



Comment from Project Researcher, Barbara Craig

This annual report presents project outcomes for the year 1 July 2015 to 30 June 2016 – for the 2020 Trust digital literacy initiatives: the Trust's flagship programme *Computers in Homes* that was initially piloted in 2000 and the associated IT skills training programmes, *Stepping UP* and *KiwiSkills ICDL*.

Project outcomes for *Computers in Homes* are assessed through analysis of responses from participants to survey questions at two different points in time. Results are reported nationally and by region. Principals of schools are interviewed at the time the programme is first established in their school. They also complete a short survey a year later assessing the impact of the project on their school community and parent involvement in school activities. The outcomes from this survey which is administered externally by the MOE will be reported in our mid-year report in January 2017.

Outcomes for *Stepping UP* are reported from participants' feedback on their learning experience with each module completed. All public libraries that offer *Stepping UP* training to their communities receive brief quarterly reports with participant comments on learning modules offered in that library.

KiwiSkills participants are assessed on completion and certification in selected modules.

Participant surveys for CiH and *Stepping UP* are managed online through SurveyMonkey and completed where possible in a group situation in a training suite where the project coordinator or tutor is on hand for technical assistance or incorrect interpretation of the questions, especially for participants where English is not their first language. Having the skills to accurately complete an online form – an essential skill to fully participate in today's digital world – is a key learning objective of these initiatives.

Computers in Homes

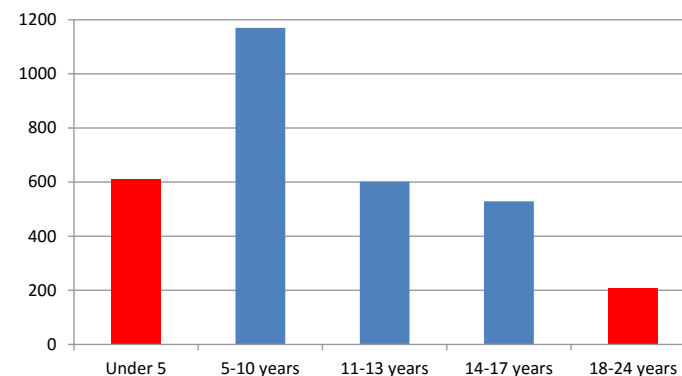
The CiH pre-graduation family questionnaire (pre-survey) documents core family background information such as ethnicity, household

composition, age of children, previous education achievement and employment history of adults in the household. It also provides feedback on the structure of the training sessions and the tutoring style. The open-ended questions seek to understand what motivates the family to sign up for *Computers in Homes*, the specific benefits participants seek to achieve and other digital skills participants would like included in the curriculum.

The CiH 'rejuvenation' family follow-up questionnaire (post-survey) is administered 12 months after graduation. In previous years this took place at a time when participants returned to the school for a final check and upgrade or 'rejuvenation' of their computer by the programme technician. At this point families became responsible for their own hardware maintenance and Internet connection. In more recent times participants are less willing to return the hardware to the school or perhaps do not see the value in having the home computer spring-cleaned one final time. The programme no longer offers this service and there is now a new process, discussed in depth below – set in place for the completion of the follow-up survey 12 months to 18 months later.

The post-survey asks questions about specific benefits gained such as confidence to volunteer in school and community activities and confer with teachers about their children's progress at school. This survey asks questions about any changes in employment status of adults in the household and questions about further training or education qualifications attained or sought and any courses participants are currently enrolled in. There are questions about children's use of the internet for learning and researching information for homework projects. It also elicits information about family

CHILDREN & YOUTH LIVING IN COMPUTERS IN HOMES HOUSEHOLDS:



use of the computer and the frequency of visits for information or services to a range of internet sites, including government departments. It asks about managing affordable broadband connections at home including preferred options for payment for services and for those who have disconnected the internet at home, reasons for doing so.

Computers in Homes families provide helpful feedback about their experiences in becoming digitally literate as they progress through the 2020 Trust training courses when they complete these online surveys. Their feedback also provides insights into family use of the internet to support their social, professional, learning and everyday life needs over the first year of having an internet-enabled computer in their home.

There are four identified measures of change over time that we report as central significance to the CiH programme:

1. Evidence of CiH parents and caregivers becoming more engaged in their children's education and increasing their participation in school-related activities.
2. Percentage of families where adult family members have enrolled in further training or education courses after graduation and those who have gained new education qualifications.
3. Changes in participants' levels of confidence – having completed the CiH training and having used a computer for 12 months – to seek new education or employment opportunities, to help their children with learning and contribute to community and civil life.

4. Percentage of families where family members have enhanced their employment situation, e.g. new job, job promotion, self-employment.

This report draws on participants' responses over 12 months (ending 30 June 2016) to the pre-surveys that are completed at the end of training one week before graduation and the post-surveys completed approximately one year on. Outcomes are based on 1,344 completed CiH pre-surveys and 481 completed post-surveys.

An on-going challenge for our coordinators is locating and communicating with these CiH families one year on from graduation to complete the post 12-month follow-up survey. In this last year, for instance, we have only been able to follow up on roughly one-third (481 post compared to 1334 pre) of graduating families. Many of our CiH communities are characterised by the high transiency of families. Some move out of the region for seasonal work and other reasons. Others often move within their communities, e.g. temporary housing with friends and family, and leave no forwarding details with schools and neighbours. Few have landline telephones in their homes. Most have cell phones but even then it is difficult to maintain contact using their mobile numbers as many families change their providers and phone details at least once over the course of the year.

The 481 who completed the post-survey are not necessarily representative of the total population who sign up for CiH. There are other harder-to-reach families whose experiences are likely to differ from those who have been self-motivated and willing to complete the survey online. Our new research

approach is to take a small random sample of new graduates (n=200 each year). The CiH regional co-ordinators have been given the task of contacting each family selected from their region (n=10 approx. per region) in person every three months to update their details and if they have moved to try and locate them. If they have moved to Australia or are not contactable by any means, then that family will be replaced with the next name that came up in the random sample. We will have some useful demographic information about each selected family at the time of graduation and we can use this data to generate a profile of 'who' cannot be contacted even a short time after graduation. If we can follow the majority of the families in this randomly generated sample and document their post-CiH experiences, then we should be able to report on outcomes and issues representative of the wider population of families in the CiH programme.

The post-survey questionnaire has been revised in the light of feedback from other NZ internet researchers and the 2020 Trust team of regional co-ordinators who work closely with these families. It now includes some questions that will allow comparison with other NZ sample surveys of internet use such as the World Internet Project and specific questions about use of some online government and other services.

Stepping UP participants complete an online survey at the completion of each Digital Step class. They are asked questions about their motivation for

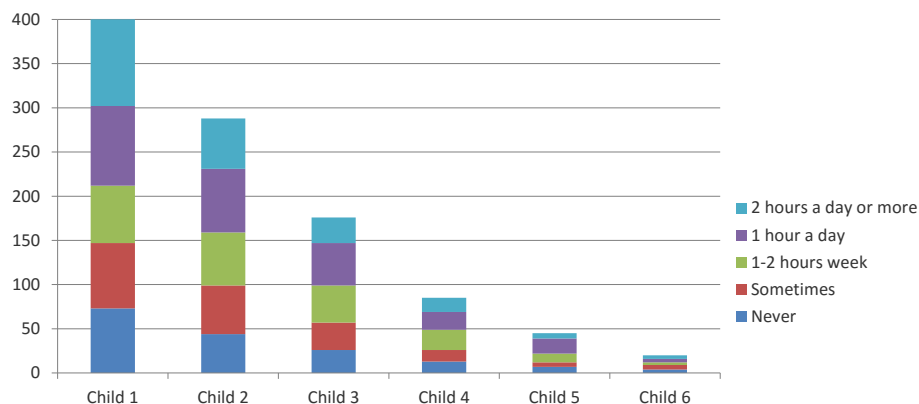
signing up for a Digital Step class. They are then asked to identify, from a dropdown menu, the specific module they have completed that day and to evaluate their learning experience. If this is their first Digital Step class, they are asked to first respond to a few key demographic and family background questions. Registration at public libraries is managed by the librarians using the Arlo booking system but the completion surveys use SurveyMonkey, managed by the 2020 Trust.

This year we combined our two *Stepping UP* curricula – one in schools offered to CiH graduates and the other in public libraries offered to the general public. During 2015–16 we offered 27 Digital Steps – along with teaching resources for the tutors – in libraries, schools and CTCs. *Stepping UP* is now offered almost exclusively in public libraries. Some regions continue to offer *Stepping UP* in schools where there are training pods still in place.

A total of 2990 Digital Steps were completed in 25 regions in the 12 months from 1 July 2015 to 30 June 2016. A total of 2850 were completed in public libraries and 140 completed in CiH schools.

The post-surveys for both *Computers in Homes* and *Stepping UP* provide participants with an opportunity to give more detailed feedback on their experiences and their ideas about how the programme or curricula might be modified to better fit their learning needs by including a number of open-ended questions.

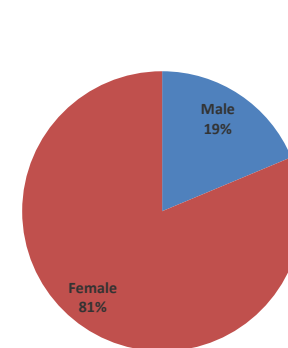
CHILDREN'S USE OF THE HOME COMPUTER FOR HOMEWORK:



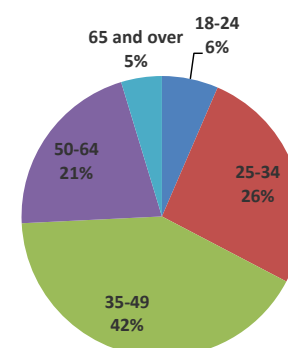
Participant Profiles:

Nationally in the last 12 months a total of 1,344 participants completed the *Computers in Homes* pre-survey administered at the end of training when they are ready to graduate. Consistent with the previous 12 months those who signed up for CiH were women (81%) who had no formal education qualifications (41%) and were full-time parents at home (31%). Just 38% were in full or part-time employment. As expected in a project that targets the parents and caregivers of school-aged children the largest group was those in the 35–49 age bracket (42%). One quarter (26%) was over the age of 50, which reflects the number of grandparents and older whānau members in these communities caring for school-aged children. In 2015/16 just over half the families joining the project were Māori (52%), a quarter (25%) Pākehā and 18% Pasifika, very much in line with previous years. The largest groups in the 'other' category were Indian and Australian families.

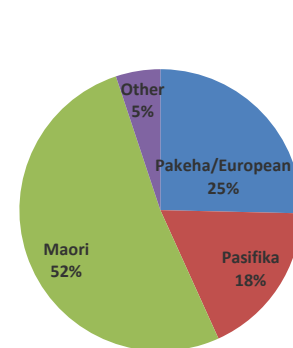
PARTICIPANT GENDER:



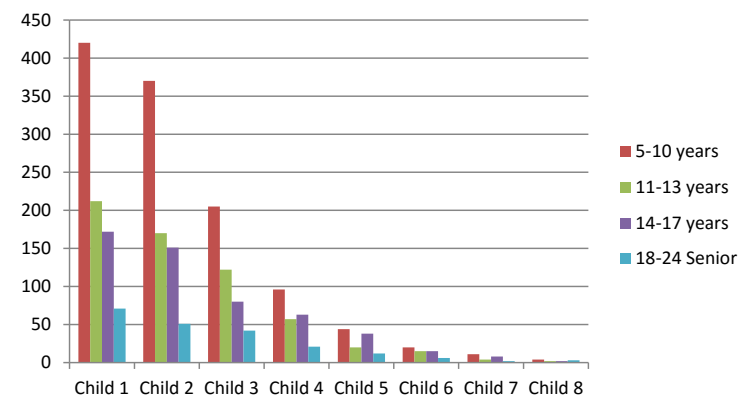
PARTICIPANT AGE:



PARTICIPANT ETHNICITY:

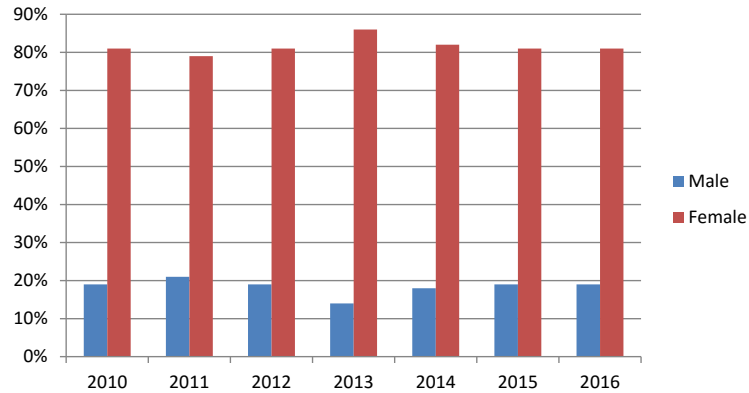


NUMBER OF SCHOOL AGED CHILDREN:

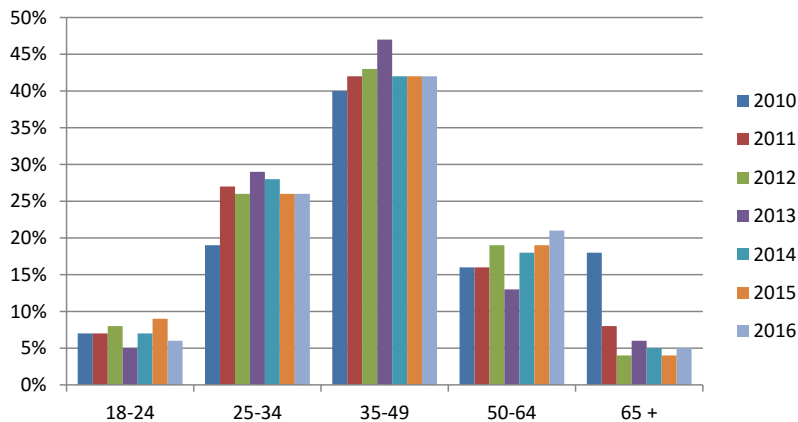


The average household composition comprised 2 adults over the age of 18 and 2.5 children under 18. Family size ranged from 1 to up to 8 children living at home. In 2015–16 CiH worked with 23 families with 8 children and a further 39 with 7 children sharing the home computer. The largest group of children in CiH family homes are of primary school-age (n=1170). There was a spread of intermediate-aged students (n=602), high school students (n=529) and senior students (n=208).

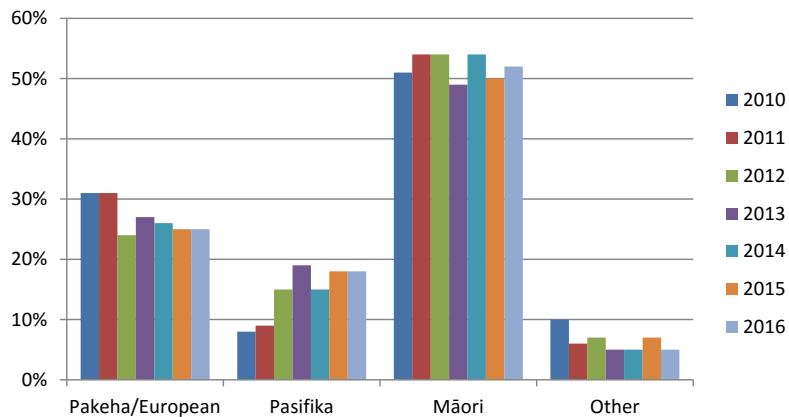
2010–2016 TRENDS: GENDER



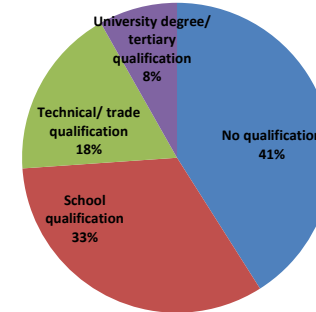
2010–2016 TRENDS: AGE



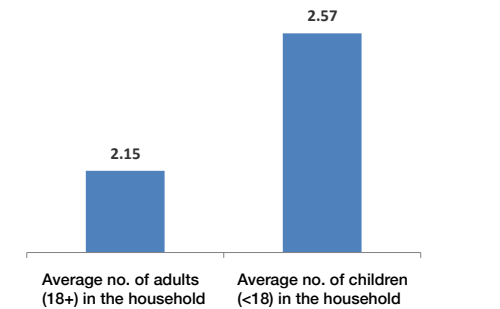
2010–2016 TRENDS: ETHNICITY



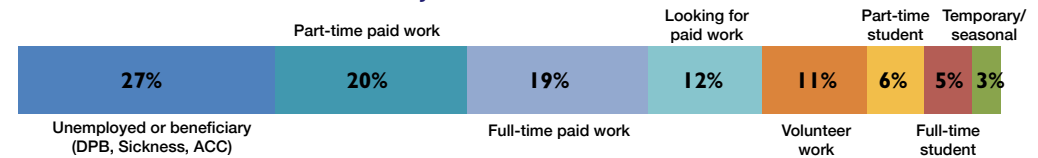
EDUCATION BACKGROUND:



FAMILY SIZE:



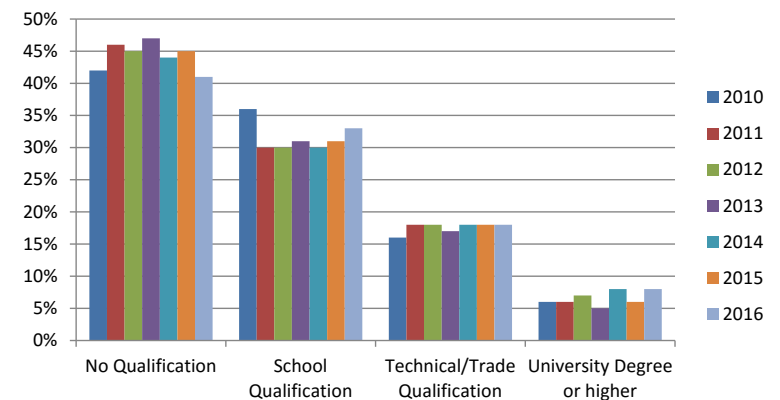
EMPLOYMENT SITUATION AT TIME OF JOINING:



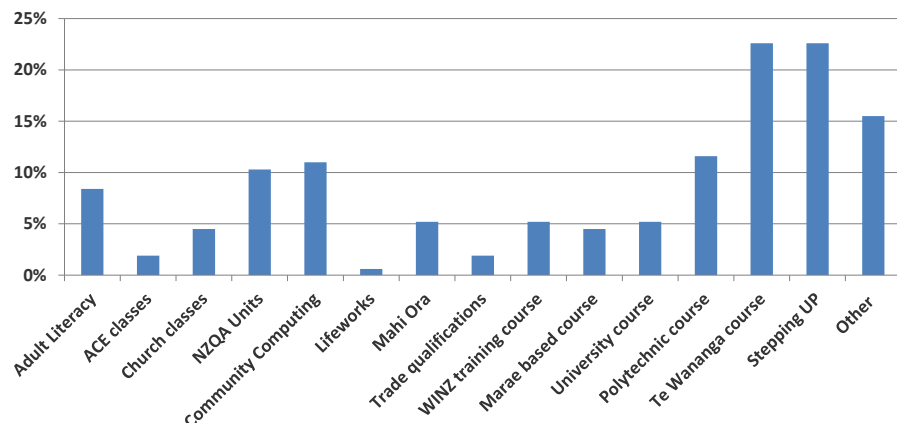
Research Outcomes – Education & Training

Over the last 12 months the education profile of parent participants remains unchanged with 41% reporting that they left school without acquiring any formal achievement qualifications. Almost one-third (33%) had stayed at school long enough to attain a school qualification and 26% had gone on to study for a trade or tertiary qualification. Since CiH graduation 34% of those who completed the post-survey (n= 481) report that they have gone on to enrol in further education or training. Almost a quarter (23%) had enrolled in a Wānanga course, 18% had enrolled to complete an NZQA unit, 12% were enrolled at a Polytechnic, 11% enrolled in a Community Computing course, 23% had completed at least one *Stepping UP* module and two enrolled in *KiwiSkills*.

2010–2016 TRENDS: EDUCATION BACKGROUND



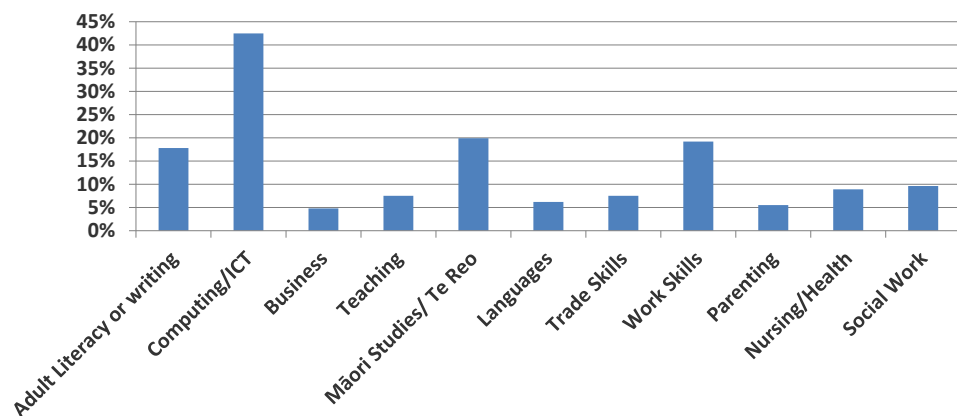
WHAT OTHER TRAINING OR EDUCATION HAVE YOU ATTENDED SINCE CIH GRADUATION?



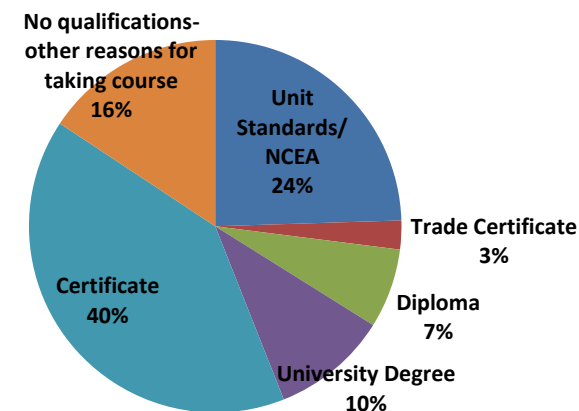
The 'other' category included two men studying for a Class 2 truck driver's licence, two mothers attending a parenting course 'Be Your Best', a healthy eating course *Moving Forward*, parenting classes at the school, mental health programmes, first aid and learning Xero accounting system online.

Some participants had enrolled in more than one course of study. This question allowed for participants to select multiple options. Most (80%) were attending classes in person but a further 27% were enrolled in online courses. A large proportion (42.5%) enrolled to continue their studies in ICT/Computing to build on the CiH and *Stepping UP* digital literacy training. A further 20% have selected to study Te Reo and Māori studies, 19% enrolled in employment preparation courses and 18% adult literacy and community education programmes. The majority was seeking to gain either a certificate (40%) including ICDL or unit standard qualification (24.5%). A smaller number (15%) were enrolled in courses that did not lead to qualifications.

WHAT SUBJECTS OR TOPICS DID YOU STUDY?



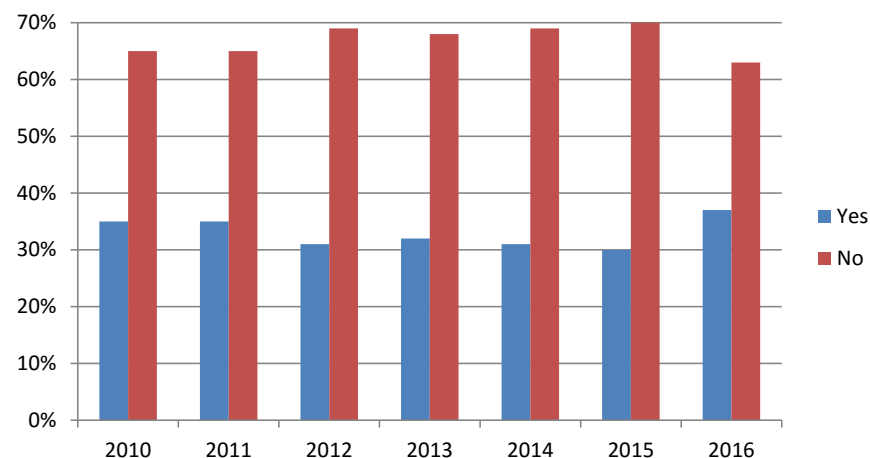
WHAT KIND OF QUALIFICATION CAN YOU GAIN THROUGH THIS STUDY?



Research Outcomes – Employment

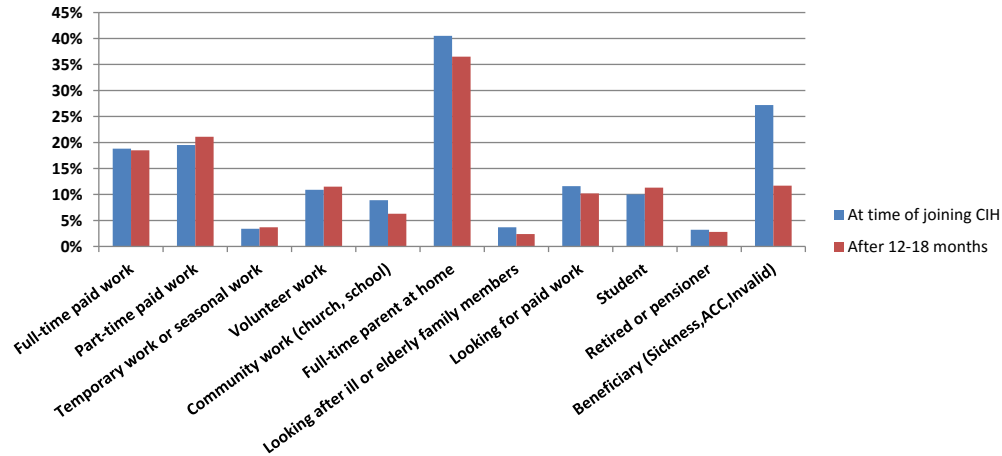
At the time of joining the CiH programme, 19% of participants were in full-time employment, 9% in part-time work, 31% full-time parents at home and 19% on a benefit such as unemployment, DPB or ACC at this time. This question about employment status allows for participants to tick multiple options. It is possible that those who are beneficiaries or are full-time homemakers (31%) are also caring for sick or elderly relatives (4%) or grandchildren (9%) or doing voluntary work in the community, church or school (18%).

2010–2016 TRENDS: EMPLOYMENT STATUS OF PARTICIPANTS AT TIME OF CIH TRAINING:

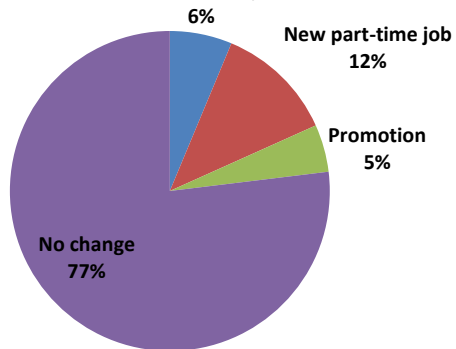


Changes in employment status 12 to 18 months post-graduation are very small but descriptive case studies of those who have gained new employment reveal the importance of this change to the individual family. In this past year, 6% reported getting a new full-time job, 12% a new part-time job and 5 % a promotion in their current work situation. This is in step with outcomes in previous years.

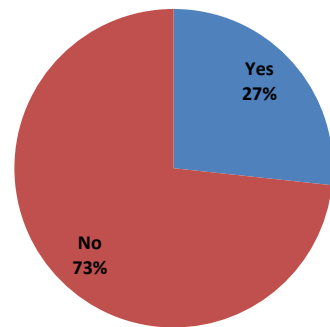
EMPLOYMENT CHANGES FOR PROGRAMME PARTICIPANTS:



SINCE CIH GRADUATION HAVE YOU GOT A NEW JOB OR BEEN PROMOTED IN YOUR CURRENT WORKPLACE?

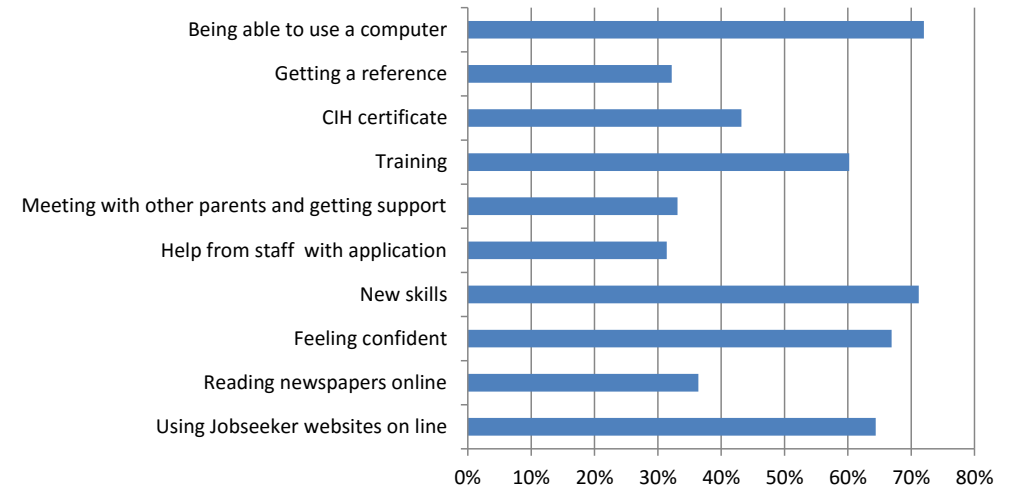


DID CIH TRAINING HELP YOU FIND PAID WORK?

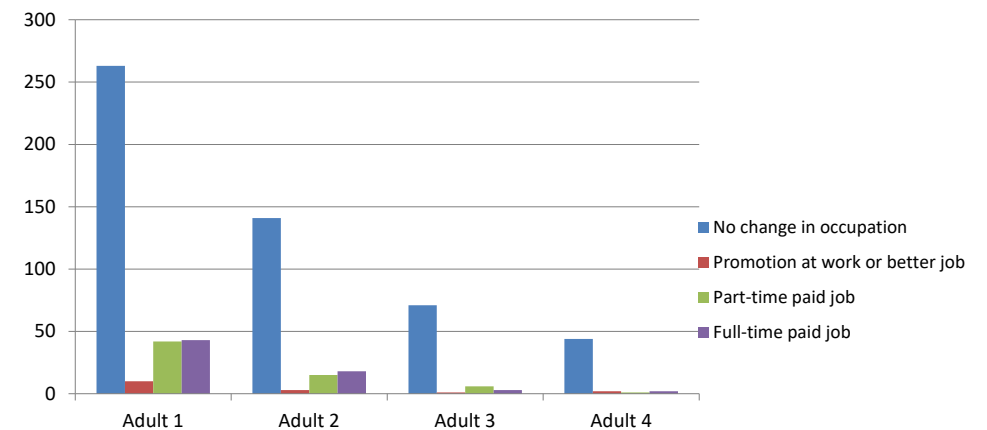


The specific aspects of CIH that helped with gaining employment were being able to use a computer at home, greater confidence in seeking work and having new skills to offer. Access to a computer in the home also helped other adult family members find work, with 18 % of participants telling us that at least one other family member over 18 years of age and living in the household gained full-time employment, 18% reported a family member had gained part-time employment and just less than 1% promotion where already employed.

HOW HAS CIH HELPED?



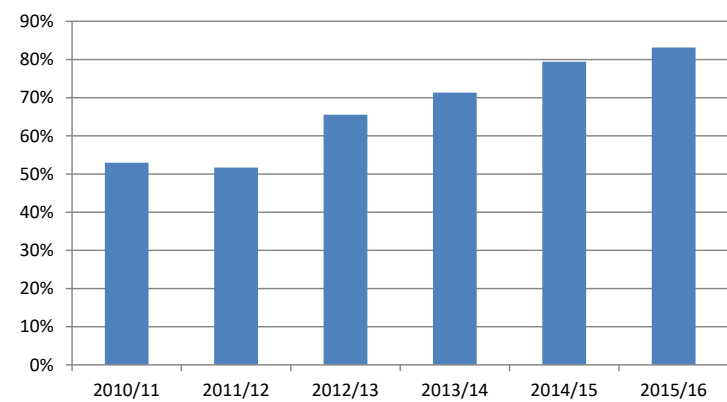
EMPLOYMENT CHANGE FOR OTHER FAMILY MEMBER:



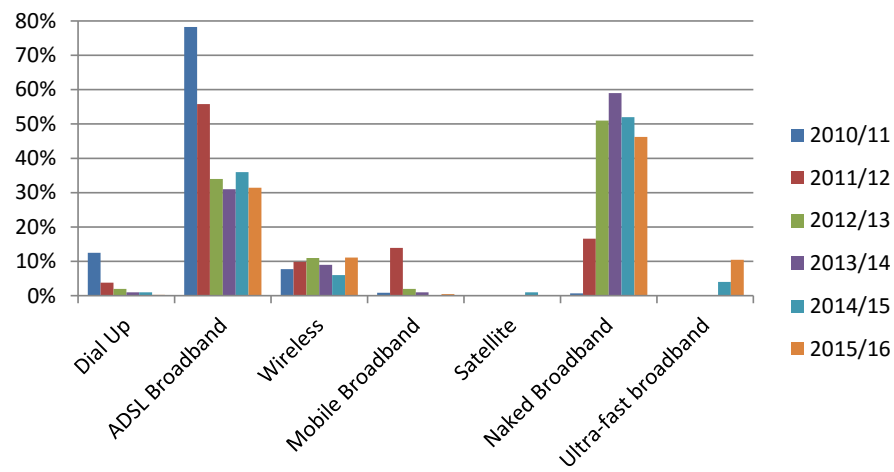
Internet Connection

The introduction of the automatic weekly payment scheme has proved an affordable option for CiH families and in 2015/16, 83 % of families have taken up the offer of a subsidised internet connection in their home at the time of graduation a small increase over the 2014/15 period. In 2015/16 the most popular internet connection (45%) was through Naked DSL a reflection of the number of households who do not have a landline telephone. This year 10% of families had connections through the ultra-fast broadband network.

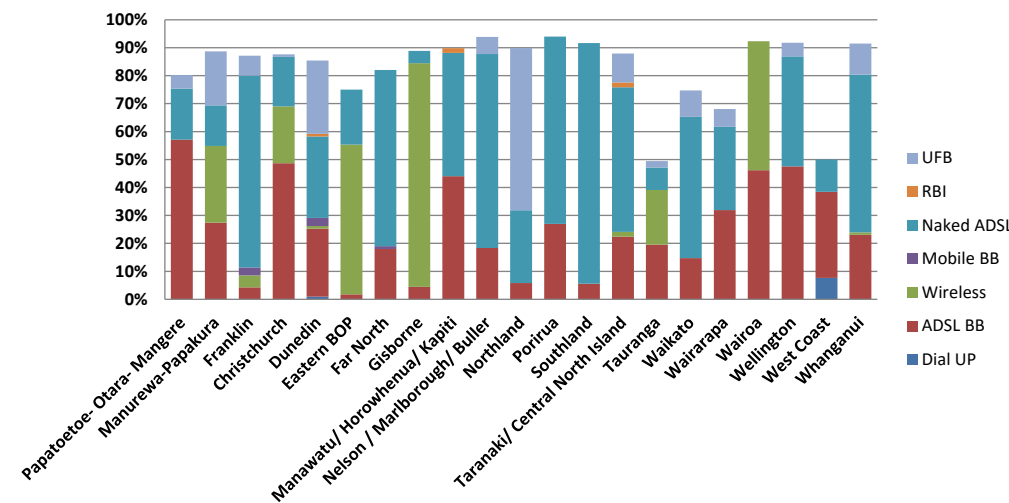
INTERNET CONNECTION AT THE TIME OF GRADUATION:



2010-2016 TRENDS – TYPE OF INTERNET CONNECTION:

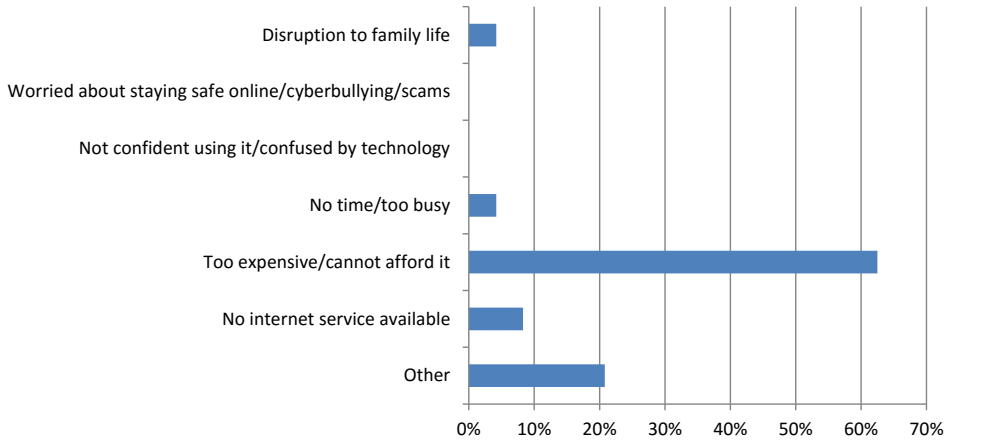


TYPE OF INTERNET CONNECTION BY REGION – 2015:



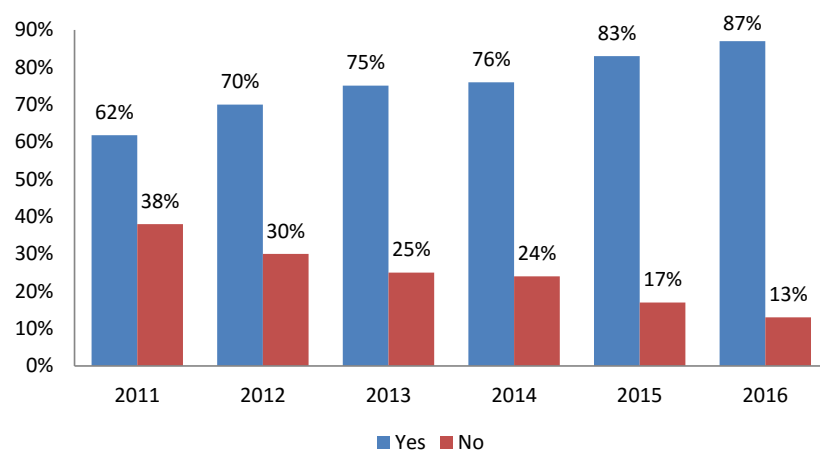
Reasons for not connecting at graduation were: not able to afford it (62.5%), no internet service available to the family home (8%). Just one person said they didn't have time or were too busy, and one person said they thought it would disrupt their family life.

REASONS FOR NOT CONNECTING TO INTERNET AT GRADUATION?

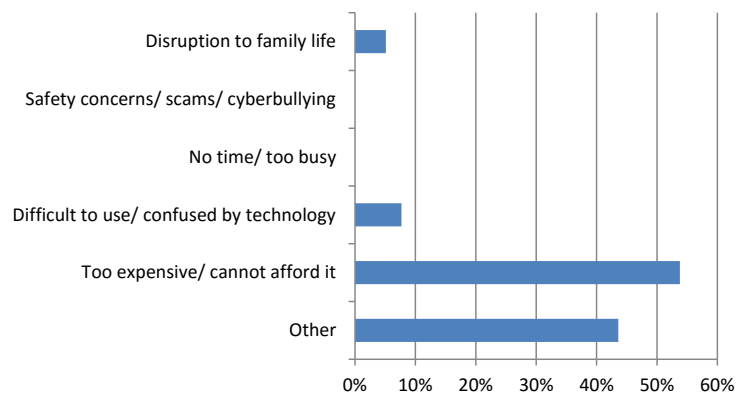


Most (87%) CiH homes were still connected to the Internet at the time of completing the post-survey at 12 to 18 months after taking the computer home (n=481 completions). Of those 13.5% (n=63) households who did not have a current connection at the time of completing the post-survey, 61 % (n=37 families) reported that they did at one time have a subsidised CiH internet service and 39% (n=24 families) had never had a connection. The main reason for disconnecting was the cost (54% or n=21). A further 5% said they found the internet difficult to use or confusing and 5% were concerned about the disruption to family life. No-one had safety or time concerns. A large number ticked 'other' (44% or n=17) with a range of reasons but nearly all financial: cancelled it but now cannot afford it, can no longer afford the internet due to family reasons, cannot afford it at home so use free wifi in public places, no line of sight for a connection to my home, have bad credit, moving house or living with other whānau to save money; and plans to reconnect in the future as they acknowledge a need to have access.

INTERNET CONNECTIONS AT 12-18 MONTHS:



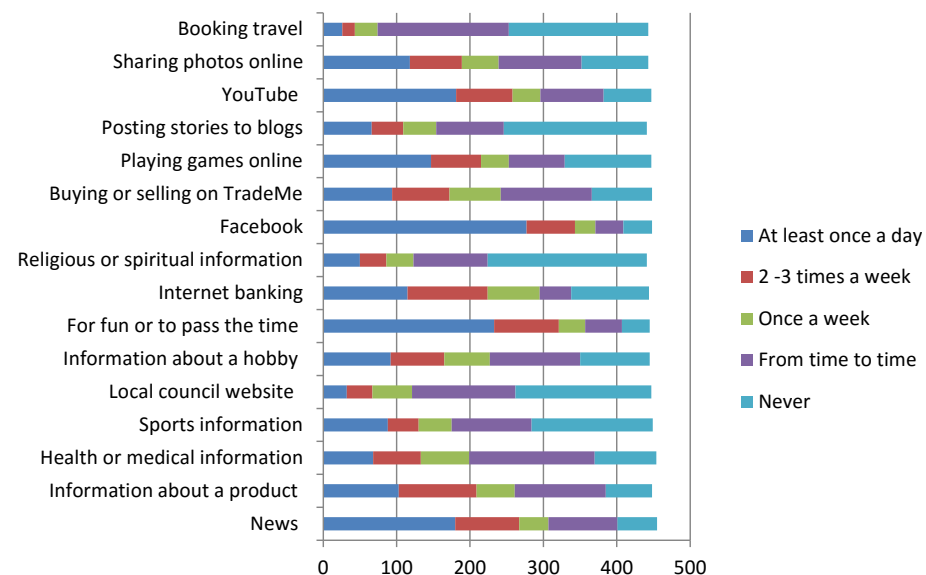
REASONS FOR DISCONNECTING FROM INTERNET AFTER GRADUATION:



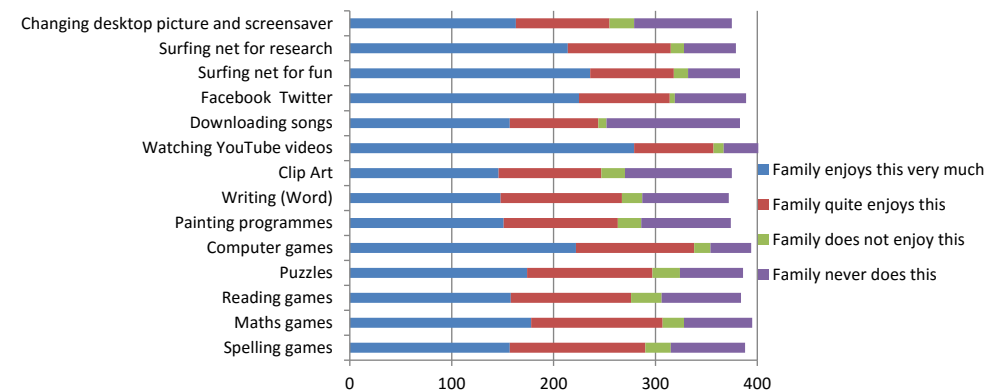
Internet Use

Daily activities that are popular with these CiH families are watching YouTube videos, playing games online, going on Facebook, checking news updates and just going on the net for fun or to pass time. Other activities that the families engage in several times a week are sharing photos online, buying or selling on TradeMe, Internet banking, looking for information about a hobby or information about a product. By far the most popular activity families like to do together with their children on the internet is watching YouTube videos.

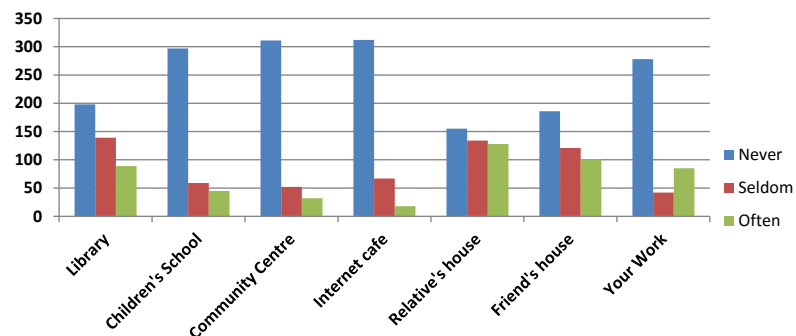
HOW OFTEN HAVE YOU USED THE INTERNET?



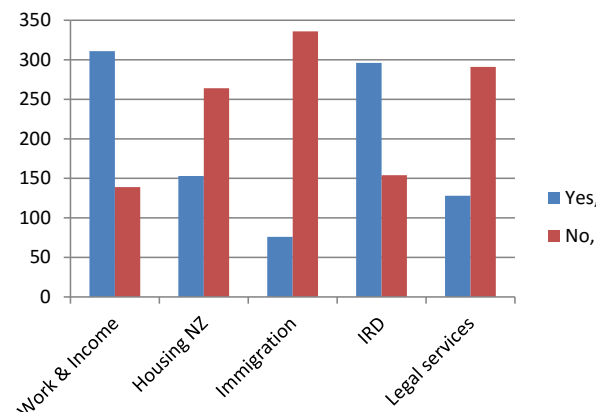
FAMILY ACTIVITIES ON THE COMPUTER:



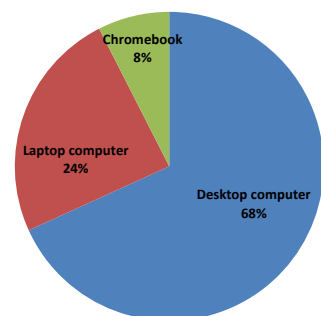
HOW OFTEN DO YOU USE THE INTERNET OUTSIDE YOUR HOME?



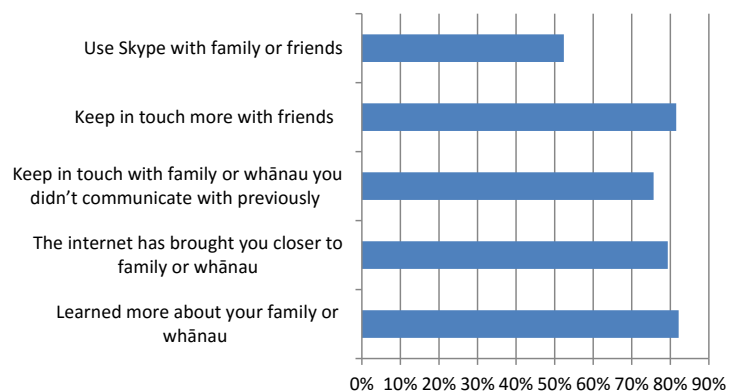
HAVE YOU EVER LOOKED AT ANY OF THESE GOVERNMENT WEBSITES FOR INFORMATION?



TYPE OF COMPUTER/DEVICE USED AT HOME:



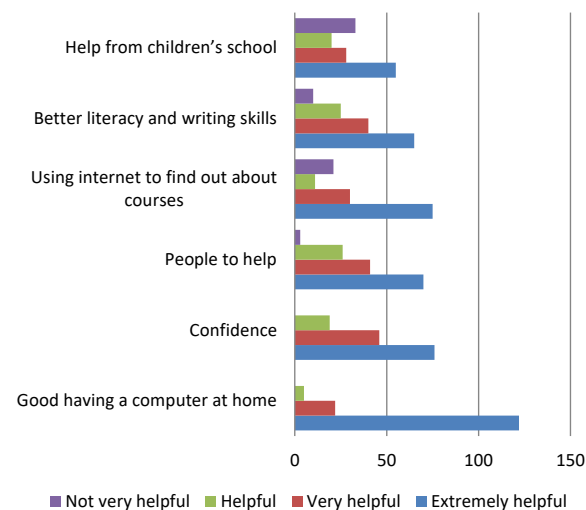
CONNECTING WITH FAMILY, WHĀNAU & FRIENDS:



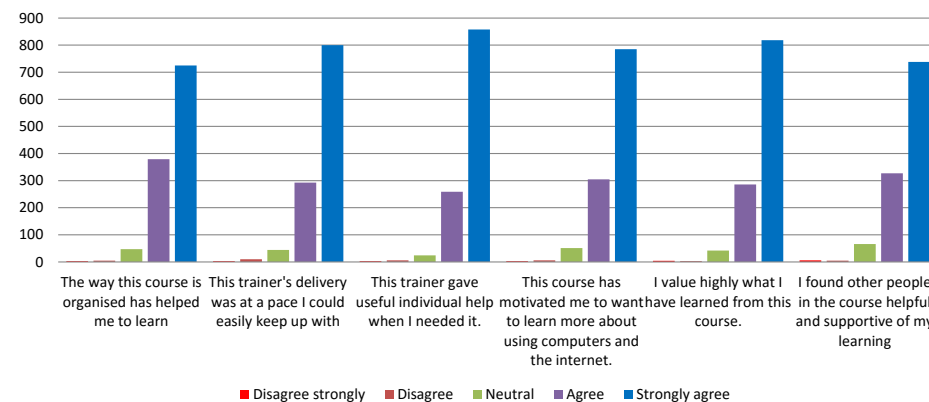
Research Outcomes – Confidence

The CiH training is structured in such a way that all learners complete the course and graduate with a certificate to celebrate their learning. Instruction moves at the pace of the learners and those who already have some digital skills are encouraged to help those who may be struggling in some classes. The structure is designed to build confidence as learners (given most have not completed any education qualification at the time of joining CiH), confidence in engaging with their children's learning and teachers, volunteering with school-based activities and furthering their own education with a view to opening up new employment opportunities.

HOW DID CIH HELP WITH YOUR STUDIES?



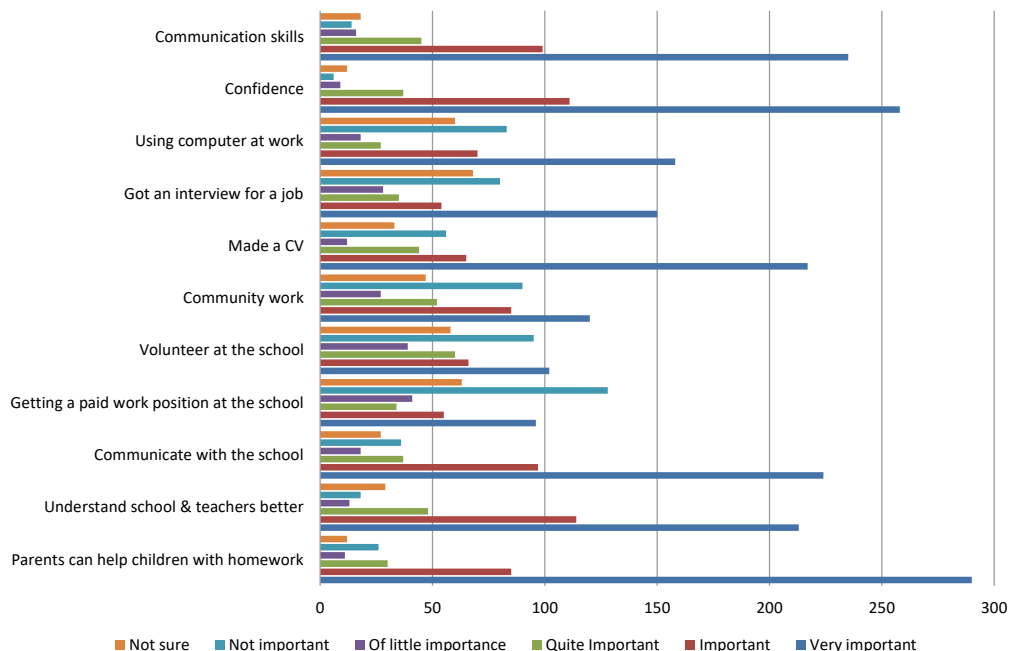
FEEDBACK – FEELINGS ABOUT TRAINING:



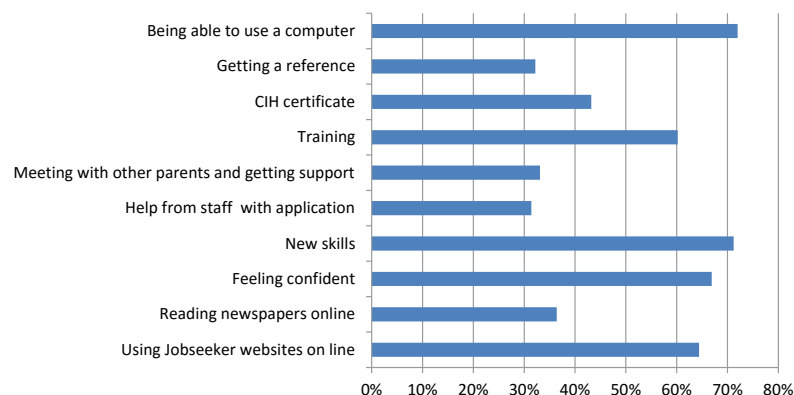
All aspects of the CiH programme helped with their study, specifically the advantage of being able to study at home on their computer. Most report that gaining new confidence in taking on further learning and training through successfully completing the CiH course has been a major benefit for them.

Participants report that three very important benefits of CiH for their family are: parents gaining the skills to help children with homework; confidence to communicate with the school and a better understanding of the teachers and how the school works. Of those participants who have gone on to new employment or education opportunities, 70% report that the CiH programme gave them the confidence to take these steps.

SKILLS & BENEFITS GAINED BY PARTICIPATING:



CONFIDENCE SEEKING EMPLOYMENT:



CASE STUDY

Technology turning challenge into opportunity

Every now and again we hear a story from a whānau that is well worth sharing and this is one of them. Nita graduated from *Computers in Homes* in May 2015. Her family has never had technology in their home, even though she has grown up children as well as Taj who is 8 years old. I remember her talking about Taj – who has ADHD and is interested in insects. She came to *Computers in Homes* in the hope of getting technology at home so he could continue to develop his interest after school.

Taj is really into entomology. As long as it's about insects he can stay interested for hours. During the *Computers in Homes* course parents were shown how to search on topics of interest. Knowing this has really helped Nita encourage Taj to explore and develop his areas of interest when he gets home. He is now hatching praying mantis in his room, having converted the fish tank into an insect house.

At school they use Chromebooks, so a keyboard and a screen were a new thing. "When we first got the computer home my son didn't use the keyboard at all. It took him a couple of months but now he's away. He's more confident generally with it. The school helps with that. He will show us what to do now.

He knows stuff I would never have thought he could know - like how to change the name Google to a praying mantis! The computer has given him more confidence than he had before. It's a tool which totally fits his way of being - it's better than school for him. It's his reward system too. He has learned so much from it.

He loves bugs (hence the praying mantis) and he 'Google' searches everything about it."

The computer has been a lifesaver for Nita. Because of her son's ADHD the medication has generally worn off by the time he gets home. It used to be chaos at home as a result. Now she is able to point him straight to the computer (which he loves) which calms him down.

At school he can't just do what he is interested in as there are other things to concentrate on. Having the computer at home is so good for him because he can learn at his own pace, and he can teach himself what he is interested in. It also gives her space once he is home to cook a meal.

She says she would be lost without the computer. She also improved her computer skills now. Before going to *Computers in Homes* she was basically computer illiterate. Now she can and does use email, Facebook and uses the Ministry of Social Development website using Real Me. She could do none of this before.

Nita is hugely grateful for the opportunities *Computers in Homes* has given her family.



Nita Wright and her son Taj.