analysis of 365 Semester 1 2005 HEN004 Foundation English exam scripts showed a 53 per cent pass rate for reading comprehension and a well below pass rate (for example 30 per cent) in other sections such as summarising and organising. These results point clearly to problems with listening and reading skills. The results were cause for great concern, and have given the department the much needed impetus for an in-depth, exploratory study of this kind to begin.

RESEARCH METHODS: Phase I & II

The reading analysis research had many observable and measurable elements with practical application for the realities of reading. The study used a triangulation approach for purposes of reliability and validity of both quantitative and qualitative data. It used a questionnaire-survey, face-to-face interviews and an analysis of students’ results from the SRA reading kit.

HEN004 Foundation English is the compulsory, comparator course across the five faculties in which all first year students enrol, on having passed English with grades 1-4 in the PSSC regional exam. With the largest number of students available, it afforded the department the greatest opportunity to methodically and systematically test, analyse and document the reading habits and strategies practised by a selected sample of this group.
As educators concerned with literacy, the research team identified problems with reading skills and competencies of pre-degree and Foundation students, particularly those enrolled in the Foundation Certificate of Education, which has flow-on effects across the curriculum, since English is the primary language of instruction in late primary and all of the secondary level. This problem is evidenced by the low pass rates in our own English courses, and is often used by other faculties to explain low pass rates.

The problem is exacerbated by the lack of reading materials in both languages in many homes to give the students practice and confidence in reading and writing, especially in the second language of English.

The objectives in conducting this research were fourfold. Firstly, to identify reading ages of a sample of pre-degree and Foundation students across the five faculties, both at the beginning and end of the study. Secondly, to identify reading strategies that will help motivate and improve students’ attitudes to reading as a desirable and necessary skill for survival in the contemporary world. In addition, the study aimed to identify applications and amendments to current Foundation English courses which will incorporate helpful strategies for future Foundation cohorts, including a supplementary text of easily-digestible reading material. The final objective looked at developing a diagnostic instrument to gauge students’ reading proficiency in English at entry to NUS, which could then be used to place students appropriately in tutorial groups.

**Phase I**

**Student Selection**

It was determined that for this research, a total number of approximately 150 students would be solicited to participate, with the expectation that 100 would actually agree to do so. Students were to be selected from the HEN002, HEN003, HEN004 and HEN005 course enrolments. In actuality, 130 students were approached for participation in the reading research.

Further, it was determined that an equal representation of males to females per course, and faculties per course, was the desired selection pool. Therefore, the course enrolments for the four courses were obtained from the Administrative office. The enrolments indicated student gender and faculty. Note that if gender was not indicated for any student, that student was removed from the list of potential participants for the purposes of this research.

The enrolments for the four courses were totalled, and then percentages for each course determined (Table 1).

<table>
<thead>
<tr>
<th>Course</th>
<th>Number of Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEN002</td>
<td>72</td>
<td>19</td>
</tr>
<tr>
<td>HEN003</td>
<td>27</td>
<td>7</td>
</tr>
<tr>
<td>HEN004</td>
<td>179</td>
<td>47</td>
</tr>
<tr>
<td>HEN005</td>
<td>102</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>380</td>
<td>100</td>
</tr>
</tbody>
</table>

The percentages were then applied to the number of students we would select from each course: 19 per cent, or 26 were selected from HEN002; seven per cent or 10
selected from HEN003; 47 per cent or 60 from HEN004, and 27 per cent, or 34 from HEN005. Once the number of students needed per course was established then each course’s enrolment was sorted in Excel by faculty breakdown: Faculty of Arts, Faculty of Science, Faculty of Commerce, Faculty of Nursing and Health Sciences and Faculty of Education. Because we also wanted equal gender representation as much as possible, each faculty per course was then sorted by gender (Table 2).

<table>
<thead>
<tr>
<th>Course</th>
<th>Faculty</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEN002</td>
<td>Commerce</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Non Award</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Nursing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>HEN003</td>
<td>Education</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non Award</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>HEN004</td>
<td>Arts</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Non Award</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Nursing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>HEN005</td>
<td>Arts</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Commerce</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Non Award</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

The process began with the announcement at lectures inviting students to participate. After a random selection was made of the student volunteers, consent forms were signed, and students completed an initial survey. This survey asked for information pertaining to their reading habits and preferences, English language acquisition, and availability of reading materials.

The next step, assessing individual reading ages, was by far the most time consuming in the process. Participants were to meet one-on-one with one of the researchers to read aloud three (3) pre-selected 100 word passages. As they read, the
assessor listened for mispronunciations, hesitations and errors. Students were allowed to self-correct. After reading each passage, the participant was asked a series of questions. The correctness of their answers, combined with their scored reading performance, provided the research team with a reading age for that student.

According to Ms Marj Moore, a Reading Recovery Specialist, involved in the first phase of this research project, the passages used in this reading assessment survey were taken from the Prose Reading Observation, Behaviour and Evaluation of Comprehension (PROBE), which is an informal reading inventory that combines evaluation of reading accuracy, reading behaviour and in-depth reading comprehension. It was designed by a team of specialist education practitioners with a wide range of experience in schools in New Zealand and Australia over the past 30 years. Each text was purposely written as an assessment tool thus avoiding problems posed by material, which has not been specifically written for assessment or has been taken out of context. The texts also have a high interest level and include both fiction and non-fiction. Poetry, technical and instructional reading have been intentionally omitted as research suggests that the specialised vocabulary makes the noun frequency count unreliable. Topics involving debatable or controversial information had been avoided.

The reading age of the texts was determined by the Elley Noun Frequency method, the Fry Readability Formula, the Holdaway's Sight Words and Progression of Word Recognition Skills. For this initial assessment, a selection of three texts was chosen (Table 3).

```
<table>
<thead>
<tr>
<th>Title</th>
<th>Classification</th>
<th>Reading Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train</td>
<td>Fiction</td>
<td>11-12 years</td>
</tr>
<tr>
<td>Mexico City</td>
<td>Non-fiction</td>
<td>12-13 years</td>
</tr>
<tr>
<td>The Computer</td>
<td>Fiction</td>
<td>14-15 years</td>
</tr>
</tbody>
</table>
```

It was noted that generally a reading age (word recognition and comprehension) of 15 years indicates a proficient reader no longer in need of teacher guidance. Students scoring 95 per cent or higher in the decoding of text are generally considered to be independent readers at that level. It is also considered that a minimum of 70 per cent success rate in comprehension would indicate that the student has grasped the main points and details of the text. This applies equally to silent reading and listening comprehension (Moore 2006).

The emphasis on comprehension is based on the belief that understanding what is read is the ultimate function of reading. For each of the three passages, five questions were asked. There were four (4) types of questions: Evaluation (EV), Inference (IN), Reorganisation (RO), Vocabulary (VO).

Establishing which questions the reader has understood and those, which have caused difficulty highlights general and specific areas of comprehension ability. For instance, low scoring in inference, evaluation, vocabulary and reaction questions show a minimal ability in reading the subtext. After the reading assessment was completed, the final step of the process required students to submit to an interview with a member of the research team to obtain more in-depth information regarding their reading habits and attitude and those of their home environment.
Phase II

Phase II involved a replication of Phase I using a different student sample. For Phase II, reading ages were assessed using the SRA Reading Laboratories, which confirmed the Phase I findings of undeveloped readers.

Student Selection

Phase II, Semester 1, 2007 experienced a much more relaxed selection process. Based on the high attrition rate from the last semester, it was decided to solicit 200 students. Of that 200, the entire HEN001 class of 27 students was to be utilised. The remaining numbers were taken from HEN003 and HEN004 based on their numbers enrolled. The rigid constraints of the first phase were not applied. Of the 200 students selected, 68 students started the programme, 29 actually completed it.

As in Phase I, students were asked to sign a consent form, agreeing to participate in the programme and allowing the research team to use their personal information as necessary. Also, students again completed an initial survey, which asked for information pertaining to their reading habits and preferences, English language acquisition, and availability of reading materials.

The SRA Reading Lab texts are colour coded as follows; Violet 12-14 yrs; Rose 12-14 yrs; Red 12-15 yrs; Orange 13-15 yrs; Gold13-15 yrs; Brown 14-16 yrs; Tan 15-17 yrs; Lime 17-18+ yrs; Green 17-18+ yrs; Purple 17-18+ yrs.

The SRA provides a ‘placement’ test to help determine which colour the reader should begin. This was initially misleading, with a majority placing in the ‘Lime’ or adult reader category. After the first reading, students were then placed at more appropriate levels.

The participants were gathered together once a week for one hour for their reading practices and each student was provided with an answer/progress tracking sheet that they would uplift at each session. The student would read a self-selected text card from their indicated colour and answer the questions that followed. The answers were corrected and evaluated. If the student scored 50 per cent or close to that, they would remain in that colour, but read a different card. If they scored 45 per cent or less, they would be downgraded a colour. If they scored 60 per cent or better, they would be upgraded a colour. Most students would only complete one card per one-hour session, a few students were able to complete two per session.

The problems encountered during Phase I and II in the research study involved student selection as well as completion. The high attrition rate of 65 per cent on average, reflected factors such as commitment, time table clashes, and illness. The reading assessments led to a significant delay due to underestimating the time involved in this step of the process and the travelling schedules of personnel involved. The data input with the Statistical Package for Social Sciences (SPSS), as well as the acquisition of the SRA reading laboratories, from New Zealand also took additional time.

RESULTS AND OUTCOMES: Phase I & II

Phase I: Reading Age

The findings from Phase I of the research study relating to reading age were later confirmed by the results of Phase II. Based on the reading age assessment performed on the Phase I students, Moore discovered that 67.3 per cent of those students were
reading at age 13 and less, which is obviously inadequate to cope with tertiary level reading materials.

The majority of the remaining 32.7 per cent who read at age 14 and above were students who had graduated either from Robert Louis Stevenson Secondary School (RLSS) or Church College of Western Samoa (Pesega), both of which are private schools. Additionally, interviews with these students showed a high exposure to reading materials in both languages, time provided for reading as opposed to other activities and reading a wide variety of materials for pleasure.

It is significant that both RLSS and Pesega have quality libraries and provide small group reading instruction for students according to their reading ability (for the former at primary level and for the latter from Year 7 upwards). By contrast, students in government schools do not have ready access to quality library collections or reading instruction. Pereira (2006) and Esera (1996) looked at how reading is taught in government primary schools. Both studies refer to students reading in unison from the same text (that is, whole class instruction), irrespective of the reading abilities of students. Sinclair (2009) as well as Pereira (2009) also referred to the lack of reading materials in government primary schools.

Location and socio-economic factors also impact on students' opportunities to become good readers. Urban families have access to the Nelson Memorial Library. Students at RLSS are far more likely to be from socio-economically advantaged homes and in households that value reading and have reading materials readily available. These students are less likely to have excessive family chores that impact on their time.

The results also revealed the following: that students overall scored higher on the fiction than they did on the non-fiction (dialogue as opposed to straight text). Obviously, this had some impact on their ability to read and comprehend non-fiction tertiary texts. Reading age levels averaged around 12-13 years. The results showed a third of students tested grasped sufficient meanings of fiction texts which contained a large portion of dialogue. Again, how many tertiary texts are (a) fiction, or (b) contain significant passages of dialogue? Oral reading of texts showed a wide range of abilities. Some notable features included good skills in tone and expression ('barking' at print, but unfortunately not matched by comprehension). There was also word-to-word reading - concentration on sounding the word but thereby losing the meaning of the passage; poor literal understanding; limited self-correction even though the passage did not make sense, yet students continued reading and did not 'demand meaning' from print. Inability to grasp abstract ideas such as inferences, was indicative of narrow reading backgrounds. Few of the students viewed reading as something they did regularly or even as a recreational pastime. Rather, students viewed reading as a chore and a means to an end, that is, success in study.

Cummins' distinction between BICS and CALP is of relevance here. These terms are used in reference to students who are acquiring a second language. BICS refers to basic interpersonal communication skills. Cummins' research demonstrated that this takes about 2-3 years to acquire. By contrast, cognitively advanced language proficiency (CALP) takes 5-7 years of high quality immersion in the second language. The problems that the students in our study experienced suggest that they have not reached the CALP stage of language acquisition, which is vital to success at tertiary level.
Reading Habits

After the input of the data from the collected surveys, the facts revealed that 73 per cent of the students read for only seven to eight hours per week. When one considers that the students spend approximately 15 hours weekly in lectures and tutorials, they were not keeping up with even minimum reading requirements for their course work. Seventy nine per cent of students said they read at home, and 21 per cent said they read their text books at home. Clearly, based on their reading skills and time spent reading, students would be underperforming. While there are obviously some students who do perform at age level or better, our focus is on those who do not.

What students report reading at home is the Bible during the daily lotu (prayer). When asked what prevented them from reading, a high percentage responded with, “not enough time.” They are expected to spend their time at home working, or engaged in activities such as chores. The “if you have time to read, you have time to work” mentality is prevalent amongst Samoan parents, especially those in the rural areas.

Another reason for not reading, as cited by students, was the lack of availability of reading materials. In the past few years, more English-language reading materials such as magazines and novels have been more readily accessible. Unfortunately, these materials come with a cost, usually higher than most families can afford or are willing to pay.

It is a never-ending spiral for most students: unable to pay for ‘extra’ reading materials in English or their mother tongue, their language, vocabulary and reading skills begin to lag to the point that they are unable to cope with both the volume and content of reading required at tertiary level. This in turn results in poor academic performance. Most parents who are struggling to even obtain an education for their child see the poor grades, decide that hard-earned monies can be spent better elsewhere and the child leaves school. Thus the cycle continues into the next generation.

Phase II: Findings

The majority of the students were reading in the violet-gold categories, supporting Phase I’s findings of underdeveloped readers. Nearly identical statistics applied to the participants in Phases I and II as pertains to attitudes, time spent reading, family and societal obligations.

Three students in particular, while not experiencing significant improvement in their reading skills, nevertheless, did experience steady improvement and an overall willingness to do whatever was asked of them if they thought it would help them. These were not the top-scoring students on the assessments for their English courses in which they were enrolled, but they were the most dedicated to self-improvement. Indeed, at the end of the process, two of them expressed appreciation for this research programme, saying they felt it helped them feel more confident in their overall academic performance.

Some Reflections on the Findings from Phases 1 & II

One of the most significant and challenging findings to emerge from this study was the lack of time prioritised for reading. This was an average of one hour a day (Figure 1). Despite all the academic advice during orientation, presentations during lectures and encouragement during tutorials, the message that reading matters and is vital to academic success, especially at tertiary level, seemed to be falling on deaf ears in the case of this cohort. This moment of epiphany for lecturers involved in the research
demands new approaches to reading in the classroom which will be the focus of the second part of the research.

![Figure 1. Hours Spent on Reading](image)

The majority of the respondents (>67 per cent) read for seven-eight hours a week and the next highest group (21) spent 1-2 hours a week reading.

Another significant revelation involved the barriers to reading (refer to relevant tables and graphs below) where many students answered that a lack of time as well as chores (fe’au) prevented them from reading more. The attitude that reading is a waste of time, is indicative of the mentality of some parents who would prefer to see their children engage in physical activities rather than reading which is seen as futile and non-productive.

![Figure 2. Barriers to Reading](image)

Difficult vocabulary, boring narratives, sports and family chores, as well as the lack of time and the length of books, were seen as the main barriers to reading.
The third significant finding pertains to the availability of reading materials and the types of reading materials available in the home (Figure 3). The financial cost in purchasing reading materials was itself restrictive as well as the types of materials which were available and accessible. It is also important to note that within Apia as the capital of a modern island nation, the bookshops are linked to institutions such as churches and are usually linked to a stationery outlet with a limited variety of costly reading materials available.

![Figure 3. Types of Reading Materials at Home](image)

The majority of students (56.3 per cent) reported that cooking meals and household chores were the main daily activities that prevented them from reading, whilst 31.3 per cent reported that sports, watching TV or listening to music and hanging out with friends were barriers to their reading. A minority (4.7 per cent) reported that nothing prevented them from reading, whilst the remainder (7.8 per cent) reported that 'studies' was the main daily activity that prevented them from reading (Table 4).
When asked to identify how they spent their time, the six main activities reported by the students were reading, watching television, watching video or playing computer games, surfing the net, phone texting and doing chores (Table 5). The majority (74 per cent) spent one to two hours reading, followed by watching television (36 per cent), watching video or playing computer games (32 per cent), and chores (30 per cent) surfing the net (16 per cent) and phone-texting (15 per cent). Twenty seven percent (27 per cent) also reported that they engage in phone-texting less than one hour each day. Another interesting finding regarding watching television was that 29 per cent watched three to four hours a day, and 23 per cent watched five to six hours a day.

Table 5. (Q9) Approximately How Many Hours per Day do You Spend in the Following Activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>&lt;1</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7-8</th>
<th>Most of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>9</td>
<td>74</td>
<td>18</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Watching TV</td>
<td>10</td>
<td>36</td>
<td>29</td>
<td>23</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Video/Computer Games</td>
<td>9</td>
<td>32</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Surfing the Net</td>
<td>11</td>
<td>16</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Phone Texting</td>
<td>27</td>
<td>15</td>
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CONCLUSION

This reading research project has demonstrated that reading does matter and is a significant skill area, having serious implications related to academic success. The subjects of reading and literacy, along with their related problems are complex. The first two objectives of this research were fulfilled in the main, whilst the last two objectives still need to be completed. These include developing a supplementary text of high interest, easily-digestible reading materials and a diagnostic instrument to gauge students' reading proficiency. These will be the focus of the next reading research project to be undertaken.

It is vital that lecturers in post-secondary or tertiary level institutions do not assume that students can read the assigned texts or set readings. Students may have other priorities as has been noted from the student survey and in-depth questionnaire(s). Daily household chores, watching television, listening to music, 'hanging out' with friends and participation in sports were reported by the majority of students (87.3 per cent) as daily activities which prevented them from reading.

The realities of a highly literate (90-99.9 per cent) population, as so often touted in the past, is in the view of the researchers, a myth. This is evident in the low reading ability of first year students, the lack of commitment to the reading load at tertiary level for research assignments and the low comprehension levels of our students. It is necessary to promote the value and significance of reading as a vital competency needed for success at post-secondary or tertiary level educational institutions. Support should include resources such as library books, SRA reading laboratories, as well as instructional and guided reading programmes. This should assist the students in overcoming the reading difficulties that have been identified.

It is apparent that new dynamic, passionate strategies are needed domestically and institutionally to promote the love of reading and to value books at all levels of society: home, village, community, school, workplace and nation. It is vital to create a climate where the power of the written word is recognised and appreciated.
Note

1 The research was generously funded and supported by the University Research and Ethics Committee (UREC) of NUS. Their support is gratefully acknowledged.

References and Further Reading


