Topic

Access to ICT infrastructure and devices in the South Pacific

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Abstract

The South Pacific region spreads over more than 30 million square kilometres of the Pacific Ocean. The region comprises more than a dozen island nations ranging from small volcanic islands to even smaller coral atolls. Population masses in the island nations vary from around 2,000 in Tokelau to a little more than 800,000 in the Republic of Fiji. Access to information and communications technologies and internet connectivity in the region is varied. This project involves the design and conduct of a desktop study into access to ICT infrastructure, connectivity and devices and their use by students and teachers in the Pacific. Outcomes of this study will enable COL to make informed decisions about what access and delivery technologies to employ in the Partnership for Open, Distance and Flexible Learning project in the Pacific. The study will address issues of access to hardware, software, connectivity and skills, as well as examples of ways in which teachers, institutions or Ministries have found ways to address the challenges in low bandwidth/limited access environments, especially in the nine developing countries of the Commonwealth in the region.

ICT Affordances for learning and teaching

Information and communications technologies (ICT), unlike the conventional printed material, have the potential to capture, store and deliver information to learners and teachers in a variety of formats. These include the integration of text with audio, video and animation (see Naidu, 2008; 2010). In addition, with ICT it is possible to design for more active engagement and provide immediate automated formative feedback on learning. Ethically sound use of learning analytics also provides information for individualised support. Not only do ICTs offer greater capabilities and a wider range of possibilities for the presentation of content they have greater storage capacity as well. Much larger amounts of information and various types of content can be stored using contemporary ICTs, than has been possible using conventional media (see Greenhow, Robelia, & Hughes, 2009). This information can be easily accessed and more readily updated, which is useful in maintaining its currency.

A further unique feature of contemporary ICTs is their ability to support both synchronous and asynchronous communication. This is especially critical for distance learners who are separated in time and place from their teachers, tutors and educational organization. But opportunities for communication and collaboration are not uniquely important for distance learners alone. Full-time students in campus-based educational settings also appreciate the possibilities that these attributes of ICTs afford. Teachers also find these attributes increasingly valuable in supporting their teaching strategies such as collaborative group work activities among their students.
There is also now a substantial body of experience and literature which points to the role of online synchronous and asynchronous communication tools for building and promoting learning communities and communities of practice (see Wenger, 1998, 2007; Wenger, McDermott, & Snyder, 2002). These attributes of ICTs can be organised and harnessed in a variety of ways and combinations to support learning and teaching formats. They include self-paced learning online and offline, and group-based learning synchronously and asynchronously (see Naidu, 2008; 2010). These modes of engagement and interaction oftentimes will also overlap and co-exist (see Figure 1). Many of these learning and teaching opportunities are simply not possible in conventional campus-based learning arrangements, with large numbers and in distributed or distance education settings.

**Figure 1: Modes of engagement and interaction with ICT**

*Self-paced learning offline* is possible with the help of PDAs, and laptop computers which enable learners to readily access and use large amounts of information and rich data at their own time, place and pace, a lot more than what is possible via a printed resource. *Self-paced learning online* is possible with the help of a range of technologies and networked resources such as online databases and the Web. These technologies allow users to engage and interact with subject matter content in a variety of ways and also at a pace that is convenient for individuals (see Naidu, 2008; 2010).

The dynamics of learning are altered considerably when learners are able to work in groups collaboratively. A wide range of technologies is becoming increasingly available to support group-based collaborative learning synchronously as well as asynchronously. *Group-based learning in real time* is possible with a range of audio, videoconferencing, and audio-graphic technologies, and i-labs which facilitate remote control of laboratories over the Internet. *Asynchronous group-based learning* is possible through a plethora of online learning environments, discussion forums and Web 2.0 technologies which enable learners to work together from a place and time, and at a pace that is convenient for them (see Greenhow, Robelia, & Hughes, 2009; Naidu, 2008; 2010).

**Research Questions**

To be able to leverage off these affordances of technologies, access to a range of ICTs is required, and here lies the challenge for the Pacific. There is a lack of comprehensive data on access to ICTs and its use in the Pacific region, which affects decision making about what needs to be done, where and when. This study seeks to address that deficit. It will benchmark *access to ICT and its use* in the South Pacific so that shifts in ICT access and use can be monitored over time.

The goal of this study has been to collect data along the following lines:

1. Demography (Gender, Residence Rural/Urban; Employment status/Student).
2. Device Access (Access to, as well as Ownership of ICTs including mobile devices).
3. Use of ICT (How are ICTs currently being used by people).
4. Level of access to the Internet and Connectivity.
5. Adequacy of access to the Internet and Connectivity.
7. Level of experience in the use of ICT and the Internet.
8. Satisfaction with the access to ICT and connectivity.

**Research Methodology**

A mixed methods approach was adopted in the conduct of this study. This comprised the use of an online survey and focus group interviews for the collection of both quantitative and qualitative data. Additional country specific data was also sourced from data warehouses.
The online survey (see Appendix 1) consisted of 13 questions. These covered demographic information on respondents, device access and ownership, experience with and use of ICT, perceptions of and satisfaction with ICT, and costs of ICT in relation to income and expenditure.

Results

Data from both the online survey is presented in the following.

### Online Survey Data

**Q1. How do you identify yourself?**

- Male 36%
- Female 64%

241 responses

**Q2. How do you describe your socio-economic background?**

- Rural/Village dweller 24%
- Urban/Town dweller 76%

241 responses

**Q3. What is your residential location?**

- Fiji 72%
- Tonga 14%
- Cook Islands 1%
- Vanuatu 3%
- Solomon Islands 1%
- Nauru 2%
- Papua New Guinea 2%
- Samoa 1%
- Kiribati 4%

241 responses
Q4. Do you personally own—or does your employer provide you with—any of these devices?

![Bar chart showing responses for owned vs. provided devices.]

241 responses

Q5. Please rate the level of your experience with the following ICT-enabled learning/working devices/spaces.

![Bar chart showing experience ratings for various devices/spaces.]

241 responses
Q6. Please rate the quality of your experience with the following ICT-enabled connection and communication tools and resources.

![Bar chart showing the distribution of responses for different ICT tools and services.]

241 responses

Q7. Please rate the quality of your experience with the following ICT support services:

![Bar chart showing the distribution of responses for different ICT support services.]

241 responses
Q8. Rate your satisfaction with the following technologies at your institution:

![Bar chart showing satisfaction levels for different technologies]

241 responses

Q9. Rate your agreement with the following statements, specifically considering how using technology has been enabling for you? Technology has enabled me to

![Bar chart showing agreement levels for different statements]

241 responses
Q10. To what extent do you agree with the following statements about ICT? I get distracted when I...

![Graph showing responses to Q10.]

Q11. Approximately what proportion of your monthly earnings is allocated to the cost of the following?

![Graph showing responses to Q11.]

241 responses
Q12. In your country, which of the following is your preferred Internet Service Provider (ISP)?

- Digicel
- Others
- Solomon Telekom
- Telecom Cook Islands
- Telecom Fiji
- Tuvalu Telecom
- Vodafone

Q13. In your country, what is the approximate monthly cost for widely used data packages (in US dollars)?

- 10-20 USD
- 20-40 USD
- 40-50 USD
- Less than 10 USD
- More than 50 USD
Online Survey Data Disaggregated by Country

Q4. Do you personally own—or does your employer provide you with—any of these devices?

241 responses

**Desktop**

- **Neither**
- **Personally own**
- **Provided by Institution**

**Laptop**

- **Neither**
- **Personally own**
- **Provided by Institution**

241 responses
Tablet

- Neither
- Personally own
- Provided by Institution

Number

Cook Islands
Fiji
Kiribati
Nauru
Papua New Guinea
Samoa
Solomon Islands
Tonga
Vanuatu

241 responses

Smartphone

- Neither
- Personally own
- Provided by Institution

Number

Cook Islands
Fiji
Kiribati
Nauru
Papua New Guinea
Samoa
Solomon Islands
Tonga
Vanuatu

241 responses
Q5. Please rate the level of your experience with the following ICT-enabled learning/working devices/spaces.

[Online collaborative spaces where you can work synchronously (at the same time) or asynchronously (at different times) (e.g., the learning management system [LMS], Google Docs, Dropbox, etc.)]

[Tools (e.g., computers, projection systems, lecture-capture systems, SMART boards, etc.)]
Q6. Please rate the quality of your experience with the following ICT-enabled connection and communication tools and resources.

### Physical Collaborative Spaces

- **Average**
- **High**
- **Low**
- **Very high**
- **Very low**

### Wi-Fi Networks

- **Excellent**
- **Fair**
- **Good**
- **Haven’t used it in the past year**
- **Neutral**
- **Poor**
Q7. Please rate the quality of your experience with the following ICT support services

[Technical support (e.g., desktop support, classroom technology support, course development, etc.)]

[Bar chart showing the distribution of responses to the question about technical support across different regions.]

241 responses

[Training around the use of technology (e.g., short courses for professional development)]

[Bar chart showing the distribution of responses to the question about training around the use of technology across different regions.]

241 responses
[Support for making courses accessible to students with disadvantages and disabilities]

- Excellent
- Fair
- Good
- Haven’t used it in the past year
- Neutral
- Poor
- Service not offered

241 responses

[Institutional repository of educational resources (e.g., publications, presentations, posters, preprints, etc.)]

- Excellent
- Fair
- Good
- Haven’t used it in the past year
- Neutral
- Poor
- Service not offered

241 responses
Q8. Rate your satisfaction with the following technologies at your institution

**[Computers]**

- Dissatisfied
- N/A
- Neutral
- Satisfied
- Very Satisfied
- Very dissatisfied

241 responses

**[Software on computers]**

- Dissatisfied
- N/A
- Neutral
- Satisfied
- Very Satisfied
- Very dissatisfied

241 responses
Q9. Rate your agreement with the following statements, specifically considering how using technology has been enabling for you? Technology has enabled me to..

[...communicate basic information to others]

[...clearly explain new concepts and ideas I have learned to others]
Q10. To what extent do you agree with the following statements about ICT? I get distracted when I...

- ...explain my thought processes to others more clearly

- ...use social media ...
- ...am text messaging ...
- ...read e-mail ...
- ...play games on a laptop or mobile device
...read websites not related to my work

- Agree
- Disagree
- Neutral
- Strongly agree
- Strongly disagree

Cook Islands   Fiji   Kiribati   Nauru   Papua New Guinea   Samoa   Solomon Islands   Tonga   Vanuatu

241 responses

...surf the Web

- Agree
- Disagree
- Don’t Know
- Neutral
- Strongly agree
- Strongly disagree

Cook Islands   Fiji   Kiribati   Nauru   Papua New Guinea   Samoa   Solomon Islands   Tonga   Vanuatu

241 responses

Pacific ICT Access Study/20
Q11. Approximately what proportion of your monthly earnings is allocated to the cost of the following?

[Computers and accessories]

241 responses

[Mobile Phones and accessories]

241 responses
Q12. In your country, which of the following is your preferred Internet Service Provider (ISP)?

[Bar chart showing preferred ISPs by number of responses.
- Digicel
- Others
- Solomon Telekom
- Telecom Cook Islands
- Telecom Fiji
- Tuvalu Telecom
- Vodafone]

241 responses
Q13. In your country, what is the approximate monthly cost for widely used data packages (in US dollars)?

<table>
<thead>
<tr>
<th>Country</th>
<th>10-20 USD</th>
<th>20-40 USD</th>
<th>40-50 USD</th>
<th>Less than 10 USD</th>
<th>More than 50 USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
<td>22</td>
<td>35</td>
<td>14</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Fiji</td>
<td>20</td>
<td>45</td>
<td>12</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Kiribati</td>
<td>18</td>
<td>40</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Nauru</td>
<td>20</td>
<td>40</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>20</td>
<td>40</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Samoa</td>
<td>20</td>
<td>40</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>20</td>
<td>40</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Tonga</td>
<td>20</td>
<td>40</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>20</td>
<td>40</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

241 responses

Online Survey Data Disaggregated by Gender (Male/Female)

Q2. How do you describe your socio-economic background?

<table>
<thead>
<tr>
<th>Gender</th>
<th>Rural/Village dweller</th>
<th>Urban/Town dweller</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>Male</td>
<td>60</td>
<td>80</td>
</tr>
</tbody>
</table>

Pacific ICT Access Study/23
Q3. What is your residential location?

Q4. Do you personally own—or does your employer provide you with—any of these devices? Select all that apply.
Q5. Please rate the level of your experience with the following ICT-enabled learning/working devices/spaces.

[Tools (e.g., computers, projection systems, lecture-capture systems, SMART boards, etc.)]

[Online collaborative spaces where you can work synchronously (at the same time) or asynchronously (at different times) (e.g., the learning management system [LMS], Google Docs, Dropbox, etc.)]
Q6. Please rate the quality of your experience with the following ICT-enabled connection and communication tools and resources.

[Physical collaborative spaces (e.g., computer labs, learning commons, labs, active learning spaces, etc.)]

[Wi-Fi networks]

[Communication tools (e.g., e-mail, social media tools, twitter, instagram etc.)]
Q7. Please rate the quality of your experience with the following ICT support services:

[Videoconferencing tools (e.g., Skype, Zoom, MS Teams, Google Hangouts, Adobe Connect, etc.)]

- Excellent
- Fair
- Good
- Haven’t used it in the past year
- Neutral
- Poor
- Service not offered

[Technical support (e.g., desktop support, classroom technology support, course development, etc.)]

- Excellent
- Fair
- Good
- Haven’t used it in the past year
- Neutral
- Poor
- Service not offered

[Training around the use of technology (e.g., short courses for professional development)]

- Excellent
- Fair
- Good
- Haven’t used it in the past year
- Neutral
- Poor
- Service not offered
[Support for making courses accessible to students with disadvantages and disabilities]

- Excellent
- Fair
- Good
- Haven’t used it in the past year
- Neutral
- Poor
- Service not offered

[Institutional repository of educational resources (e.g., publications, presentations, posters, preprints, etc.)]

- Excellent
- Fair
- Good
- Haven’t used it in the past year
- Neutral
- Poor
- Service not offered
Q11. Approximately what proportion of your monthly earnings is allocated to the cost of the following?

[Computers and accessories]

[Mobile Phones and accessories]

[Data and Internet connection]
**Discussion**

Two hundred and fourteen usable responses to the online survey were received. Two-thirds of the respondents classified themselves as female and one third male, mostly residing in urban communities. The majority of the 241 respondents were from The Republic of Fiji. The sample is small but the best that could be achieved at this time. Nevertheless, this small sample is representative of the urban population in the small island nations of the Pacific.

Personal ownership of ICT (laptops and smartphones) is high among respondents to this survey. Respondents rated *their experience with ICT* from average to high, and the *quality of this experience* as generally fair, to good. The *quality of the experiences with support services* is also rated as fair to good. The majority of the respondents reported being satisfied with ICT and ICTs as having an enabling role. Many also reported the use of social media was distracting although many did not find the use of social media as distracting from their work. When disaggregated by gender (male and female), no significant differences were observed on key indicators such as device ownership, access to support services or satisfaction.

*The cost of ICT access and connectivity* is high in the region with people spending around 5% of their monthly earnings on ICT and 10-20 US dollars a month on the purchase of data. Access to the Internet is fairly high in the region as the following table shows with the exception of a few countries such as Papua New Guinea, Vanuatu and the Solomons Islands. In these countries access to the Internet is comparatively low.

**Internet Users and Population Statistics – 2021**

<table>
<thead>
<tr>
<th>Country</th>
<th>Internet Users 31/12/2020</th>
<th>Population (2021 Est.)</th>
<th>% Population (Penetration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
<td>11,377</td>
<td>17,565</td>
<td>65%</td>
</tr>
<tr>
<td>Fiji</td>
<td>615,500</td>
<td>902,906</td>
<td>68%</td>
</tr>
<tr>
<td>Kiribati</td>
<td>51,300</td>
<td>121,392</td>
<td>42%</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>23,000</td>
<td>59,610</td>
<td>39%</td>
</tr>
<tr>
<td>Nauru</td>
<td>6,418</td>
<td>10,876</td>
<td>59%</td>
</tr>
<tr>
<td>Niue</td>
<td>1,485</td>
<td>1,619</td>
<td>92%</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>1,099,945</td>
<td>9,119,010</td>
<td>12%</td>
</tr>
<tr>
<td>Samoa</td>
<td>134,500</td>
<td>200,149</td>
<td>67%</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>130,000</td>
<td>703,996</td>
<td>19%</td>
</tr>
<tr>
<td>Tokelau</td>
<td>800</td>
<td>1,373</td>
<td>58%</td>
</tr>
<tr>
<td>Tonga</td>
<td>75,400</td>
<td>106,760</td>
<td>71%</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>6,400</td>
<td>11,931</td>
<td>54%</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>110,000</td>
<td>314,464</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: [https://www.internetworldstats.com](https://www.internetworldstats.com)
Internet Users and Population Statistics - 2021

Source: https://www.internetworldstats.com
Recommendations

Access to ICT and connectivity in the South West Pacific is improving rapidly. There are nevertheless, serious challenges facing its adoption and use across the region. In most cases this has to do with access to ICT infrastructure as well as digital literacy of citizens. This includes their capacity for effective use of ICT in a wide range of formats including self-placed modes as well as group-based formats, synchronously and asynchronously.

While access to ICT and connectivity in the Pacific is growing, we need to be cognizant that this picture is not uniform within and among the various countries in the region. Access to ICT and connectivity to the Internet differs considerably by geographical location, with residents in the urban centres outpacing those in the rural areas. The integration of ICT and connectivity needs to consider this very real digital divide among and within the various communities. But this reality should not hold back the rollout of ICT and connectivity in the region.

Enabling different groups to move at different paces ought to be considered as a realistic way forward. Some of the obvious opportunities in the provision and support of ICT are the adoption of a growing list of ICT tools, social media, and software applications to improve productivity in the workplace. This can include assistance with the adoption and use of:

- LMS use;
- Basic use of Internet and the Web;
- Basic word processing and data analysis tools and software;
- More technical teacher upskilling workshops on the use of ICT;
- Upskilling of COL Focal Points at the provincial level;
- Incentivization with micro-creds and certificates from COL for Focal Points;
- ICT tool or technology suggestion options from COL;
- General professional development for working smarter (not necessarily harder).

Acknowledgement

This paper is an abbreviated version of the final report on “access and connectivity to ICT infrastructure and devices related to COL’s Partnership for Open, Distance and Flexible Learning (ODFL) in the Pacific project (Ref: C22-067).

References


Appendix 1: Pacific ICT Access and Use Survey

This survey investigates access to, and the use of information and communications technologies (ICT) in the countries of the South Pacific.

This survey will take about 15-20 minutes to complete and your responses will always remain anonymous. Participation in it is voluntary and you can exit the survey at any point. There are no right or wrong answers to the questions in the survey. We would just like you to answer them honestly. Required questions are indicated with an asterisk (*).

Please use the survey’s navigation buttons below to go back or forward within the survey. Using your device or browser’s navigation buttons may result in lost answers. So, remember to save your responses after each section.

Conditions of engagement
1. I agree to complete this online survey for research purposes and understand that the data derived from this survey may be made available in unitary and aggregate formats in the form of public presentations, reports, journals or newspaper articles, and/or in books.
2. I understand that my participation in this research survey is totally voluntary and that declining to participate will incur no penalty or loss of benefits.
3. Please indicate your agreement with the informed consent statement below. *Required.
   () I agree.
   () I do not agree. <<exit survey>> If you choose this option, you will exit the survey.

Demography (About You)
1. How do you identify yourself?
   • Male
   • Female
   • Prefer not to answer
2. How do you describe your socio-economic background?
   • Urban/Town dweller
   • Rural/Village dweller
3. What is your residential location?
   • Cook Islands
   • Fiji
   • Kiribati
   • Marshall Islands
   • Nauru
   • Niue
   • Papua New Guinea
   • Samoa
   • Solomon Islands
   • Tokelau
   • Tonga
   • Tuvalu
   • Vanuatu
Device Access and Ownership
4. Do you personally own—or does your employer provide you with—any of these devices? Select all that apply.

<table>
<thead>
<tr>
<th>Device</th>
<th>Personally own</th>
<th>Provided by Institution</th>
<th>Neither</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laptop</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tablet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smartphone</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Experience with, and Use of ICT
5. Please rate your level of experience with the following ICT-enabled learning/working devices/spaces.

<table>
<thead>
<tr>
<th>Tools and Spaces</th>
<th>Service not offered</th>
<th>Haven’t used in the past year</th>
<th>Poor</th>
<th>Fair</th>
<th>Neutral</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools (e.g., computers, projection systems, lecture-capture systems, SMART boards, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online collaborative spaces where you can work synchronously (at the same time) or asynchronously (at different times) (e.g., the learning management system [LMS], Google Docs, Dropbox, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical collaborative spaces (e.g., computer labs, learning commons, labs, active learning spaces, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Please rate your level of experience with the following ICT-enabled connection and communication tools and resources.

<table>
<thead>
<tr>
<th>Services</th>
<th>Service not offered</th>
<th>Haven’t used in the past year</th>
<th>Poor</th>
<th>Fair</th>
<th>Neutral</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wi-Fi networks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication tools (e.g., e-mail, social media tools, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Videoconferencing tools (e.g., Skype, Zoom, MS Teams, Google Hangouts, Adobe Connect, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Please rate your level of experience with the following ICT support services:

<table>
<thead>
<tr>
<th>Services</th>
<th>Service not offered</th>
<th>Haven’t used in the past year</th>
<th>Poor</th>
<th>Fair</th>
<th>Neutral</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical support (e.g., desktop support, classroom technology support, course development, etc.)</td>
<td></td>
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<tr>
<td>Training around the use of technology (e.g., short courses for professional development)</td>
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<tr>
<td>Support for making courses accessible to students with disadvantage and disabilities</td>
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<tr>
<td>Institutional repository of educational resources (e.g., publications, presentations, posters, preprints, etc.)</td>
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</tr>
</tbody>
</table>

Perceptions of, and satisfaction with ICT
8. Rate your satisfaction with the following technologies at your institution:

<table>
<thead>
<tr>
<th>Technology</th>
<th>Very dissatisfied</th>
<th>Dissatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Software on computers</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Computer projection devices</td>
<td></td>
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<tr>
<td>Wireless access</td>
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</tr>
</tbody>
</table>

9. Rate your agreement with the following statements, specifically considering how using technology has been enabling for you? Technology has enabled me to…

<table>
<thead>
<tr>
<th>Statement</th>
<th>Don’t Know</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>…communicate basic information to others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>…clearly explain new concepts and ideas I have learned to others</td>
<td></td>
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<tr>
<td>…explain my thought processes to others more clearly</td>
<td></td>
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</tr>
</tbody>
</table>

10. To what extent do you agree with the following statements about ICT? I get distracted when I…

<table>
<thead>
<tr>
<th>Activity</th>
<th>Don’t Know</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>…use social media</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>…am text messaging</td>
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<tr>
<td>…read e-mail</td>
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<tr>
<td>…play games on a laptop or mobile device</td>
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<tr>
<td>…read websites not related to my work</td>
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<tr>
<td>…surf the Web</td>
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</tbody>
</table>

**Costs of ICT in relation to income and expenditure**

11. Approximately what proportion of your monthly earnings is allocated to the cost of the following?

<table>
<thead>
<tr>
<th>Expense</th>
<th>Less than 2%</th>
<th>2-5%</th>
<th>5-10%</th>
<th>More than 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers and accessories</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mobile Phones and accessories</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Data and Internet connection</td>
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</tr>
</tbody>
</table>

12. In your country, which of the following is your preferred Internet Service Provider (ISP)?

<table>
<thead>
<tr>
<th>Country</th>
<th>Cocos Islands</th>
<th>Fiji</th>
<th>Kiribati</th>
<th>Marshall Islands</th>
<th>Nauru</th>
<th>Niue</th>
<th>Samoa</th>
<th>Solomon Islands</th>
<th>Tokelau</th>
<th>Tonga</th>
<th>Tuvalu</th>
<th>Vanuatu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digicel</td>
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<tr>
<td>Vodafone</td>
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<tr>
<td>Other</td>
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</tr>
</tbody>
</table>

13. In your country, what is the approximate monthly costs for widely used data packages (in US dollars)?

<table>
<thead>
<tr>
<th>Country</th>
<th>Less than 10 USD</th>
<th>10-20 USD</th>
<th>20-40 USD</th>
<th>40-50 USD</th>
<th>More than 50 USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
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<tr>
<td>Fiji</td>
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<tr>
<td>Kiribati</td>
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<tr>
<td>Marshall Islands</td>
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<tr>
<td>Nauru</td>
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<tr>
<td>Country</td>
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<tr>
<td>Niue</td>
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<tr>
<td>Papua New Guinea</td>
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<tr>
<td>Samoa</td>
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<tr>
<td>Solomon Islands</td>
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<tr>
<td>Tokelau</td>
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<td>Tonga</td>
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<td>Tuvalu</td>
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<tr>
<td>Vanuatu</td>
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</table>

Please click the “Submit” button below to submit your survey.

Thank you for responding to the Pacific ICT Access & Use Survey!