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Piata Mai

A Case Study of a Kaupapa Māori Approach to Developing an Electronic System for Ohomairangi Early Intervention Service

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Abstract

This thesis endeavours to explore the possibility of developing a system for a small Māori organisation incorporating their Kaupapa Māori needs. A project was undertaken to develop a system for “Ohomairangi”, an Early Intervention Service to assist with sustainable management of data and the production of reports. For this project, a Kaupapa Māori approach to development was chosen to enhance cultural validity, to acknowledge the tikanaga and kaupapa of Ohomairangi, create a stronger sense of shared understanding and trust, and to enable a more appropriate and user-friendly system to be developed.

This project was commissioned by, financially supported by, and will be utilised within Ohomairangi Trust Early Intervention Service (See Appendix B).
Acknowledgements

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1.1 Statement of Problem

Information Technology offers new development to Māori to generate distinct products and services, and sustain their culture and knowledge. However, developing unique systems for Māori is not commonly recognised, on the shelf software does not meet the needs of Kaupapa Māori based organisations. The thought of initiating the development of a personalised system becomes daunting when the explanation of technology precedes the limitations of the organisation. When systems are developed it is usually the organisation that must adjust to meet the needs of the technology, increasing the potential for an unusable system.

1.2 Motivation

The motivation behind this project was to support the development of a Māori approach to systems development, by utilising Kaupapa Māori research. A Kaupapa Māori approach is taken in order to assist in strengthening the cultural validity of the project and to support the development and acceptance of Kaupapa Māori approaches to systems development.

1.3 Objectives

Piata Mai has been developed for Ohomairangi Trust, Early Intervention Service. Ohomairangi currently have no computerised administration system, all information is recorded using paper-based forms. As their client base grows Ohomairangi would like a system that provides an interactive and user-friendly environment where staff
will be able to access information in a precise and efficient format. The system would be required to:

- maintain data on Kaimahi (Staff), Tamariki (Children/Client base of Ohomairangi), and Ngā whakapa (Address book of Contacts) details of organisations Ohomairangi associate with
- be suitable with the working style of the users, in regards to their processes
- make use of te reo Māori (the Māori language).
- produce reports following a standard format
- allow for key workers to have a child’s information readily available
- reduce the administration work required by early intervention staff
- improve on communication between staff

1.4 Main Problems and their Solutions

The entire project, from designing the databases and finishing with the implementation is original work. The approach and practice of the project was determined by and in collaboration with Ohomairangi. Ohomairangi controlled the framing of the project, the gathering of the knowledge and the negotiating with the sources of knowledge how best it might be utilised and distributed. The developer’s role was to be an active participant in the phases of information systems development and implementation to ensure that the system meets the needs of the organisation [13].

Two of the main problems encountered in the development of the project and their solutions will be presented in what follows:

- The project was to be developed around a Kaupapa Māori framework. Having little knowledge of Kaupapa Māori it was established that Ohomairangi would initiate workshops (see Appendix A) covering the Kaupapa Māori needs of the organisation and to gain a shared understanding of Kaupapa Māori in practice.
The electronic system was to be bilingual that is in both Māori and English. It was decided that the systems first language would be te reo Māori. By incorporating Māori text in the system we were required to include macron fonts, which are not standard system fonts. The decision was made to purchase Te Kete Pūmanawa Rorohiko. Te Kete Pūmanawa Rorohiko enables macrons to be inserted into most text-based applications by clicking on the Ctrl button, releasing, and then selecting the correct vowel. If the software is not installed Piata Mai will present the long vowels with a dieresis (a vowel with a double dot above it, e.g. à).

1.5 Thesis Outline

Chapter 2 describes the background details behind the development of this project, including background information of Ohomairangi and where Māori are with Information Technology. Chapter 3 presents the detailed systems design. Chapter 4 describes the implementation of the system. Chapter 5 presents the testing process of the system. Chapter 6 provides the results of developing the system.
Chapter 2

Background

2.1 Ohomairangi

Ohomairangi is an Early Intervention Service established in February 2001. Ohomairangi was developed because of a need in the community for a service that could focus on developing and providing early intervention in a uniquely Māori way, without the constraints of a crown agency [11]. Ohomairangi consists of a few permanent staff members, contract workers whom provide specialist services and a expanding client-base. Their client-base consists of Māori children with special needs, aged between 0-6 years. This includes children who:

- experience behaviour difficulties
- are developmentally delayed
- have a physical and/or cognitive disability
- experience communication difficulties
- require social and/or emotional support
- or have other developmental needs

The kaimahi are a group of inspiring and talented wahine who specialise in early intervention teaching, speech and language therapy, and educational psychology. Their commitment is to work together with families, and early childhood facilities, to support children to reach their ultimate potential while fully included in their communities [12].

I was first introduced to Ohomairangi in November of 2001. We discussed the possibility of developing an electronic system. I was amazed at the ideas that flowed from each of the participants. Although some of the ideas were somewhat outrageous, we took the approach that everything and anything was achievable. It was great to discover a Māori Organisation that was not only committed to a
sustainable vision, but also one that had already designed and implemented a significant dimension of this vision in all parts of their Organisation.

We knew that there would be a substantial time investment, and we took very seriously the prospect of investing this time into an area of research, in which we were dealing with cultural knowledge and information. We desired to work on a project that we were passionate about, and also to make a contribution to those who were the focus of our research.

2.2 Māori and Information Technology

2.21 Māori and IT in Tertiary Institutions
Māori are advancing in Information Technology at a rapid pace. Māori are using the technology to promote their language, knowledge and their culture. Māori tertiary computing enrolments increased by 420% from 1994 to 2000, from 181 to 941 students. In 2000 Māori students made up just over 12% of all enrolments in tertiary computing courses [18].

2.22 Māori and the Internet
The Internet is a major source of sharing information between whānau, hapū and iwi, and for promoting te reo Māori. An increase of access to Internet technology through home, work, libraries, educational institutions and cyber-cafés is important to the progression of Māori in the Information Technology Age. There are a number of organisations and recent projects devoted to increasing participation by Māori in Information Technology [19].

- **Te Wānanga O Raukawa** requires all students to purchase a computer when enrolling in their tertiary programmes. An Internet connection, training and support is also provided by the wānanga.
- **New Zealand Māori Internet Society** was established in 1998 to promote Māori on the Internet.
• **Te Wairere Wahine** (Society for Professional Māori Women in Information Technology) supports Māori women who work in information technology or who wish to become information technology professionals.

• **Cyberwaka Enterprises** developed by Cisco Systems and Te Rūnanga O Te Whānau Apanui. An interactive web-based curriculum, which allows students to gain industry recognised qualifications for the computer-networking field.

• **Wairoadotcom** a community computer hub, which enables the community of Wairoa access to more than 20 computers, along with Internet connections to learn computer and Internet skills.

• **Cyber Tek** a community computer hub in South Auckland developed by the Manukau Urban Māori Authority (MUMA), provides a base for Māori in South Auckland to gain computer skills, so as to increase their employment options.

• **The Ministry of Education** provided laptops, videoconferencing and technical and professional development support to the Māori Secondary Teachers Association.

• **NAMMSAT (National Māori Mathematicians, Scientists and Technologists)** established to help improve Māori participation and achievement in science, mathematics and technology.

The ACNielsen Netwatch survey reported that there was an increase by twofold of internet access in Māori homes between 2000 and 2001 [18].

Several Māori iwi (tribes) have established an Internet presence, Māori are selling their products and services, there are Māori advocacy sites, news sites, sites providing
information in regards to our histories and personal home pages. This has reflected in
the dramatic increase in the Māori presence on the web. In 2000 Karaitiana Taiuru’s
search of the word ‘maori’, using the Internet search engine www.altivista.com,
revealed 77,880 web pages [15]. Today the same search delivered 547,899 web
pages.

2.23 Māori and Software Development

Software development is slowly progressing within maoridom. There are many
different software products available those that are developed by Māori for use by
Māori, by Māori for non-Māori, or by non-Māori. The majority of software
developed is for use for educational purposes.

- **ReddFish** market Te Kete Pūmanawa Rorohiko, the Māori Language software
  kit (http://www.reddfish.co.nz/). It provides macron fonts to enable Māori
  fonts to be represented in their true form (ā). The long vowel sound, within
  software, has in previous years been represented using a dieresis (a vowel with
  a double dot above it, e.g. ā) or as double letters.

- **VeCommerce** a Sydney based company developed the VeCab system for
  Auckland Co-op Taxis. The system uses speech technology to enable
  passengers to book taxis via the telephone. Because a lot of the place names
  in New Zealand are Māori names and represent different sounds that are not
  found in the English language, the system incorporated the use of the Aculab’s
  LexMan dictionary manager. This dictionary manager enables developers to
  create, update and extend multiple text-to-speech lexica for custom
  pronunciations and provides a phonetic vocabulary for the Māori
  pronunciations and makes them available to the application [9].

- **Carich Productions** developed the Tangata Whenua, an interactive CD-ROM
  of Māori culture and lifestyle in New Zealand [17].

Although Māori are well on their way to conquer Internet technologies, and are
making progress in the development of software, there has not been much progress in
the development of software built for Māori by Māori and specifically to reduce
workloads on Māori organisations or communities.
2.24 Māori and user-defined systems

The cost of developing software is a considerable deterrent to Māori to develop their own user-defined systems. There is a high set up cost to personally develop a system with no guarantee that the end product will meet the needs of the organisation. In order to develop systems to meet the Kaupapa Māori needs of an organisation, the system developers must have considerable knowledge of their culture and the ability to first meet the needs of the organisation with disregard to the potential difficulties of the technology.

2.3 A Kaupapa Māori Approach to Systems Development

At the initiation of this project there was no definitive text setting forth a commonly used and accepted approach on developing Information Systems for Māori. Thus one aim of the project was to investigate Kaupapa Māori and what does it mean to take such an approach. It must also be acknowledged that at the initiation of this project my knowledge on Kaupapa Māori was limited and there is still much for me to learn.

2.31 Kaupapa Māori

In order to discuss the approach taken to develop the system we need to first discuss briefly what is Kaupapa Māori. Kaupapa Māori in general is a Māori way of doing things. Tuakana Nepe [10] states Kaupapa Māori as being a ‘body of knowledge’ accumulated by the experiences through history, of the Māori people. Mereana Taki [16] interprets the word kaupapa using its distinct parts:

Kau is often used to describe the process of ‘coming into view or appearing for the first time, to disclose’. Taken further ka u may be translated as ‘representing an inarticulate sound, breast of a female, bite, gnaw, reach, arrive, reach its limit, be firm, be fixed, strike home, place of arrival’ (H.W. Williams c1844-1985:464). Papa is used to mean ‘ground,
foundation base'. Together kaupapa encapsulates these concepts, and a
basic foundation of its 'ground rules, customs, the right way of doing
things.

Kaupapa Māori can be seen in many different ways, as an outcome from the
Kaupapa Māori workshops conducted between Ohomairangi and the
developers we established different views on what Kaupapa Māori meant to
each of the contributors. For me it is a personal thing that drives me to
accomplish things in everyday life.

### 2.32 Kaupapa Māori Approach

The approach can be separated out in to separate parts as based on the statements set
out by Fiona Cram’s thesis in regard to the process of Kaupapa Māori research [5].
Acknowledging that these concepts were based on the process of research and not that
of developing systems.

**A respect for people**

*About allowing people to define their own space and to meet on their own terms.*

In order for a system to be successful there are a few essential values that should be
adhered to, mutual respect, communication and responsiveness to human needs.

Coming from a western base of knowledge for developing systems it would be
inappropriate to force this conception of development on a Kaupapa Māori based
organisation. The process needs to be empowered by the organisation and based
around the processes they adhere to.

The first thing that must be realised is to establish a relationship between the
developers and the organisation. Not just an understanding of one another but one of
whakawhanaungatanga, an ongoing process of forming and maintaining relationships.
The second thing is that the developers need to become involved physically, ethically, morally and spiritually in the development and not just as a 'developer' concerned with the technology.

In the development of Piata Mai this was partly accomplished through workshops, where both the organisation and the developers provided knowledge to enable the two partners to establish an understanding of concepts of Kaupapa Māori based around the organisation and of Information Systems Development. Also through the use of cultural protocols and methods such as karakia (incantation to initiate a meeting) and mihi (acknowledgement of members).

He Kanohi Kitea

*About the importance of meeting with people, face-to-face.*

The source of this statement is the whakatauki “He reo e rangona, engari, he kanohi kitea”, “A voice may be heard but a face needs to be seen”. It is important in the development of systems to meet face-to-face with the organisation. It is just as important to meet with the organisation in their space and to adhere to their protocols.

Within developing systems for Māori organisations it is also important to spend time prior to the conception of development to allow the developers and the organisation to build trust before the sharing of knowledge can occur.

Titiro, whakarongo... korero

*About the importance of looking and listening so that you develop understandings and find a place from which to speak.*

It is extremely important to ensure that as the systems developer you listen to the needs of the organisation. Being the so called expert can sometimes put you in a predicament where you would like to interrupt to state how things should be, without listening to the reasons behind why it is necessary for this approach. For example, the storing of the Kaimahi and Tamariki in the database, although it would seem more
appropriate to have the records uniquely represented by a number, it was the wish of the organisation for the staff and children to be uniquely identified by their given names.

It is of equal importance to ensure that you observe the processes and protocol of the organisation in order to understand the best way to approach the development of the system.

Manaki ki te Tangata
About a collaborative approach to research, research training, and reciprocity.

It needs to be understood that both the developers and the organisation have something meaningful to contribute to the development process. Without the ongoing information provided by the organisation the success of the system would inevitably be adverse. The control of the development does not lie within the developer’s constituency but within that of the organisation.

The organisation needs to become familiar with the design process as well as the developers becoming familiar with the workings of the organisation. The collaboration between the designer and the organisation (those who will potentially use the system) in the development process would ensure the usability of the system. The un-usability of systems is a tremendous problem all over the world; the usability of the system should be one of the main focuses of development. The developers ideas may be different from that of the users, working in collaboration would ultimately conclude in the development of a system which best meets the needs of the organisation and its participants. It is important to note that the system is ultimately designed for the organisation and should take into account all aspects and concepts in which the organisation realises. It is not up to the developer to decide what is best for the organisation but to assist in decision-making only by way of suggestions.

The organisation should be thought of not only as the client or the users, but also as part of the design team. Not only the designers but also the users-to-be should participate in the whole process of development. In order for this to be successful, as
already acknowledged, a close relationship with the organisation needs to be established. The organisations input should be sought from the beginning, and not after initial concepts, visions and prototypes already exist. This approach would evidently ensure that the system would be developed to respond to the users real needs. Through the involvement of the organisation in the development process it is also important to acknowledge their contribution to the end product.

**Kia tupato**

*About being politically astute, culturally safe and reflexive about our insider/outsider status.*

An aspect that is commonly overlooked in the development of systems is that of cultural safety. The organisation must feel that they’re safe and secure within their culture. That is their needs to be respect shown to Māori values, history and culture, and in everything we say and do.

**Kaua e takahia te mana o te Tangata**

*Don’t trample the mana of the people. About sounding out ideas with people, about community feedback that keeps people informed about the research process and the findings.*

The exchange of knowledge between the developers and the organisation needs to flow in both directions. That is we do not enter an organisation and take information without giving back knowledge gained through our academic reality. It is important to share your learning with the organisation to enable them to better understand the concepts involved. As discussed this can be accomplished through the process of workshops. We need to ascertain the understanding that the development process is a partnership and one cannot be without the other.
Kaua e mahaki

*Don’t flaunt your knowledge. Also about sharing knowledge and using our qualifications to benefit our community.*

Systems developed ‘by Māori for Māori’ will enable the development of technology that incorporates or even enhances our own traditions and culture. It is important for Māori to be able to apply Māori tradition, knowledge and approaches to assist their own organisational development and sustainability. Māori should themselves, set the agenda for development and have considerable control over processes and structures, this will enable the system to be developed in the way in which it was intended, to meet the needs of the organisation.

Evidently the end process would realise certain outcomes for the organisation:

- a knowledge of systems development
- increased technical skills
- a system suitable with the working style of the organisation
Chapter 3

System Requirements, Analysis and Design

The goal of this project is to develop a system to meet the needs of Ohomairangi Trust Early Intervention Service. The system was developed to incorporate the administrative tasks, and reporting requirements of Ohomairangi. It also provides an interactive and user-friendly environment so staff can access information in a precise and efficient format. The interface and database(s) must be stable, and easy to control. The interface must also be suitable with the working style of the users, in regards to their processes and with the use of te reo Māori (the Māori language).

3.1 The System Requirements

3.11 Technical Architecture

Different services make different demands on the networks. These demands have determined which networks are suitable for the organisation, and have led to the network planning and design. Ohomairangi is a relatively small organisation; one of their requirements is to enable staff to work in parallel on the system. The main reason for developing a network environment is to create a computerised collection of interrelated stored data that serves the needs of multiple users within the organisation. Other advantages of using electronic databases over files [6]:

- integration for easy access and update
- control of data redundancy
- improved data accessibility and responsiveness
- increased productivity
- data consistency
- improved data integrity
3.12 Hardware and Software

Originally Ohomairangi Trust had two desktop computers and two printers. Additional computers were purchased in order to ensure accessibility to the system. It was decided to purchase laptops, this would allow the staff to record information immediately on home visits while they are with the children and also to be able to complete associated work activities from home. A goal for the future can be to enable the staff to be connected to the central database from outside the proposed network structure.

The system as implemented in this project requires at least a Pentium II or compatible, 256 Mb RAM, and running on Windows XP Professional.

3.13 Extendability

The system has been designed to enable future developments to be eventually included. The design of the interface and of the database(s) must be considered and allow future extensions to be included. For example:

- additional modules and forms
- modifications to existing forms

3.14 Help System and Manual

A help system/manual has been developed to ensure that existing and future users of the system are able to fully make use of all functions provided by the system. The help system can be accessed directly from the electronic system. The manual is in paper form to ensure that people who are not familiar with the use of computers are able to confidently find out and understand how to use the system under discussion.
3.2 The System Analysis

The system was developed using a Rapid Application Development (RAD) approach. This choice was motivated by the following three reasons:

(1) the time frame – within a nine month period
(2) familiarity of the author with the RAD tool – C++ Builder
(3) RAD combines elements that work together so that the total effect is greater than the sum of individual effects [3].

3.21 Interviews and Meetings

Meeting with staff and prospective users is the ideal way of collecting information to develop a system. As the organisation currently have no computerised system in place, the forms in which the organisation base their structure around were collected and ordered into the various components necessary for the system to envisage. The forms will evidently become the style in which the system will be designed ensuring the easy transition from the paper-based system to the proposed computerised system. There was also an ongoing process in which the developers and the users came together to make decisions based on the outcomes of interviews and meetings.

3.22 Workshops

Workshops (Appendix A) were conducted during the initial stages of the project at the request of the organisation. The workshops enabled the organisation to gain knowledge of the processes involved in developing information systems and for the developers to understand and acknowledge the processes and the key values of the organisation. In order to design a system successfully you need to first understand the foundation on which the organisation stands.
3.23 C++ Builder

There are various visual RAD tools available to develop systems Delphi, Visual Basic etc. My choice was to use C++ Builder for various reasons one being that my knowledge of Builder is superior to that of Visual Basic, and Delphi.

The main qualm I have with using Builder is the use of database access. Database access in Visual Basic is very simple compared with Builder. Just one component is used to open the recordset, offer a navigator visual interface and link to the data controls, while in Builder we have to use three components for the same purpose a dataset, datasource and navigator object. Builder also has its advantages; it enables you to combine different dataset and navigator components and to place the dataset and datasource components in a central data module.

3.24 Macromedia Dreamweaver and Macromedia Fireworks

The help system will be designed using Dreamweaver and Fireworks. Dreamweaver allows you to create, build and manage websites, internet applications and easy creation of web pages while working in a single environment. The main two reasons for choosing them were:

- the ability to manage the system via a site repository, enabling changes to URL addresses within the site to be automatically updated.
- the advantage of creating a standard template design for each of the web pages, any changes to the template will automatically take effect to all web pages created by the template.
3.25 Microsoft Access

Microsoft Access is the desktop database chosen to develop the system. It is not designed to compete with systems such as Oracle or SQL Server whose engines are superior in terms of speed and multi-user capabilities. The advantage of MS Access is that it is affordable and fairly easy to use. It can be used by almost anyone of any level. Beginners can get to grips with it very easily using the wizards and the easy-to-understand interface whilst developers can push it to its limits and do some extraordinary things with it. It is a system for everyone as it was created with a mixed user-level in mind.

3.26 Te Kete Pūmanawa Rorohiko

The Māori alphabet consists of 15 characters:

5 vowels a, e, i, o, u (vowels can have short or long sounds represented by ā, ē, ī, ō, ū)

8 consonants h, k, m, n, p, r, t and w

2 digraphs wh and ng

The long vowel sound, within software, has in previous years been represented using a dieresis (a vowel with a double dot above it, e.g. ā) or as double letters e.g. aa. The reason these forms of long vowels were used was the macron fonts were not commonly available. Macron fonts are not standard fonts and require you to purchase specific software. Te Kete Pūmanawa Rorohiko produced by ReddFish was purchased to enable Piata Mai to incorporate macron fonts. The macrons can be inserted into most text-based applications by clicking on the Ctrl button, releasing, and then selecting the correct vowel.
3.3 The System Design

The information provided from the interviews and meetings established that there would need to be two databases created; one for the staff and clients and another for the contact list of associated organisations and people. There was also additional information or attributes that needed to be included that were not found within the organisations forms.

3.3.1 Database Modelling and Design

During database modelling tables were designed to represent information that would be stored in the database. The tables show the following information:

- **Name of Attributes** – the name of the field in the database table
- **Description** – a description of what the attribute represents
- **Data Type** – the data type of the attribute
- **Data Size** – the size of the data, if required
- **Constraint**
  - **Primary Key**: Uniquely identifies a record in the database table
  - **Alternate Key**: An alternative key which uniquely identifies a record in the database table
  - **Automatically calculated**: The field does not require data to be entered, it is automatically calculated
- **Default Value** – A value that the field is assigned on the creation of a new record
- **Null Value** – Whether the field must or may not contain a value

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
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<td>Size 1</td>
<td>Primary Key</td>
</tr>
<tr>
<td>Name 2</td>
<td>Description2</td>
<td>Type 2</td>
<td>Size 2</td>
<td>Alternate Key</td>
</tr>
<tr>
<td>Name 3</td>
<td>Description3</td>
<td>Type 3</td>
<td>Size 3</td>
<td>Automatically calculated</td>
</tr>
<tr>
<td>Name 4</td>
<td>Description4</td>
<td>Type 4</td>
<td>Size 4</td>
<td>Default Value</td>
</tr>
<tr>
<td>Name 5</td>
<td>Description5</td>
<td>Type 5</td>
<td>Size 5</td>
<td>Null Value</td>
</tr>
</tbody>
</table>
Kaimahi (Staff)
The Kaimahi are the staff members of Ohomairangi Early Intervention Trust. This includes Early Intervention workers, contract workers and general staff. The contract workers are hired on a needs basis, they may be contracted to work with one or more children. This may be for reasons that specialist care is required for individual tamariki.

Kōrero mō ia Kaimahi (Staff personal details)
The system is required to maintain information regarding personal details, Iwi (tribe), hapu (sub-tribe), emergency contact details, medical conditions, doctor contact details and also bank account details of each staff member.

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the staff member. This field and the DOB field uniquely identify a staff member.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Aka</td>
<td>The name the staff member may also be known as.</td>
<td>Text</td>
<td>120</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>DOB</td>
<td>The date of birth of the staff member. This field and the Staff_Name uniquely identify a staff member.</td>
<td>Date</td>
<td></td>
<td>Primary key</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>The address of the staff member.</td>
<td>Text</td>
<td>200</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td>The home phone number of the staff member.</td>
<td>Text</td>
<td>10</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td>The mobile number of the staff member.</td>
<td>Text</td>
<td>12</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>The email address of the staff member.</td>
<td>Text</td>
<td>50</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Emergency_Contact</td>
<td>The name of the staff member next of kin or preferred emergency contact.</td>
<td>Text</td>
<td>120</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Emergency_Phone</td>
<td>The phone number of the emergency contact.</td>
<td>Text</td>
<td>10</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Emergency_Mobile</td>
<td>The mobile phone number of the emergency contact.</td>
<td>Text</td>
<td>12</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>The relationship between the staff member and the emergency contact.</td>
<td>Text</td>
<td>40</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Illness_Allergies</td>
<td>Any illnesses or allergies that the staff member has.</td>
<td>Text</td>
<td>200</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Allergic_Medication</td>
<td>Any medication the staff member is allergic to.</td>
<td>Text</td>
<td>200</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Additional attributes

Aka
Previous generations of Māori under colonisation lost the right to use their Māori name, now Māori are reclaiming this right and hence the reason for the inclusion of this attribute. There is also the reason that a staff member may go by an alternate name for example a nickname they have been brought up with.

Status
This field was included to allow the separation of the permanent staff from the contract workers via way of a query.

Iwi and Hapū (Tribe and Sub-tribe of the Staff)
A separate table needs to be created for Iwi and Hapū as staff members may have more than one Iwi or Hapū.
Rātaka Mahi (Diary Sheet)

Each staff member is required to fill out a diary sheet, this is not meant to keep track of how many hours each staff member is working each week, but to keep track of how many hours are spent on different job contracts. For permanent staff the job contracts consist of Ministry of Education (MOE) Early Intervention, Team, Management, Te Puni Kōkiri (TPK) and Leave. Contract staff members are only required to record time spent with each of the tamariki allocated to them, and any leave that they may incur. There are a set number of hours that temporary staff are required to spend with each tamariki. This is compared with the actual time and allows for further planning. The information stored will later be used to produce detailed reports to assist with decision-making and financial funding, and will be useful for staff planning for the following year.

Table 3: Entity-Hapu (Staff Sub-tribe)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the staff member.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Hapu</td>
<td>The Hapū or sub-tribe of the staff member.</td>
<td>Text</td>
<td>100</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

Table 4: Entity-Rātaka Mahi (Diary Sheet)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the staff member.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Area</td>
<td>The job contract associated with the appointment.</td>
<td>Text</td>
<td>80</td>
<td>Primary key</td>
<td>'Early Intervention'</td>
<td>No</td>
</tr>
<tr>
<td>Description</td>
<td>If the attribute Area is MOE Early Intervention this would be a child’s name, if it is Leave then it would be the type of leave taken etc.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Service</td>
<td>This is the service provided to the child and is only related to Early Intervention Teaching.</td>
<td>Text</td>
<td>100</td>
<td>Primary key</td>
<td>'N/A'</td>
<td>No</td>
</tr>
<tr>
<td>Date</td>
<td>The date of the appointment.</td>
<td>Date</td>
<td></td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Hours</td>
<td>The number hours spent at an appointment.</td>
<td>Number</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td>Any comments related to the diary entry.</td>
<td>Text</td>
<td>100</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Te Whakapakari Tangata (Personal Development)
As part of the working environment permanent staff have the opportunity to set annual goals they would like to accomplish during the period of a year. The goals are separated into sections Wairua, Mouri Ora, Hau Ora, Hau Aio, Hau Whenua, Hau Moana, and Hau Tangata to coincide with the mana kaitiakitanga framework.

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the staff member.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Area</td>
<td>The different sections of goals.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td>'Wairua'</td>
<td>No</td>
</tr>
<tr>
<td>Goal</td>
<td>The goal of the staff member.</td>
<td>Memo</td>
<td></td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Year</td>
<td>The year in which the goals were started.</td>
<td>Number</td>
<td></td>
<td>Primary key</td>
<td>The current year</td>
<td>No</td>
</tr>
<tr>
<td>Start_Date</td>
<td>The start date of the one year period set for the goals.</td>
<td>Date</td>
<td></td>
<td></td>
<td>Today’s date</td>
<td>Yes</td>
</tr>
<tr>
<td>End_Date</td>
<td>The end date of the one year period set for the goals.</td>
<td>Date</td>
<td></td>
<td></td>
<td>One year from today’s date</td>
<td>Yes</td>
</tr>
<tr>
<td>Action_Timeline</td>
<td>The estimated time in which the goal will be completed.</td>
<td>Text</td>
<td>100</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

Additional attributes

**Year**
This attribute was included to clearly define the year in which the goals are set. This is because the start date and end date may be different for goals set within a specific year.

Te Whakatau Mahi (Performance Agreement)
The performance agreement is based partially on the personal development section, which is necessary to be completed before this initiation of the performance agreement. This is an agreement by staff members to fulfil certain goals. A staff member allocated as supervisor monitors the agreement. The agreement is revisited bi-annually.
### Table 6: Entity-Te Whakatau Mahi (Performance Agreement)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the staff member.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Section</td>
<td>The different sections of agreement</td>
<td>Text</td>
<td>200</td>
<td>Primary key</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Expectations</td>
<td>The expected outcome of the goal set.</td>
<td>Memo</td>
<td>Primary key</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Year</td>
<td>The year in which the agreement was established.</td>
<td>Number</td>
<td>Primary key</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Date_from</td>
<td>The start date of the one year period set for the agreement.</td>
<td>Date</td>
<td>Today’s date</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Date_to</td>
<td>The end date of the one year period set for the agreement.</td>
<td>Date</td>
<td>One year from today’s date</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Measures</td>
<td>The measures taken to complete the goal.</td>
<td>Memo</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Comments</td>
<td>General comments in relation to the goal.</td>
<td>Memo</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Final_Review</td>
<td>The final outcome of the goal.</td>
<td>Memo</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Additional attributes**

**Year**

This attribute was included to clearly define the year in which the agreement was prepared. This is for reasons that goals may be altered within the year setting the end date outside of the current year.

**Te Whakapakari Kaimahi (Professional Development)**

The staff are required to record courses attended throughout their employment. A full description of what the course was, where it was held, the duration and the cost need to be stored.
<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the staff member.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Start_Date</td>
<td>The start date of the course.</td>
<td>Date</td>
<td>Primary key</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Course</td>
<td>The name of the course.</td>
<td>Text</td>
<td>100</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Position</td>
<td>The position held by the staff member.</td>
<td>Text</td>
<td>60</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Dates</td>
<td>The dates the staff member will be at the course.</td>
<td>Text</td>
<td>50</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>No_Days</td>
<td>The number of days or duration of the course.</td>
<td>Text</td>
<td>3</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Facilitator</td>
<td>The course controller.</td>
<td>Text</td>
<td>120</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Cost</td>
<td>The complete cost of the course.</td>
<td>Currency</td>
<td></td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Utunga (Claim for Reimbursement of Expenses)**

On a weekly basis staff are required to claim back any expenses accumulated due to work necessities. Things such as petrol (based on the kilometres incurred), travel and accommodation can be reclaimed.

Different information is collected for reclaiming expenses for that of other types of claims, thus it was necessary to separate the storage of the information. The other claims are separated into accommodation, meals, sundry and other.

When a claim has been processed it is then necessary to record the payment date and the amount that is to be reimbursed.
Table 8: Entity-Utunga Kiromita (Claim for reimbursement of kilometres)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the staff member.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Date_of_Claim</td>
<td>The date the claim was made.</td>
<td>Date</td>
<td>Primary key</td>
<td></td>
<td>Today’s date</td>
<td>No</td>
</tr>
<tr>
<td>Detail</td>
<td>The reason for incurring the kilometres e.g. the name of the child visited, the name of the organisation in which supplies were collected etc.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Date</td>
<td>The date in which the travelled occurred</td>
<td>Date</td>
<td>Primary key</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>From</td>
<td>The place in which the kilometres were recorded from.</td>
<td>Text</td>
<td>50</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>To</td>
<td>The place in which the kilometres were recorded to.</td>
<td>Text</td>
<td>50</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Return</td>
<td>Whether the travel was a return trip.</td>
<td>Yes/No</td>
<td></td>
<td>‘No’</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Kilometres</td>
<td>The amount of kilometres incurred for the trip.</td>
<td>Number</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>The rate per kilometre in which the kilometres can be reclaimed.</td>
<td>Number</td>
<td></td>
<td>‘0.62’</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>The total amount of the claim.</td>
<td>Currency</td>
<td></td>
<td>Automaticall y calculated</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Job Cost</td>
<td>The contract under which the claim is made.</td>
<td>Text</td>
<td>40</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Entity-Utunga Other (Claim for reimbursement of other expenses)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the staff member.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Date_of_Claim</td>
<td>The date the claim was made.</td>
<td>Date</td>
<td>Primary key</td>
<td></td>
<td>Today’s date</td>
<td>No</td>
</tr>
<tr>
<td>Section</td>
<td>One of the following accommodation, meals, sundry or other</td>
<td>Text</td>
<td>40</td>
<td>Primary key</td>
<td>‘Accommodation’</td>
<td>No</td>
</tr>
<tr>
<td>Details</td>
<td>The name of the place in which the payment was made.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Date</td>
<td>The date in which the expense occurred</td>
<td>Date</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Extra_Details</td>
<td>Any additional details.</td>
<td>Date</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>The total amount of the claim.</td>
<td>Currency</td>
<td></td>
<td>‘No’</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Job Cost</td>
<td>The contract under which the claim is made.</td>
<td>Text</td>
<td>40</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Table 10: Entity-Utunga Paid (Payment of claims)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the staff member.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Date_of_Claim</td>
<td>The date the claim was made.</td>
<td>Date</td>
<td></td>
<td>Primary key</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Date_Paid</td>
<td>The date the reimbursement was paid.</td>
<td>Text</td>
<td>40</td>
<td>Today’s date</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Paid</td>
<td>If the payment has been made or not.</td>
<td>Text</td>
<td>120</td>
<td>‘No’</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>The amount reimbursed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ngā Tamariki o te Kaimahi (Children of the Contract Workers)
The contract workers are allocated to children who require special needs. They are allocated a set number of hours to work with a child. The days in which they intend to work with the child need to be retained. The visits with the child recorded via the diary sheets will be compared to the number of hours allocated for the contract worker to spend with a child. This will enable staff to determine whether a child requires more or less time with specialist care.

Table 11: Entity-Ngā tamariki o te kaimahi (Children of the contract workers)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff_Name</td>
<td>The name of the contract worker.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Tamariki</td>
<td>The name of the child allocated to the contract worker.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Hours_perWeek</td>
<td>The number of hours allocated to work with a child.</td>
<td>Number</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Days</td>
<td>The days of the week the contract worker intends to work with the child.</td>
<td>Text</td>
<td>100</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Tamariki (Children)
The tamariki are the client-base of Ohomairangi. The tamariki consist of young children between the ages of 0-6 years requiring early intervention care.
Kōrero mō ia Tamariki (Children’s personal details)

The system is required to maintain up-to-date details of each child. Information regarding the child’s date of birth, family contact details, early childhood facility, Iwi, Hapū and details of whom the child was referred by are important and must be retained within the system.

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child_Name</td>
<td>The name of the child.</td>
<td>Text</td>
<td>120</td>
<td>Primary key</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Aka</td>
<td>The name the child is known by.</td>
<td>Text</td>
<td>120</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>DOB</td>
<td></td>
<td>Date</td>
<td></td>
<td>Primary key</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>All ethnicity’s of the child</td>
<td>Text</td>
<td>30</td>
<td></td>
<td>Māori</td>
<td>No</td>
</tr>
<tr>
<td>ECFacility</td>
<td>The Early child facility the child attends.</td>
<td>Text</td>
<td>120</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Centre</td>
<td>The type of early child facility the child attends. E.g. Te Kohanga Reo, Play centre</td>
<td>Text</td>
<td>50</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>GSEArea</td>
<td>The GSE Area in which the child lives.</td>
<td>Text</td>
<td>100</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Parents</td>
<td>The caregivers of the child.</td>
<td>Text</td>
<td>200</td>
<td></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Address</td>
<td>The home address of the child.</td>
<td>Text</td>
<td>255</td>
<td></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Phone_home</td>
<td>The home phone number of the child.</td>
<td>Text</td>
<td>12</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Phone_work</td>
<td>The work phone number of the parent.</td>
<td>Text</td>
<td>12</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Referrer</td>
<td>The name of the person who referred the child.</td>
<td>Text</td>
<td>120</td>
<td></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Section</td>
<td>Whether the referrer was from an Educational Institution, a Health Service, Social Services or other organisation.</td>
<td>Text</td>
<td>150</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Date_referred</td>
<td>The date the child was referred.</td>
<td>Date</td>
<td></td>
<td></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Relationship</td>
<td>The relationship between the referrer and the child.</td>
<td>Text</td>
<td>120</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Reasons</td>
<td>The reasons the child was referred.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Moderated</td>
<td>Whether the child is moderated.</td>
<td>Yes/No</td>
<td></td>
<td></td>
<td>‘No’</td>
<td>Yes</td>
</tr>
<tr>
<td>Notes</td>
<td>Any additional notes the staff member is required to know on visiting the child.</td>
<td>Text</td>
<td>120</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Kaimahi</td>
<td>The current keyworker allocated to the child.</td>
<td>Text</td>
<td>120</td>
<td></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Date_Allocated</td>
<td>The date the keyworker was allocated to the child.</td>
<td>Date</td>
<td></td>
<td></td>
<td>Automatic Entry based on field Kaimahi</td>
<td>Yes</td>
</tr>
<tr>
<td>Closed</td>
<td>Whether the child's record has been closed.</td>
<td>Yes/No</td>
<td>'No'</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------</td>
<td>--------</td>
<td>------</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date_Closed</td>
<td>The date the child is no longer monitored.</td>
<td>Date</td>
<td>Automatic entry based on field Closed</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional attributes**

**Aka**
The reason for this attribute can be associated with that of the Kaimahi attribute *Aka*, but mainly for the reason that a lot of Māori children are called by a name other than the name that is recorded on their birth certificates.

**Notes**
Additional notes may be required for staff in relation to a child, this may be for the simple reason that a dog runs freely on the property of the child’s home and this note will serve as a warning to the staff member.

**Kaimahi**
A child is allocated to a key worker, a staff member who is primarily responsible for the child. This attribute enables specific children allocated to a staff member to be grouped via queries.

**Date_Allocated**
This attribute is necessary to ensure that a child has been allocated to a staff member. This date will be associated with a checklist of activities that need to be completed for a specific child.

**Closed**
When a child no longer needs assistance from the organisation their record is closed. This attribute will enable the choice of view of users, whether they would like to view all children recorded by the system or only the open records.
**Date_Closed**

The date the child is no longer in need of assistance is automatically determined by the date in which the attribute *Closed* is completed. The date recorded will be later used within the checklist of the child.

**Iwi and Hapū (Tribe and Sub-tribe of the Children)**

A separate table needs to be created for Iwi and Hapū as children may have more than one Iwi or Hapū.

<table>
<thead>
<tr>
<th>Table 13: Entity-Iwi (Child Tribe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Attributes</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Child_Name</td>
</tr>
<tr>
<td>Iwi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 14: Entity-Hapu (Child Sub-tribe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Attributes</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Child_Name</td>
</tr>
<tr>
<td>Hapu</td>
</tr>
</tbody>
</table>

**Tirohanga Tuatahi (Initial Evaluation)**

Children accepted by Ohomairangi undertake an initial evaluation to find out his/her strengths and weaknesses. The evaluation enables Ohomairangi to develop a plan and allocate the appropriate resources to the child.
### Table 15: Entity-Tirohanga Tuatahi (Initial Evaluation)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child_Name</td>
<td>The name of the child.</td>
<td>Text</td>
<td>120</td>
<td>Primary Key</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Family</td>
<td>The names of the parents, brothers/sisters, and significant others who share a close relationship with the child and family.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Key_Issues</td>
<td>The key referral issues.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Likes</td>
<td>The things the child likes or is good at.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Difficulty</td>
<td>The things the child finds difficult.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Wairua</td>
<td>How the child settles within the environment and his/her emotional wellbeing.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Mouriora</td>
<td>How the child attends to activities and his/her motivational factors.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>HauOra</td>
<td>The child’s self help and self concept skills and awareness.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>HauWhenua</td>
<td>How the child relates to and interacts with family and peers and whether specific needs or difficulties impact on this and/or other areas of development.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>HauMoana</td>
<td>How the child responds to routines and directions and how the child communicates and shows understanding of communication.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>HauTangata</td>
<td>The fine and gross motor skills, and cognitive development of the child.</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

**Whakarapopoto Mahi (Home Visits)**

Each time a staff member visits a child they record the learning activities, any observational notes, suggestions, comments and the date of the next appointment.
Table 16: Entity-Whakarapopo Māhi (Home visits with Children)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child_Name</td>
<td>The name of the child.</td>
<td>Text</td>
<td>120</td>
<td>Primary Key</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>The time of the visit.</td>
<td>Time</td>
<td></td>
<td>Primary Key</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>The date of the visit.</td>
<td>Date</td>
<td></td>
<td>Primary Key</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td>The place of the visit.</td>
<td>Text</td>
<td>100</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Present</td>
<td>All those present during the visit.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Activities</td>
<td>The learning activities of the visit.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>The observational notes of the visit.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Suggestions</td>
<td>The suggestions given for the visit.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Whānau</td>
<td>The links to the whānau (family)</td>
<td>Memo</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td>The comments taken from the visit.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Date_Next</td>
<td>The next appointment date.</td>
<td>Date</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Time_Next</td>
<td>The next appointment time.</td>
<td>Time</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

He Ahutanga (The Early Intervention Plan)

The early intervention plan contains teaching goals and strategies to support the child’s development. The plan is based on assessment as well as parent and family priorities and routines. The meeting to evaluate the child’s needs can be attended by whānau (family), hapu (sub-tribal relations) and iwi (tribal relations). During the meeting all outcomes are recorded as these outcomes will eventually be the basis for Te Whāriki.
Table 17: Entity-He Ahutanga (The Early Intervention Plan: meeting)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child_Name</td>
<td>The name of the child.</td>
<td>Text</td>
<td>120</td>
<td>Primary Key</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Staff_Member</td>
<td>The staff member who wrote</td>
<td>Text</td>
<td>120</td>
<td>Primary Key</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>the plan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>The date of the meeting to</td>
<td>Date</td>
<td></td>
<td>Primary Key</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>establish or to evaluate the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>plan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Next_Appointment</td>
<td>The next meeting date to</td>
<td>Date</td>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>evaluate the plan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Next_Time</td>
<td>The next meeting time to</td>
<td>Time</td>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>evaluate the plan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td>Any additional comments.</td>
<td>Memo</td>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A separate table needs to be created for the attendees of the Early Intervention Plan meeting, as there will be a number of people present.

Table 18: Entity-He Ahutanga attendees (The Early Intervention Plan attendees)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child_Name (PK)</td>
<td>The name of the child.</td>
<td>Text</td>
<td>120</td>
<td>Primary Key</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Date (PK)</td>
<td>The date of the meeting to</td>
<td>Date</td>
<td></td>
<td>Primary Key</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Attendee (PK)</td>
<td>The name of the attendee.</td>
<td>Text</td>
<td>120</td>
<td>Primary Key</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Relationship</td>
<td>The relationship between the</td>
<td>Text</td>
<td>50</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>child and the attendee.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Te Whāriki (Individual Education Plan)

Te Whāriki is an Early Childhood Curriculum formulated by the Ministry of Education. It provides a basis for childhood education services to set out the principles and goals that are appropriate for their service. Te Whāriki gives directions for developing an education plan for a child.
Table 19: Entity-Te Whāriki (Individual Education Plan)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child_Name (PK)</td>
<td>The name of the child.</td>
<td>Text</td>
<td>120</td>
<td>Primary Key</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>The date of the planning meeting</td>
<td>Date</td>
<td></td>
<td>Primary Key</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Attendees</td>
<td>The names of those who attended the meeting</td>
<td>Memo</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Child_known</td>
<td>What the child knows and what they’re doing that’s good</td>
<td>Memo</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Goals</td>
<td>The goals that are being worked towards.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Worker</td>
<td>Who will be working towards these goals.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Resources</td>
<td>The required resources.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>The evaluation of the meeting.</td>
<td>Memo</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Ngā Whakapa (Contacts)

The contact list contains information on organisation that Ohomairangi associate with. These may be specific people or organisation that referred the child/ren, Early Childhood Centres, General Practitioners etc.

The system is required to maintain information regarding the organisation, the contact person and additional contact details.
<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Description</th>
<th>Data Type</th>
<th>Data Size</th>
<th>Constraint</th>
<th>Default Value</th>
<th>Null Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The contact person of the organisation</td>
<td>Text</td>
<td>120</td>
<td>Primary Key</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Organisation</td>
<td>The name of the organisation</td>
<td>Text</td>
<td>50</td>
<td>Primary Key</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Postal_Address</td>
<td>The postal address of the organisation</td>
<td>Text</td>
<td>50</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Suburb</td>
<td>The suburb location of the organisation</td>
<td>Text</td>
<td>30</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>City</td>
<td>The city location of the organisation</td>
<td>Text</td>
<td>30</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Phone</td>
<td>The contact phone number for the organisation</td>
<td>Text</td>
<td>13</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fax</td>
<td>The fax number for the organisation</td>
<td>Text</td>
<td>13</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Email</td>
<td>The email address of the organisation</td>
<td>Text</td>
<td>60</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Comments</td>
<td>Any comments in regard to the organisation</td>
<td>Memo</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Section</td>
<td>The area in which the organisation is organised, e.g Matauranga, Hauora, Toko I te Ora, ano/etai atu</td>
<td>Text</td>
<td>30</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Print</td>
<td>Yes/No</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Physical Address</td>
<td>Text</td>
<td>100</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
3.32 Entity Relationship Diagrams

The Entity Relationship Diagram (ERD) is a conceptual modelling technique defining the association between the different entities in a Information System. In the ER model the 'real world' is represented in terms of entities, the relationship between entities and the attributes associated with the entities [2]. For example we can show that the Kaimahi (Staff) have connections to Rātaka Mahi (the diary sheet), as a staff member must make several entries in a diary.

![Diagram of Staff and Diary relationship]

<table>
<thead>
<tr>
<th>Concept</th>
<th>Representation &amp; Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entity</td>
<td>Staff</td>
</tr>
<tr>
<td>Relationships</td>
<td>One-to-One relationship</td>
</tr>
<tr>
<td></td>
<td>One-to-Many relationship</td>
</tr>
<tr>
<td></td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>Optional</td>
</tr>
</tbody>
</table>
The staff entity is central to the above model; all the above entities require a relationship with the staff entity.
The child entity is central to the above model; all the above entities require a relationship with the child entity.
The model above shows the connection between the staff entity and the child entity.
3.33 Screen Design

The screen is a key component of the interface between an operator and the system, Piata Mai. It is important to design the interface correctly, to provide ease of navigation, as well as to ensure the security, and correct entry of data. The screen designs have been provided in the manual (Appendix B) to inform of the layout of the visual interface.

There were four main goals to achieve when designing the screens:

- **Ease of understanding**
  This is achieved through the use of default values in input fields, lists of values most appropriate for a field, automatic calculations of fields, context-specific message boxes and online help, guiding the users through the data entry and manipulation steps. Users are also provided with tool tips, small message windows containing translations of all text, which appear when the user hovers the cursor over the text in question.

- **Ease of navigation**
  This is provided by a main menu, which directs the user to different areas of the system, colour coding to indicated which area of the system you are in, toolbar menus to provide additional information and help, tabbed pages to group areas of information. The tabbed pages were designed to provide easy access between sets of data for a particular staff member or child.

- **Data Security**
  This has not been implemented as yet, but will be when the system has been tested thoroughly and accepted by the users. A logon screen will be created; this will enable different data access privileges to be assigned to certain Kaimahi members. This is not to restrict staff from accessing particular records, but to restrict Kaimahi from modifying certain records, e.g. children are assigned to a Kaimahi and only that person should modify that child’s record. On occasions it may be necessary for another Kaimahi member to view a child’s record, as they may have to take over the duties for a child due
to the absence of the child’s primary Kaimahi. The administrator will be able to access and modify all records and will provide the privileges associated with each Kaimahi.

- **Correct Entry of data**

This is enforced through the use of input masks, default values, and drop down lists, ensuring that invalid characters cannot be entered, as well as pop-up error boxes providing help on whatever error has been committed. Also provided is the ever-useful undo function.

The following shows the components used to reduce the occurrence of incorrect entry of data. All attributes not shown use a standard text box.

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible component</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOB</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td>MaskedEdit</td>
<td>(99) 999-9999</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td>MaskedEdit</td>
<td>(999) 999-9999</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Emergency_Phone</td>
<td>MaskedEdit</td>
<td>(99) 999-9999</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Emergency_Mobile</td>
<td>MaskedEdit</td>
<td>(999) 999-9999</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Phone_GP</td>
<td>MaskedEdit</td>
<td>(99) 999-9999</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>IRD</td>
<td>MaskedEdit</td>
<td>99.999-999</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Bank_number</td>
<td>MaskedEdit</td>
<td>99-9999-999999-99</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>TextBox</td>
<td>'Permanent' or 'Temporary' (Used to enable the filtering of Permanent and Temporary staff)</td>
<td>No</td>
<td>'Permanent'</td>
</tr>
</tbody>
</table>
### Table 22: Data Entry-Rātaka Mahi (Diary Sheet)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
</table>
| Area               | TabControl| 'MOE EI'
                              'Rōpu'
                              'Te whakahaeretanga o
                              Ohomairangi'
                              'TPK'
                              'Whakaaetanga' | Yes | 'Early Intervention' |
| Service            | ComboBox  | Early Intervention Teaching'
                              Paraprofessional Support'
                              'Service Co-ordination'
                              'Specialist Services AODC'
                              'Specialist Services Education
                              Psych'
                              'Specialist Services Speech
                              Language'
                              'N/A' | Yes | 'N/A' |
| Date               | ComboBox  | DD/MM/YYYY (A list of dates
                              for a week period Monday-
                              Sunday) | Yes | |

### Table 23: Data Entry-Te Whakapakari Tangata (Personal Development)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
</table>
| Area               | TabControl| 'Wairua'
                              'Mouri Ora'
                              'Hau Ora'
                              'Hau Alo'
                              'Hau Whenua'
                              'Hau Moana'
                              'Hau Tangata' | Yes | 'Wairua' |
| Year               | ComboBox  | YYYY        | Yes               | The current
                              year |
| Start_Date         | DateTimePicker | DD/MM/YYYY | Yes | Today’s date |
| End_Date           | DateTimePicker | DD/MM/YYYY | Yes | One year from
                              today’s date |
### Table 24: Data Entry - Te Whakatau Mahi (Performance Agreement)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
<td>TabControl</td>
<td>Te mahitahi ki nga tamariki, whanau me nga where kohunghunga' 'Mahi / Kirimana ano' 'Mahi a ropumahi, ropu whakahae re ranei' 'Mana whakahaeere' 'Supervision and Feedback'</td>
<td>Yes</td>
<td>'Te mahitahi ki nga tamariki, whanau me ga where kohunghunga'</td>
</tr>
<tr>
<td>Year</td>
<td>ComboBox</td>
<td>YYYY</td>
<td>Yes</td>
<td>The current year</td>
</tr>
<tr>
<td>Date_from</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td>Today’s date</td>
</tr>
<tr>
<td>Date_to</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td>One year from today’s date</td>
</tr>
</tbody>
</table>

### Table 25: Data Entry - Te Whakapakari Kaimai (Professional Development)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start_Date</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

### Table 26: Data Entry - Utunga Kiromita (Claim for reimbursement of kilometres)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date_of_Claim</td>
<td>DateTimePicker</td>
<td>DD/MM/YY</td>
<td>Yes</td>
<td>Today’s date</td>
</tr>
<tr>
<td>Date</td>
<td>ComboBox</td>
<td>DD/MM/YY (A list of ten dates prior to today’s date)</td>
<td>Yes</td>
<td>Today’s date</td>
</tr>
<tr>
<td>Return</td>
<td>CheckBox</td>
<td>Yes/No</td>
<td>Yes</td>
<td>'No'</td>
</tr>
<tr>
<td>Amount</td>
<td>TextBox</td>
<td>Kilometers * Rate</td>
<td>Yes</td>
<td>Automatically calculated</td>
</tr>
</tbody>
</table>
### Table 27: Data Entry-Utunga Other (Claim for reimbursement of other expenses)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date_of_Claim</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td>Today’s date</td>
</tr>
<tr>
<td>Section</td>
<td>TabControl</td>
<td>‘Where noho’; ‘Kai’; ‘Etahi atu’; ‘ano/etahi atu’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>ComboBox</td>
<td>DD/MM/YYYY (A list of ten dates prior to today’s date)</td>
<td>Yes</td>
<td>Today’s date</td>
</tr>
</tbody>
</table>

### Table 28: Data Entry-Utunga Paid (Payment of claims)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date_of_Claim</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td>Today’s date</td>
</tr>
<tr>
<td>Date_Paid</td>
<td>DateTimePicker</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Paid</td>
<td>CheckBox</td>
<td>Yes/No</td>
<td>Yes</td>
<td>‘No’</td>
</tr>
</tbody>
</table>
### Table 29: Data Entry-Kōrero mō ia Tamariki (Child’s personal details)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOB</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Phone_home</td>
<td>MaskedEdit</td>
<td>(99) 999-9999</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Phone_work</td>
<td>MaskedEdit</td>
<td>(99) 999-9999</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Date_referred</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Moderated</td>
<td>CheckBox</td>
<td>Yes/No</td>
<td>Yes</td>
<td>‘No’</td>
</tr>
<tr>
<td>Kaimahi</td>
<td>ComboBox</td>
<td>A list of names from the Kaimahi Entity</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Date_Allocated</td>
<td>TextBox</td>
<td>DD/MM/YYYY</td>
<td>No</td>
<td>The date the Kaimahi attribute is entered</td>
</tr>
<tr>
<td>Closed</td>
<td>CheckBox</td>
<td>Yes/No</td>
<td>Yes</td>
<td>‘No’</td>
</tr>
<tr>
<td>Date_Closed</td>
<td>TextBox</td>
<td>DD/MM/YYYY</td>
<td>No</td>
<td>The date the Closed Check box is checked</td>
</tr>
</tbody>
</table>

### Table 30: Data Entry-He Ahutanga (The Early Intervention Plan: meeting)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Next_Appointment</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Next_Time</td>
<td>DateTimePicker</td>
<td>HH:MM am/pm</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

### Table 31: Data Entry-He Ahutanga attendees (The Early Intervention Plan attendees)

<table>
<thead>
<tr>
<th>Name of Attributes</th>
<th>Component</th>
<th>Format/List</th>
<th>Visible Component</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>DateTimePicker</td>
<td>DD/MM/YYYY</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
3.34 Output Design

There are various outputs for the system provided as reports. The reports have been designed to be clear and easy to interpret, as well as to be aesthetically pleasing for the Kaimahi, and iwi, hapu and whanau they work with. The majority of the reports were designed by Ohomairangi and were adapted to work within the system. The visual representations of the reports reflect on Ohomairangi’s commitment to providing a professional and caring relationship with the Kaimahi, iwi, whanau and hapu.

There are two sets of reports:

- **Standard reports:** for each of the different sections of the system.
  - Kōrero mō ia Kaimahi
  - Rātaka Mahi
  - Te Whakapakari Tangata
  - Te Whakatau Mahi
  - Te Whakapakari Kaimahi
  - Utunga
  - Kōrero mō ia Tamariki
  - He Aromatawai
  - Whakararapopoto Mai
  - He Ahutanga Whakamua
  - Te Whaariki

- **Derived Reports:** those that represent multiple aspects of the system for special reporting requirements.
  - He Aromatawai
  - Ngā Ripota Matua
  - Ngā Huritu a Nga Tamariki
  - Taipakeke
  - Rārangi Arowhai

Copies of the reports designed are included in the system manual in Appendix C.
He Aromatawai (Assessment Report)
He Aromatawai is an assessment report showing the progress of a specific child. The child’s key worker completes the report. The information in the report is not stored in the database. It is a standard report that represents the level a child is at in regards to certain activities, behaviours etc. The report can be saved, and later retrieved to compare the progress the child has made.

Ngā Ripota Matua (Milestones Report)
The Milestones Report displays the distribution of hours for Early Intervention Services provided for children during a set period, usually bi-annually. The report is used to plan for funding. The milestones report derives information from the tables representing the child’s personal details and the kaimahi diary sheets.

Ngā Huritau a Nga Tamariki (Children’s Birthdays)
Ngā Huritau a Ngā Tamariki displays a list of the children’s birthdays separated into the month in which they were born. The report enables staff to present the child with a small gift on their birthday.

Taipakeke (Report on the Children’s Age)
A report showing how many children of different age groups are currently in the client-base. The report also allows staff to determine which of the children are older than six years.

Rārangī Arowhai (Checklist)
Rārangī Arowhai relates to the checklist found in the form tamariki. The report informs staff of what actions have taken place and what actions require urgent attention in regards to the child’s educational needs.
3.35 Network Design

There are a number of different options available for the design of a network. The decision made was predominantly determined by the cost of the required hardware. The organisation's current hardware consists of two desktop computers, two laptops, and two printers. In order for the network to be established, it was necessary to purchase the following software and hardware:

- Upgrade to Microsoft XP Professional for all the computers
- Norton anti-virus software
- Network cards for all computers
- Cabling
- A hub

Figure 2: Proposed Network Architecture
Chapter 4

Implementation

4.1 C++ Builder Components

The following contains the set of C++ Builder components [4], which were used in the development of Piata Mai.

4.11 Standard Page Components

**TMainMenu**
The menu component was utilised in all the main forms; Kaimahi, Tamariki, Ngā Whakapa and Ripota. The menu component creates menu bar menus for your form. The use of the Menu Designer makes it simple to add menu items directly into forms.

**TLabel**
The label component was used to display static text throughout Piata Mai, enabling other components to be easily identified. For example, to identify what information is required to be entered into a TEdit control.

**TEdit**
The edit component was used to display an editing area where the user can enter or modify a single line of text. It was not utilised extensively within Piata Mai as most areas requiring text to be entered were linked to the database, requiring the use of the TDBEdit component. However, the edit component was used within the form to locate a specific staff member, child or contact person.
**TRadioButton**
The radio buttons were used to display a group of choices allowing the user to select only one radio button in a group. For example within the Tamarki form, He Aromatawai contained radio buttons to determine the level a child was at in respect to some activity or behaviour. The user was given the choice of three different levels.

**TComboBox**
The combined list box allows the user to select from a list of items. The component was utilised within Whakapakari in selecting the year in which goals were set. The combined list box contains a list of *years*, the current year, the previous two years and the next two years combined in a list box and edit box. The Style property specifies whether the user can type values into the edit region as well as select values from the list. In this case the drop-down list has been chosen, disallowing the user to edit the value in the edit region.

**TGroupBox**
The group box component was used to group the radio button components within He Aromatawai. The group box component enables a group of radio buttons to work together.

**TPanel**
The panel component was used for the coloured section at the top of each form containing the name of the kaimahi, child or contact person, to group data within the forms, and to separate sections within a module. The Panel component can contain other components; with its ability to contain a raised outer bevel it easily enables the separation of different sections.
4.12 Additional Page Components

**TBitBtn**

Bitmap buttons were utilised within Piata Mai instead of the standard button components. The bit button has the ability to display a bitmap image as well as text. The BitBtn component also has the additional *Kind* property allowing commonly used buttons to be predefined e.g. OK, Cancel, Help. The predefined buttons contain default images, text and default behaviours, enabling little or no code to be written. The bitmap button is a push button on a form, which triggers some event to occur.

**TImage**

The image component was used to display the background image of the main form and the step images for the report He Aromatawai. The Image component supports bitmaps, icons and metafile graphics.

**TScrollBox**

Scroll boxes were used within the pages of the tabbed notebook component. The scroll boxes contain numerous components. The scroll boxes were utilised to enable the user to scroll down through the contents of a module.

4.13 Win32 Page Components

**TTabControl**

The tab control component enables multiple options for tabs to be set. When the selection of a tab is changed the OnChange event handler is called allowing direct changes to affect the form. In the case of Piata Mai the tab control was used to filter data in a table. The following code example presents the OnChange event handler for the tab control for the module *Te Whakapakari Tangata*. 
/* filters the contents of the table tbPersonalDev in relation to the selected tab */
void __fastcall TfrmKaimahi::TabControl1Change(TObject *Sender)
{
    AnsiString filter;

    switch (TabControl1->TabIndex)
    {
    // Area represents a field in the table tbPersonalDev
    case 0: filter = AnsiString("Area = 'Wairua'"); break;
    case 1: filter = AnsiString("Area = 'Mouri Ora'"); break;
    case 2: filter = AnsiString("Area = 'Hau Ora'"); break;
    case 3: filter = AnsiString("Area = 'Hau Aio'"); break;
    case 4: filter = AnsiString("Area = 'Hau Whenua'"); break;
    case 5: filter = AnsiString("Area = 'Hau Moana'"); break;
    case 6: filter = AnsiString("Area = 'Hau Tangata'"); break;
    }
    // adjust the filter to incorporate the selected year
    filter = filter + AnsiString("AND Year = ") + cmbPDevYear->Text;
    // apply the filter to the table tbPersonalDev
    tbPersonalDev->Filtered = true;
    tbPersonalDev->Filter = filter;
}

No default value is required within the switch statement, as the tab control requires the selection of a tab; the selected tab by default is the tab 0.

---

**TImageList**

The image list component assisted with the collection of bitmaps for the main menu and tool bar components within Piata Mai. The image list allows for the easy allocation of bitmaps or icons each of which can be referred to by its index. The image list manages sets of images using an Image List Editor.
**TDateTimePicker**
The date/time list box assisted with the correct entry of dates and times in the database. The date/time list component was used in conjunction with the data-aware edit components OnChange event handler. Changes made to the date/time list component automatically update the data-aware edit components text property allowing the data to be stored in the current record. Only valid dates and times can be entered into the date/time component. The Kind property determines whether the component represents a date or time. Users can enter dates and times by directly entering the text scrolling with the Up and Down arrows. Dates can also be selected via the drop down calendar, which has in the case of Piata Mai been disabled to ensure that the dominant language within the system is Māori.

**TStatusBar**
The status bar component is situated at the bottom of all the main forms. It allows for system actions to be displayed at the bottom of the screen. It has been utilised within Utunga (Expenses) to display the running total of kilometres incurred for a specific staff member, within a specific year. Each time a new record is added to the expenses the sum of kilometres is recalculated and redisplayed on the status bar.

**TToolBar**
The tool bar component was utilised in all the main forms; Kaimahi, Tamariki, Ngā Whakapa and Ripota, it allows buttons to be grouped within a form. The buttons displayed on the tool bar maintain the same height and width. The data-aware navigator component has also been used to sit within the tool bar container. In Piata Mai the buttons on the tool bar all correspond to items within the main menu component, allowing direct access to the commands.
4.14 Data Access Page Components

**TDataSource**
The data source component is an intermediary between dataset components e.g. TTable, TQuery etc., and data-aware components such as TDBEdit and TDBGGrid. Dataset and data-aware components must be associated with a data source component to enable the data in the database to be displayed and manipulated. A data source component is created for all the tables utilised within Piata Mai.

**TTable**
The table component retrieves and sends data from a physical database table via the BDE Administrator. The table component associates with a data source component allowing data-aware components to display and manipulate the data in the table. The BDE Administrator has been configured to work with the database(s) associated with Piata Mai enabling access to its tables. Separate Data Modules have been created within the project to group tables and data sources in the following categories, Kaimahi, Whakapakari and Tamariki.

**TQuery**
The query component uses SQL statements to retrieve data from one or more physical database tables via the BDE Administrator. The query component associates with a data source component allowing the data-aware component to display and manipulate the data within the query. Various queries have been created within the creation of the reports to ensure that only relevant data is utilised.

**TDatabase**
The database component provides the connection to the databases of Piata Mai. The database component has the ability to connect to a single database. Piata Mai requires multiple database components to be instantiated.
4.15 Data Controls Page Components

TDBGrid
The data-aware custom grid component has been used within Kōrero mō ia Kaimahi and Kōrero mō ia Tamariki for the Iwi and Hapū data. A master detail relationship is created to enable all Iwi and Hapū for the current staff member to be displayed. The following shows the master detail relationship between the tables:

<table>
<thead>
<tr>
<th>Master Table</th>
<th>Detail Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaimahi</td>
<td>Kaimahi Iwi</td>
</tr>
<tr>
<td>Kaimahi</td>
<td>Kaimahi Hapū</td>
</tr>
<tr>
<td>Tamariki</td>
<td>Tamariki Iwi</td>
</tr>
<tr>
<td>Tamariki</td>
<td>Tamariki Hapū</td>
</tr>
</tbody>
</table>

The data is viewed in a tabular format with different columns representing individual fields.

TDBNavigator
The data-aware navigation component allows the user to easily navigate through records in a table. The component contains buttons enabling:

- navigating to the first or last record in a dataset
- navigating to the next or prior record in the dataset
- placing a table in Insert, Edit, or Browse mode
- records to be created, modified and deleted
- data to be refreshed

The data-aware navigation component has been used to navigate through all tables used within the forms of Piata Mai.
TDBText
The data-aware label component has been utilised within the form Rārangi arowhai (check list). It enables the contents of a field in a record to be displayed without the user being able to modify the text. The purpose of the check list is to enable the staff to become aware of their responsibilities, the information is gathered via a query and does not require the staff to alter the contents of the control.

TDBEdit
The data-aware edit box component has been used exhaustively within Piata Mai. It is the main component used to display and manipulate the contents of fields within a record.

TDBMemo
The data-aware memo box component is similar to that of the data-aware edit box but enables fields that may contain lengthy amounts of text to be displayed and edited. The component is utilised within Piata Mai when the associated field type in the database is a Memo.

TDBComboBox
The data-aware combo box component has been utilised to reduce inconsistent data to be entered into the database, within Piata Mai. The data-aware combo box is similar to that of the combo box component, but enables connection to a table’s field and permits the display of values directly from a column in a table. It is important that the entry of data is consistent to enable data to be grouped effectively and efficiently. It also assists with the accuracy of the queries.

TDBCheckBox
The data-aware check box component presents two options to the user, and is used for fields that represent Boolean data, True/False. The component can present two values checked (True) or unchecked (False). Within Utunga, the component has been used for the field Hokinga mai (return) to indicate whether the kilometres incurred represent a one-way trip or a return trip. Within Tamariki, the component has been used for the field Pūtea tautoko (moderated) to specify whether the Ministry of Education funds the child.
TDBCtrlGrid
The database control grid component enabled different data-aware controls, e.g. DBEdit, DBMemo, DBCheckBox, representing different field types to be displayed in a tabular grid format. The control was used throughout Piata Mai to enable multiple records to be displayed containing various field types.

4.16 Win 3.1 Page Components

TTabbedNotebook
The tabbed notebook component was used to separate different modules within the forms Kaimahi and Tamariki. The component contains multiple pages; the users select a page by clicking the tab at the top of the page. The tabbed notebook component allowed for easy navigation between the different modules in the system.

4.17 QReport Page Components

Quick report has been used to design all the reports within Piata Mai. Quick report allows reports to be designed using data source components. Reports are built with bands, page headers, and footers, multiple detail sets, summaries, and group headers and footers. Quick report enables the calculation of summary information and counting of records automatically.

TQuickRep
The reports within Piata Mai were built using the Quick report page component. The Quick report page component is the form on which all reports are built. It enables you to set your page properties, e.g. page size, margins, orientation etc. Only components from the QReport pallete in C++ Builder can be used within the Quick report container.
**TQRBand**

The Quick report band component forms the basic bands within a report. The BandType property is set to reflect the function the band will have in the report. The following are the list of BandTypes utilised within Piata Mai:

- **rbTitle**: The Title band is printed on the first page of the report after the page header.
- **rbDetail**: The Detail band is printed once for every record/row in the connected dataset.
- **rbPageFooter**: The Pagefooter band is printed at the bottom of each page.
- **rbSummary**: The Summary band is printed after all detail bands and potential group footers at the end of the report.
- **rbGroupFooter**: The Footer band for TQRGroup components are printed when the group breaks.
- **rbGroupHeader**: The Header band for TQRGroup components are printed before any detail bands for a given group.

**TQRGroup**

The Quick report group component allows you to group bands together and provides control for headers, footers, and page breaks. For Example, within the report Ngā huritau a ngā tamariki (Children's Birthday's), the components Expression property contains the value *Month*, which is the name of a field within the query represented by the report. This allows for detail information to be grouped via the month, hence all children will be listed under the month they were born.

**TQRLabel**

The Quick report label component enables the printing of static text. It is used within all the reports in Piata Mai to indicate what information is being displayed.

**TQRDBText**

The Quick report text component is a data-aware version of the QRLabel component that prints the value of a database field. The component has been utilised extensively within all reports to display the appropriate information from the database tables and queries.
TQRExpr
The Quick report expression prints database fields, calculations, and static text. QRExpr has been used to create summary information for reports. For example, the report Ngā Ripotai Matua (Milestones report) represents the sum of the Services Provided underneath all the corresponding columns. The Expression property of the component contains the value \( \text{Sum(Field)} \), where \( \text{Field} \) represents the field within the query associated with the specific column of data. The expression represents the sum of all records of the field in the dataset.

TQRSysData
The Quick report system data component displays system information within the report. Piata Mai utilises the following system data within the reports; report title, page number, and date.

TQRDBRichText
The Quick report data-aware rich text component enables rich text fields to be displayed in the reports. In order for the data to be viewed the DataSet property of the Quick report page component must be set to the same value of the DataSet property for the data-aware rich text component. The component was used for fields that were of type Memo.

TQRShape
The Quick report shape component was used to draw lines for columns on the report and to draw rectangular shapes to group information.

TQRImage
The Quick report image component was used within Piata Mai to display the organisations logo and pictures within the children’s reports.

TQRChart
The Quick report chart component was used within the report Taipakeke to represent a pie graph built by information stored in the database. The chart displays the sum of children of specific ages.
The following outlines the implementation of the Milestones Report, Ngā ripotamataua.

**TQReport component**
The QReport components DataSet property is set to the Query Component, Query1, to enable the Detail Band to represent multiple records from the dataset.

**TQuery component**
The Query component represents the SQL statements for the report. The SQL property of the Query component is set to:

```sql
TRANSFORM Sum(Diary.Hours) AS SumOfHours
SELECT Diary.Description, Tamariki.DOB,
    Sum(Diary.Hours) AS TotalOfHours
FROM Diary INNER JOIN Tamariki ON
    Diary.Description = Tamariki.Child_Name
WHERE Diary.Date >= :begin AND Diary.Date <= :end
GROUP BY Diary.Description, Tamariki.DOB
PIVOT Diary.Service
```

The above query represents the sum of hours of services provided for all children. The variables `begin` and `end`, are parameters for the query, which allow the query to represent data within a set period of time. The parameters need to be assigned values at runtime before the query can be opened. Before the report is shown a form is displayed to enable the user to specify the dates the report is to represent. These values are assigned to the parameters, begin and end.

```cpp
// close the query
Query1->Close();
// assign a date to the parameter begin
Query1->Params->Items[0]->AsString = dateFrom.DateString();
// assign a date to the parameter end
Query1->Params->Items[1]->AsString = dateTo.DateString();
// prepare the query
Query1->Prepare();
// open the query
Query1->Open();
```
Title Band
The Title Band contains quick report label components representing the static text, *Ohomairangi Trust, Early Intervention Service*, and *Milestone Report for the Period*. The quick report label component, qrDates, displays the dates the report represents when previewed.

Group Header Band
The group header band contains quick report labels displaying the titles for the grouped data in the detail band.

Detail Band
The detail band contains the quick report data-aware text components enabling the records in the Query dataset to be displayed. The detail band will present the collection of records in the query.

Group Footer Band
The Group Footer Band contains quick report expression components representing the sum of the *Services Provided* underneath all the corresponding columns. The sum is calculated in relation to the field it represents.

Summary Band
The Summary Band contains quick report labels displaying summary information for the report.
4.2 Cultural Issues

4.21 Primary Keys

The primary key for the Tamariki and Kaimahi tables are represented using their full names. Although it would seem more appropriate to have the records uniquely represented by numbers, it was the wish of the organisation for the staff and children to be uniquely identified by their given names. The option was given for the records to be represented by numbers only in the database and for the numbers not to be viewed within the interface, only the names. Ohomairangi felt it was important for the electronic system to retain and acknowledge the importance and whakapapa of names. It also enabled the names to be visual allowing them to be thought of as whānau, ensuring the people were acknowledged as being central.

4.22 Māori Fonts

Although, Te Kete Pūmanawa Rorohiko was utilised to incorporate the macron vowels within C++ Builder, the font for the title bar and menu components could not be changed within this application. These fonts are reliant on the system fonts. In order for the title bar and menu items to incorporate macron fonts it is necessary to change your systems Display options in Control Panel.

4.3 Bilingual

Piata Mai is predominantly presented in te reo Māori. The majority of forms and reports are written in te reo Māori. Within the forms, the English translations can be viewed as hints, by hovering the mouse pointer over the Māori text. Eventually the electronic system will give the user the ability to be viewed in either English or Māori. Currently within the Tamariki form, the module He Aromatawai gives the user the option to switch between English and Māori within the rich edit components.
Chapter 5

Testing

The following outlines the plan to ensure the testing process is a successful one. The process will include removing the bugs and introducing several improvements. The test approach will utilise both white-box and black-box testing to ensure maximum coverage. The testing will cover activities aimed at evaluating the attributes and capabilities of the system and to determine if it meets the required results.

5.1 Test Plan

The JOCS software testing strategy was chosen to test the system [6]. It requires testing to be ongoing from inception through to the completion of the project.

Figure 4
JOCS software testing strategy

The circles represent the four stages in the software-testing plan.
5.11 White Box Testing

Stage 1 and 2 represent the tests applied by the programmer. The programmer provides testing for the design, coding and initial testing for the program. These stages are based on white box testing which requires internal knowledge of the system designed. The details of the software implementation, such as programming language, logic, and styles are examined.

Stage 1
Stage 1 consists of the following tasks which are repeated until the programmer achieves an acceptable design:
- General purpose design
- Structured walkthrough of the design

Stage 2
The system has been tested throughout the coding process with the design and testing of code incrementally, rather than designing all the code and then testing. This stage involves the following tasks:
- Module design
- Module walkthrough
- Top-down testing

5.12 Black Box Testing

Stage 3 and 4 represent the tests applied by someone other than the system programmer. These stages are based on white box testing where the tests are undertaken in a real life situation with testers who do not require any internal knowledge of the system designed. The tests determine if the system functions correctly, performs the appropriate processes as set out by the client, and is visually accepted. The testers provide feedback to the programmer to ensure that the system satisfies the requirements of the client.
Stage 3
Stage 3 consists of the following tasks, which are performed using test sheets:

- Stress testing
- Recovery testing
- Security testing

If the results are not satisfactory the problems are reported to the programmer and the testing returns to Stage 2.

Stage 4
Stage 4 consists of the following tasks, which are performed by the users of the system.

- User testing
- Beta testing

If the user finds problems within beta testing the testing will return to Stage 1 requiring the section of the system to be redesigned.
### 5.13 Test Case Matrix

The following are examples of the test sheets used to test the system:

**Kōrero mō ia Kaimahi**

<table>
<thead>
<tr>
<th>Test Objective</th>
<th>Expected Results</th>
<th>Test Case Design</th>
<th>Pass/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine if a duplicate record can be created</td>
<td>Reject X</td>
<td>Create a new record and input an existing staff name</td>
<td></td>
</tr>
<tr>
<td>To determine if a message box appears confirming deletion of a record</td>
<td>X</td>
<td>Select the delete button on the navigational bar</td>
<td></td>
</tr>
<tr>
<td>To determine if a message box appears confirming the deletion of the field Lwi</td>
<td>X</td>
<td>Press Ctrl Del on the keyboard</td>
<td></td>
</tr>
<tr>
<td>To determine if a message box appears confirming the deletion of the field Hapū</td>
<td>X</td>
<td>Press Ctrl Del on the keyboard</td>
<td></td>
</tr>
<tr>
<td>To determine if the report: Kōrero mō ia Kaimahi displays correct output</td>
<td></td>
<td>Input data into all the fields in the form Kōrero mō ia Kaimahi, then preview the report</td>
<td></td>
</tr>
<tr>
<td>Test Objective</td>
<td>Expected Results</td>
<td>Test Case Design</td>
<td>Pass/Fail</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>----------</td>
</tr>
<tr>
<td>To determine if a duplicate record can be created</td>
<td>Reject X, Input X</td>
<td>Create a new diary record and input a duplicate description, service and date combination</td>
<td></td>
</tr>
<tr>
<td>To determine if a message box appears confirming deletion of a record</td>
<td>Reject X</td>
<td>Select the delete button on the navigational bar</td>
<td></td>
</tr>
<tr>
<td>To determine if the report: Rātaka Mahi displays correct output, and correct totals</td>
<td>Reject X, Input X</td>
<td>Input data into all the fields in the form Kōrero mō ia Kaimahi, then preview the report</td>
<td></td>
</tr>
</tbody>
</table>
6.1 Thesis Summary

The following outcomes were realised from the development of Piata Mai:

- Developing systems for Māori requires not only knowledge of technology but also of cultural issues
- Respect and trust between the developers and the Ohomairangi were key elements in developing Piata Mai
- It is important not only for the developers to understand the processes of the organisation but also for the organisation to understand the processes of systems development
- The system developers need to acknowledge the organisation’s contributions to the development process; without the in-depth knowledge provided by the organisation the resulting system would unquestionably be ineffective
- Information Technology offers opportunities for Māori to sustain their culture and knowledge

6.2 Future Developments

The electronic system has greater potential to Ohomairangi, the organisation are currently looking at additional modules that can be integrated within the system. There are still parts of the system that need to be considered before any additional modules can be included:

- The menu, options, needs to be completed by enabling the user the ability to display the entire system in either English or Māori, this includes all the
reports which are at present predominantly in Māori, with a few in English.

- The help system needs to be completed and incorporated within Piata Mai. The decision to delay the implementation of the help system was due to the limited time frame to complete the project. The manual will provide the users with enough information to utilise the system until this phase is complete.

- The system is currently in test mode and will need to sustain extensive testing before the end product can be released and used effectively within the organisation. There are still numerous error messages that need to be incorporated within the final product.
Bibliography


[12] Ohomairangi (2002). *Ohomairangi Early Intervention Service promotional pamphlet*

[13] Ohomairangi (March 2002), *Ohomairangi Trust, Information and Technology Strategic Plan*


Appendices
Appendix A

Workshops
Kaupapa Maori Information and Technology

6 x 1/2 day Workshops
(Prepared for Ohomairangi Trust Early Intervention Services)

1. & 2. Kaupapa Maori and Early Intervention – Office and Field Based Issues

These workshops allow participants to explore and develop the notion of Kaupapa Maori as an integrated approach for early intervention. It will include reviewing Maori curriculum and assessment frameworks and tools currently engaged in the field of early intervention. Opportunity will be provided to further develop these tools in line with current and desired work practice.


These workshops are designed to give participants an overview, and basic understanding of current information and technology systems that are applicable in managing service delivery and development in the field of education, particularly early intervention. Issues around collection, storage and dissemination of information will be considered within a Kaupapa Maori framework – paying attention to cultural and intellectual property rights.

5. Kaupapa Maori Information and Technology – A Needs Analysis for Systems Implementation and Maintenance

The purpose of this workshop is to clearly identify the information and technology systems needed to support a Kaupapa Maori Early Intervention Service. Further individual training needs will be established. This will include identifying the aims and objectives of the system and proposed outcomes of system implementation.
6. Developing a Website

Participants will have the opportunity to work alongside a website consultant to develop a website. Participants should bring with them a basic outline of what they want included in the website, with examples of text and visual images and design.

Course Frequency and Duration: The duration of each workshop is 1/2 a day. Workshops are to be held approximately 3 weekly, beginning in March 2002 and ending in May 2002, in order of the above outline.
Appendix B

Letter of Endorsement
10 February 2003

To Whom It May Concern

RE: Letter of Endorsement

It has been a great privilege to have Karina Donaldson our systems analysts, work alongside Ohomairangi Trust to establish this unique Kaupapa Maori Information System called "Piata Mai". I am pleased to inform you that "Piata Mai" is now installed on PC and is used daily to store all Staff and Client information.

It was our aim at the beginning of this project to have an Information System that would be able to:

• Store all Staff and Child Information
• Generate Bi-Monthly and Annual reporting on request by gathering information from Staff and Tamariki
• Have the system in Maori and English dialogue
• To be user friendly

I am pleased to say that all of the above aims have been achieved and I am thoroughly enjoying administrating this system. I find that this system is very user friendly, very fast and efficient especially when accessing information needed for monthly and annual reporting. For times when I come across areas that I am not so familiar with e.g. requesting a report on all our 3 year children, the manual has been able to provide me with the step by step instructions to guide me through each phase with ease.

It has been a real pleasure working with Karina on this project and wish her all the best for her Masters.

Noho ora mai ra.

[Signature]

Na Trina Ward
Piata Mai Administrator
OHOMAIRANI TRUST
Appendix C

Piata Mai: System Manual
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Piata Mai has been developed for Ohomairangi Trust Early Intervention Service. The system incorporates the administrative tasks, and reporting requirements of Ohomairangi.

**System Requirements**

The minimum requirements for the system:
- Pentium II or compatible
- 256 Mb RAM
- Windows XP Professional
- Microsoft Access 2000
- BDE Administrator

**Macrons**

In order for the title bar and menu items to incorporate macron fonts it is necessary to change your Display options in Control Panel

1. Open **Display** in Control Panel.
2. On the **Appearance** tab, click **Advanced**.
3. In the **Item** list, click on **Active Title Bar** and then adjust the font to its Māori equivalence, e.g. Trebuchet MS Māori.
4. In the **Item** list, click on **Menu** and then adjust the font to its Māori equivalence.
5. Click **OK** or **Apply** to save your changes.
Main Menu

The main form is central to the system. The different parts of the system are accessed via this form.

The different sections of the system are displayed in yellow: Kaimahi, Kaimahi mo te wa, Tamariki, Ngā whakapa and Ripota.

If you click on one of these menu items, for example clicking on Kaimahi would take you to the form with all the Kaimahi information.

Clicking on E Puta or Ctrl + E enables you to exit the system.
Explanation of the different components of the form

**Title bar**

The title bar shows the *name of the form* you are currently in and the *section of the form* you are in e.g. name: section. So as above we are in the form Kaimahi and are working in the section Korero mō ia Kaimahi.

**Menu bar**

**Whakakōnae (File menu)**

The file menu has three items: Tiro tānga, Kimihia and E Puta.

A. **Tiro tānga** (print preview): Displays the current section of the form in a report format (See Appendix A for system reports). For example, if you are in the tabbed section Korero mō ia Kaimahi, then the report will show the information of this section in a report format.

The preview of the report can be accessed using the short cut keys Ctrl + T.

B. **Kimihia** (find): Displays a form allowing you to quickly find a staff member in the system.
1. Enter a name in to the **name text box**.
   You must enter at least the staff members first name, the search will take you to the nearest match of the name entered.

2. Click on the button **Kimihiia** to complete the search.
   Otherwise click on **Whakakorengia** to disregard any name entered. The form will automatically close.

3. Click on the button **Kei te pai** to exit the form.

The form Kimihia can be opened using the short cut keys Ctrl + K.

**C. E Puta** (close): Close the form and return to the main menu.

The form can also be closed using the short cut keys Ctrl + E.

**Wā arotau (Options)**

The options menu is still under development. Eventually it will be able to give more flexibility to the system designed.

**Āwhina (Help Menu)**

The help menu has three items: Āwhina, [www.ohomairangi.co.nz](http://www.ohomairangi.co.nz) and Mā...
A. Āwhina (help): The user can look for help on a particular type of problem using the help menu. The help menu has several options for help. A contents page will have general topics that can be searched for information. There will also be a word search, which allows users to enter a particular word e.g. Kaimahi, and find information about that topic.

The help system can be accessed using the short cut keys Ctrl H.

B. www.ohomairangi.co.nz (web site): This item allows direct access to the web site of Ohomairangi. As a web site has not yet been developed this button has been disabled.

C. Mā... (about): Clicking on this item presents a form with information about the system.
Tool bar

The tool bar provides quick access to previewing reports and finding staff members. The two buttons on the toolbar are just short cuts to the file menu items Tiro tānga and Kimihia (for more information see above under Whakakōnae (file menu)).

Navigational buttons

The navigational buttons which are faded are not able to be selected, or are disabled for certain reasons.

The navigational buttons functions:

- **first record**: move to the first staff record.
- **prior record**: move to the previous staff record.
- **next record**: move to the next staff record.
- **last record**: move to the last staff record.
- **new record**: delete the current staff record. A message will be displayed to confirm the deletion of the record. Once you have deleted the record you cannot retrieve it.
• **edit record:** when the edit button is faded the current staff record has been edited, if you do not save the changes you will lose any updates to the staff record.

![edit button faded or disabled]

  e.g. ![edit button](example.png)

• **save record:** click on the save button to save changes made to the current staff record.

• **cancel edits:** click on the cancel button to cancel any edits that have been made to the current staff record.

### Name component

![Name component](example.png)

The name component is the most important component on the Kaimahi form. It tells you which staff member's records you are currently working with.

### Labels, Text boxes and Memo components

![Labels, Text boxes and Memo components](example.png)

The labels are used to describe the function of the associated control, in the above case the text box. The labels text cannot be edited. Hovering the cursor over the label will display the English translation for the label.

The text boxes enable the users to edit a database field. They can only hold a single line of text.

The memo components are similar to the text boxes, but enable multiple lines of text.
Date components

The date component allows only valid dates to be entered. The date can be changed by scrolling using the Up and Down arrows or by typing.

Grid components

The grid component is used to create a list of items associated to a record. In the case of the Kaimahi personal details we have the grid component for Iwi and Hapū. This allows for multiple Iwi and Hapū to be included in the Kaimahi personal details section.

Adding a single item to the grid component

1. Click on the active row in the grid component.
2. Enter the required text.
3. Push the Enter key on the keyboard.

Adding additional items to the grid component

1. Click on the active row in the grid component.
2. Push the down arrow key on the keyboard.
3. Enter the required text.
4. Push the Enter key on the keyboard.

Deleting an item in the grid component

1. Click on the item in the grid component that you want to delete.
2. On the keyboard push Ctrl Del.
3. A message box will appear to confirm the deletion of the record.
4. Click on OK to delete the record or Cancel to cancel the request.
Scroll bar

The scroll bar allows you to move up and down through the component that the scroll bar is attached to.

Tabbed sections

The tabbed sections allow you to quickly navigate to the required area in order to check, update or add additional records. The tab selected has red text, e.g. above Kōrero mō ia Kaimahi is the selected tab. The different areas are:

- Kōrero mō ia Kaimahi (staff personal details)
- Rātaka Mahi (staff diaries)
- Whakapakari (staff development)
- Utunga (staff claims for reimbursement of expenses)

The above areas will be discussed in detail in the next section.
Kōrero mō ia Kaimahi

After clicking on Kaimahi from the main menu you will view the Kaimahi screen. This screen enables staff details to be checked, updated and entered into the database.

Kaimahi mō ia Kaimahi maintains information regarding personal details, Iwi (tribe), hapū (sub-tribe), emergency contact details, medical conditions, doctor contact details and also bank account details of each staff member. Kōrero mō ia Kaimahi is separated into four sections:

- Personal details
- Emergency contact details
- Medical details
- Bank account details

**Personal details**

![Personal details form](image)
1. Before entering information into Korero mo ia Kaimahi you must first enter the staff name in the name component (as discussed in the previous section).

2. Ingoa ano: Enter any names you may also be known as.

3. Rā Timatanga: Enter the date for the first day of work of the staff member.

4. Iwi: Enter the Iwi for the staff member. To add multiple Iwi for a staff member, enter an Iwi, press enter and then press down the arrow key. Enter the next Iwi for the staff member.

5. Hapū: Enter the Hapū for the staff member. To add multiple Hapū follow the same process as for Iwi above.

6. Rā Whānau: Enter the staff members date of birth.

7. Wāhi Noho: Enter the staff members home address.

8. Nama Waea: Enter the staff members home phone number and mobile phone number.

   The phone numbers are entered using a masked edit component. The masked edit validates the text the user enters against a mask that encodes the valid forms the text can take. In this case the home phone numbers entered can take the form (00) 000-0000 and mobile phone numbers can take the form (000) 000-0000.

   a. Click on the text box.

   b. Enter only the numbers for the phone number ignoring any other characters. E.g. for the phone number (09) 678-9999, enter 096789999. The masked edit will correctly format the number.

9. Imera: Enter the staff members email address.
Emergency Contact Details

To view the emergency contact details use the scroll bar on the right hand side of the form Kōrero mō ia Kaimahi to scroll down.

1. **Whanaunga Tuatahi**: Enter the name of the emergency contact for a staff member.

2. **Tāna Nama Waea**: Enter the home and mobile phone number for the emergency contact using the masked edit components.

3. **Tāna Hononga ki ā koe**: Enter the relationship between the staff member and the emergency contact.
Medical Details

To view the emergency medical details continue to scroll down the form Kōrero mō ia Kaimahi.

<table>
<thead>
<tr>
<th>Taha Tinana</th>
</tr>
</thead>
<tbody>
<tr>
<td>He māuiuitanga kei ā koe?</td>
</tr>
<tr>
<td>He rongoa kāore e pai ki tōu tinana?</td>
</tr>
<tr>
<td>He take anō e pā ana ki tōu oranga?</td>
</tr>
<tr>
<td>Tōu tākuta</td>
</tr>
<tr>
<td>Tāna Nama Waea</td>
</tr>
</tbody>
</table>

1. **He māuiuitanga kei ā koe**: Enter any illnesses or allergies the staff member may have.

2. **He rongoa kāore e pai ki tōu Tinana?**: Enter any medication that the staff member may be allergic to.

3. **He take anō e pā ana ki tōu oranga?**: Enter any other health issues the staff member may have.

4. **Tōu tākuta**: Enter the name of the staff member’s General Practitioner.

5. **Tāna Nama Waea**: Enter the phone number of the General Practitioner using the masked edit component.
**Bank Account Details**

To view the bank account details continue to scroll down the form Kōrero mō ia Kaimahi.

<table>
<thead>
<tr>
<th>Taha Pūtea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tōu Whare Pūtea</td>
</tr>
<tr>
<td>Nama IRD</td>
</tr>
<tr>
<td>Te nama pūtea pēke</td>
</tr>
<tr>
<td>Ko te ingoa i runga i tōu pūtea pēke</td>
</tr>
</tbody>
</table>

1. **Tōu Whare Pūtea**: Enter the name of the staff member’s bank.

2. **Nama IRD**: Enter the staff member’s IRD number. IRD Numbers follow a specific format, numbers can only be entered into the text box using the following format, 99-999-999.
   a. Click on the text box.
   b. Enter only the numbers for the IRD number ignoring any other characters. E.g. for the IRD number 12-345-678, enter 12345678. The masked edit will correctly format the number.

3. **Te nama pūtea pēke**: Enter the bank account number of the staff member. Bank account numbers also follow a standard format, bank account numbers can only be entered using the following format, 99-9999-9999999-99.
   a. Click on the text box.
   b. Enter only the bank account number ignoring any other characters. E.g. for the bank account number 12-1234-1234567-12, enter 121234123456712. The masked edit will correctly format the number.

4. **Ko te ingoa i runga i tōu pūtea peke**: Enter the name of the staff member’s General Practitioner.

Click on the ✔ navigational button to save the changes to the record, or click on the ✗ navigational button to cancel the changes.
Navigating through the records

Move to the first record  Move to the next record

Move to the previous record  Move to the last record

Adding a New Record

Click on the navigational button + to add a new record.

Deleting a Record

1. Navigate to the record you would like to delete.

2. Click on the navigational button − to delete a record.

3. A message box will appear to confirm the deletion of the record.

4. Click on OK to delete the record or Cancel to cancel the request.
Printing the Report for Kōrero mō ia Kaimahi

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Rātaka Mahi

Tabbed sections

Tab control

Combo boxes

Control grid

Navigational buttons
Rātaka Mahi

Rātaka Mahi (diary sheet) maintains information on each staff members appointments or work hours spent on different job contracts. The following explains the process of entering a diary entry.

1. **Wiki:** Select a day in the week in you want to insert diary entries. It does not matter which day during a week’s period is selected.

![Selected date](10/12/2002)

2. Select the section of the tab control.

**Tab Control**

| MOE EI | Rōpu | Te whakahaeretanga o Ohomairangi | TPK | Whakaaetanga |

The tab control allows you to enter and view information related to a specific job contract. The different sections are:

- MOE EI (Ministry of Education Early Intervention)
- Rōpu (Team)
- Te whakahaeretanga o Ohomairangi (Ohomairangi Management)
- TPK (Te Puni Kokiri)
- Whakaaetanga (Leave)

3. Select the date for the appointment or job.
Combo boxes

The combo box contains a list of items you can choose from. It reduces the risk of entering incorrect data.

The dates in the above combo boxes relate to the selected date. The top item will always be a Monday with the last item being the Sunday.

4. **Te ata whakararangi**: Enter the details of the appointment.

The items in the combo box for *Te ata whakararangi* are dependent on the *tab control* item selected.

- MOE EI: the names of the children the staff member is responsible for.
- Rōpu: Team hui, Other
- Te whakahaeretanga o Ohomairangi (Ohomairangi Management): Hui, Financial, PR and projects, Service
- TPK: Projects, Admin
- Whakaaetanga: Annual, Sick, Time in lieu, Bereavement, Special
5. **Ratonga mahi**: Select the service related to the appointment.

<table>
<thead>
<tr>
<th>Ratonga mahi</th>
<th>Haora</th>
<th>Korero ano</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Intervention Teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paraprofessional Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Co-ordination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialist Services AODC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialist Services Educational Psych</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialist Services Speech Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This field is only related to MOE EI. The combo box for all other tab control items will only contain N/A. For MOE EI the combo box contains the following items:

- Early Intervention Teaching
- Paraprofessional Support
- Service Co-ordination
- Specialist Services AODC
- Specialist Services Educational Psych
- Specialist Services Speech Language
- N/A

6. **Haora**: Enter the number of hours spent on the appointment.

7. **Korero ano**: Enter any comments related to the appointment.

Click on the ✔️ navigational button to save the changes to the record, or click on the ✗ navigational button to cancel the changes.
Adding a New Record

Click on the navigational button + to add a new record.

Or click on the down arrow key on the control grids scroll bar.

Deleting a Record

1. A message box will appear to confirm the deletion of the record.
2. Click on OK to delete the record or Cancel to cancel the request.
Printing the Report for Rātaka Mahi

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Whakapakari: Te Whakapakari Tangata

Selected Tabbed section

Tab control

Control grid

Navigational buttons
Te Whakapakari Tangata

Te Whakapakari Tangata contains a staff members goals. The goals are sorted into which year they occur in and the different sections: Wairua, Mouri Ora, Hau Ora, Hau Aio, Hau Whenua, Hau Moana, and Hau Tangata. The following explains the process of setting goals.

1. **Tau**: Select the year in which you want to set your goals.

![Combo Box for Year Selection]

A combo box is used to allow for easy selection of the year. The combo box contains the years for two years prior and two years after the current year.

2. **Select the section of the tab control.**

![Tab Control]

The tab control above allows you to enter and view information related to a specific area of goals. The different areas are:

- Wairua
- Mouri Ora
- Hau Ora
- Hau Aio
- Hau Whenua
- Hau Moana
- Hau Tangata

3. **Ra Timata, Ra Whakamutu**: Enter the date you intend to start achieving your goal and the date you intend to complete your goal.
4. **Whāinga**: Enter your goal.

5. **Te whakamahi me tona wa**: Enter details on how you will achieve the goal and the expected duration to complete the goal.

6. **Utu**: Enter the cost of achieving the goal.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

**Adding a New Record**

Click on the navigational button to add a new record.

Or click on the down arrow key on the control grids scroll bar.
Deleting a Record

1. Click on the row you want to delete.
2. Click on the navigational button to delete a record.
3. A message box will appear to confirm the deletion of the record.
4. Click on OK to delete the record or Cancel to cancel the request.

Printing the Report for Te Whakapakari Tangata

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Whakapakari: Te Whakatau Mahi

Te mahitahi ki nga tamariki, whanau me nga whare kohunghunga

Mahi / Kirimana ano
Mahi a ropumahi, ropu whaka

Tau 2002

Ra Timata 8/05/2002
Ra Whakamutu 8/05/2003

Navigational buttons

Control grid

Selected Tabbed section

Tab control
Te Whakatau Mahi

Te Whakatau Mahi is an agreement by staff members to fulfil certain goals. A staff member allocated as supervisor monitors the agreement. The agreement is revisited bi-annually.

1. Tau: Select the year in which you want to set your goals.

   ![Combo box screenshot]

   A combo box is used to allow for easy selection of the year. The combo box contains the years for two years prior and two years after the current year.

2. Select the section of the tab control.

   ![Tab control screenshot]

   The tab control above allows you to enter and view information related to a specific area of the agreement. The different areas are:
   - Te mahitahi ki nga tamariki, whanau me nga whare kōhungahunga
   - Mahi / Kirimana ano
   - Mahi a rōpumahi, rōpu whakahaere rānei
   - Mana whakahaere
   - Supervision and Feedback

3. Ra Timata, Ra Whakamutu: Enter the date you intend to start achieving your goal and the date you intend to complete your goal.

   ![Date input screenshot]


5. Ngā Tikanga Tiaki: Enter the measures.
6. **Kōrero ano**: Enter any comments.

7. **Te Arotake**: Final review can be entered at a later date.

<table>
<thead>
<tr>
<th>Ngā tumanako</th>
<th>Ngā Tikanga Tiaki</th>
<th>Kōrero ano</th>
<th>Te Arotake</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Click on the ![checkmark] navigational button to save the changes to the record, or click on the ![x] navigational button to cancel the changes.

### Adding a New Record

Click on the navigational button ![plus] to add a new record.

Or click on the down arrow key on the control grids scroll bar.
Deleting a Record

1. Click on the row you want to delete.
2. Click on the navigational button to delete a record.
3. A message box will appear to confirm the deletion of the record.
4. Click on OK to delete the record or Cancel to cancel the request.

Printing the Report for Te Whakatau Mahi

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Whakapakari: Te Whakapakari Kaimahi

[Image of a computer interface for Whakapakari Kaimahi with tabs for Korero mō ia Kaimahi, Rātaka Mahi, Whakapakari, and Utunga. The selected tab is Whakapakari Kaimahi. Below the tabs is a section for Whakapakari Kaimahi with fields for Wānanga, Rā Timatanga (8/05/2002), Tūnga Mahi, Ngā Rā, Ehia Rā, Kaiwhakahaere, and Utu.]
Te Whakapakari Kaimahi

Te Whakapakari Kaimahi contains a record of the courses attended by a staff member. A full description of what the course was, where it was held, the duration and the cost are stored.

1. **Wananga:** Enter the name of the Course.

2. **Rā timatanga:** Enter the date the course starts.

3. **Tūnga mahi:** Enter your position.

4. **Ehia rā:** Enter the number of days the course is required to take.

5. **Kaiwhakahaere:** Enter the name of the course facilitator.

6. **Utu:** Enter the total cost of the course.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

**Navigating through the records**

- Move to the first record
- Move to the next record
- Move to the previous record
- Move to the last record
Adding a New Record

Click on the navigational button \( + \) to add a new record.

Deleting a Record

1. Navigate to the record you want to delete.
2. Click on the navigational button \( - \) to delete a record.
3. A message box will appear to confirm the deletion of the record.
4. Click on \textit{OK} to delete the record or \textit{Cancel} to cancel the request.

Printing the Report for Te Whakapakari Kaimahi

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Utunga: Kiromita

Utunga contains records of claims by staff members of expenses incurred for work related costs, things such as petrol (based on the kilometres incurred), travel and accommodation. Also the date the payment was reimbursed, the total kilometres for a specific week, and a running total of kilometres for a specific period.

Kiromita

| Kiromita | Whare noho | Kai | Etahi atu | ano / etahi atu |

The tabbed section Kiromita requires different information to be entered than that of the remainder of the tabbed sections.

1. Select the tabbed section Kiromita.

2. Rā (text box): Enter the date for which you want to make the claim. The default value for this field is today’s date so it may not be necessary for you to enter the date.

3. Te ata whakararangi: Enter the details of the claim.

4. Rā (control grid): Select the date from the combo box or type in the required date of when the expense incurred. (The combo box contains the dates for the previous ten days)
5. **Mai**: Enter the place where the kilometres were recorded from.

6. **Ki**: Enter the place where the kilometres were recorded to.

7. **Hokinga mai**: Click on the check box if it was a return trip.

8. **Kiromita**: Enter the amount of kilometres being claimed.

9. **Utu ia kiromita**: Enter the rate the kilometres can be claimed back at. (The default value is 62c in the dollar)

10. **Te nui**: The amount being claimed is automatically calculated.

11. **Utu**: Enter the job contract under which the claim is made.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

**Paying the reimbursement**

When a payment is made to a staff member for the reimbursement of expenses your are required to record the payment date.
1. **Kua uta:** Click on the check box to confirm the payment has been made.

2. **Te ra utu:** Enter the payment date.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

**Additional Features**

**Toputanga kiromita:** The running total of the kilometres for a specific claim.

**Status bar:** The status bar displays the running total of kilometres for a specific year.
Adding a New Record

Click on the navigational button + to add a new record.

Or click on the down arrow key on the control grids scroll bar.

Deleting a Record

1. Click on the row you want to delete.
2. Click on the navigational button - to delete a record.
3. A message box will appear to confirm the deletion of the record.
4. Click on OK to delete the record or Cancel to cancel the request.
Printing the Report for Utunga

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Utunga: Additional Tabbed Sections
Whare noho, Kai, Etahi atu and ano/etahi atu

As stated previously the tabbed section Kiromita requires different information to be entered than that of the remainder of the tabbed sections. The following explains the process of entering in information for the remaining sections.

1. Select the tabbed section Whare noho, Kai, Etahi atu or ano/etahi atu.

2. Rā (text box): Enter the date for which you want to make the claim. The default value for this field is today’s date so it may not be necessary for you to enter the date.

3. Te ata whakararangi: Enter the details of the claim.

4. Rā (control grid): Select the date from the combo box or type in the required date of when the expense incurred. (The combo box contains the dates for the previous ten days)

5. Te ata whakararangi: Enter any additional details required.

6. Te nui: Enter the dollar amount of the claim.

7. Utu: Enter the job contract under which the claim is made.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.
Adding a New Record

Click on the navigational button $+$ to add a new record.

Or click on the down arrow key on the control grids scroll bar.

Deleting a Record

1. Click on the row you want to delete.

2. Click on the navigational button $-$ to delete a record.

3. A message box will appear to confirm the deletion of the record.

4. Click on OK to delete the record or Cancel to cancel the request.
Printing the Report for Utunga

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Kaimahi mo te wa

Title bar

Menu bar

Tool bar

Tabbed sections

Navigational buttons

Name component

Title panel

Scroll bar

Taha Whānau

Ingoa ano

Rā Timatanga 7/02/2003

Iwi

Hapū

Rā Whānau 8/05/2002

Wāhi Noho
After clicking on **Kaimahi mo te wa** from the main menu you will view the Kaimahi screen. This screen enables contract staff details to be checked, updated and entered into the database.

The tabbed sections for Kaimahi mo te wa:

- Kōrero mō ia Kaimahi (staff personal details) see page 11.
- Rātaka Mahi (staff diaries)
- Tamariki (the children the staff member is contracted to)
- Utunga (staff claims for reimbursement of expenses) see page 35.
### Rātaka Mahi

<table>
<thead>
<tr>
<th>Korero mō ia Kaimahi</th>
<th>Rātaka Mahi</th>
<th>Tamariki</th>
<th>Utunga</th>
<th>Rātaka Mahi</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOE EI Whakaetanga</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Wiki:** 19/01/2003

#### Sections
- Tabbed sections
- Tab control
- Combo boxes
- Control grid
- Navigational buttons
Rātaka Mahi

Rātaka Mahi (diary sheet) maintains information on each staff member's appointments or work hours spent on different job contracts. The following explains the process of entering a diary entry.

1. **Wiki**: Select a day in the week in which you want to enter a week's diary entries. It does not matter which day during a week's period is selected.

   ![Selected date]

2. Select the section of the tab control.

   **Tab Control**

   ![Tab Control]

   The tab control allows you to enter and view information related to a specific job contract. The different sections for contract workers are:
   - MOE EI (Ministry of Education Early Intervention)
   - Whakaaetanga (Leave)

3. **Rā**: Select the date for the appointment or job.

   ![Date Selection]

   ![Date Selection]
4. **Te ata whakararangi:** Enter the details of the appointment.

The items in the combo box for **Te ata whakararangi** are dependent on the **tab control** item selected.
- MOE EI: the names of the children the staff member is responsible for.
- Whakaaetanga: Annual, Sick, Time in lieu, Bereavement, Special

5. **Ratonga mahi:** Select the service related to the appointment.

This field is only related to MOE EI. The combo box for all other tab control items will only contain N/A. For MOE EI the combo box contains the following items:
- Early Intervention Teaching
- Paraprofessional Support
- Service Co-ordination
- Specialist Services AODC
- Specialist Services Educational Psych
- Specialist Services Speech Language
- N/A
6. **Haora**: Enter the number of hours spent on the appointment.

7. **Kōrero ano**: Enter any comments related to the appointment.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

**Adding a New Record**

Click on the navigational button $+$ to add a new record.

Or click on the down arrow key on the control grids scroll bar.

**Deleting a Record**

1. Click on the row you want to delete.

2. Click on the navigational button $-$ to delete a record.

3. A message box will appear to confirm the deletion of the record.
4. Click on **OK** to delete the record or **Cancel** to cancel the request.

**Printing the Report for Rātaka Mahi**

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Kaimahi mō te wa: Tamariki
Kaimahi mō te wa: Tamariki

This section contains details of the children the contract workers are allocated to work with, the number of hours per week and the days during the week that the contract worker is expected to work with the child.

1. **Ingoa o te tamaiti**: Enter the name of the child the contract worker is assigned to.

   ![Ingoa o te tamaiti dropdown menu]
   - Mere T
   - Mary B
   - Jason D
   - Sharon J
   - Bella S

2. **Haora mō te wiki**: Enter the number of hours per week the contract worker is expected to work with the child.

3. **Rangi**: Enter the days during the week the contract worker will be working with the child.

   Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

**Adding a New Record**

Click on the navigational button to add a new record.
Or click on the down arrow key on the control grids scroll bar.

Deleting a Record

1. Click on the row you want to delete.

2. Click on the navigational button to delete a record.

3. A message box will appear to confirm the deletion of the record.

4. Click on OK to delete the record or Cancel to cancel the request.
Tamariki

Kōrero mo ia Tamariki

Ingoa o te tamaiti

He alrn aromatawai

He Ahutanga Whakamua

Kaimahi

Text boxes

Labels

Combo boxes

Date components

Tōnā Ra Whānau

12/12/2002

Tirohanga whakamuri

Whare Kohungahunga

Rōpu

Momo tangata

Pūtea tautoko

Iwi

Grid components

Navigational buttons

Name component

Title panel

Scroll bar
Kōrero mō ia Tamariki

After clicking on *Tamariki* from the main menu you will view the Tamariki screen. This screen enables children’s details to be checked, updated and entered into the database.

Kōrero mō ia Tamariki maintains information regarding personal details, *Iwi* (tribe), *hapū* (sub-tribe), caregivers of the child, referral details and additional notes for each of the children.

**Personal details**

<table>
<thead>
<tr>
<th>Personal Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingoa ano</td>
<td></td>
</tr>
<tr>
<td>Kaimahi</td>
<td></td>
</tr>
<tr>
<td>Tōnā Rā Whānau</td>
<td>31/01/2000</td>
</tr>
<tr>
<td>Tirohanga whakamuri</td>
<td>2</td>
</tr>
<tr>
<td>Whare Kohungahunga</td>
<td></td>
</tr>
<tr>
<td>Rōpu</td>
<td></td>
</tr>
<tr>
<td>Momo tangata</td>
<td></td>
</tr>
<tr>
<td>Pūtea toutoko</td>
<td></td>
</tr>
<tr>
<td>Iwi</td>
<td></td>
</tr>
<tr>
<td>Hapū</td>
<td></td>
</tr>
</tbody>
</table>

1. **Before entering information in to Kōrero mō ia Tamariki you must first enter the child’s name in the name component at the top of the form.**

2. **Ingoa ano**: Enter any names the child may also be known as.

3. **Kaimahi**: From the drop down combo box select the key worker for the child.
4. **Tōna Rā Whānau:** Enter the child’s date of birth.

5. **Tirohanga whakamuri:** The child’s age will be automatically calculated once the child’s date of birth is entered.

6. **Whare Kohungahunga:** Enter the early childhood centre the child attends.

7. **Rōpu:** Enter the type of early childhood facility the child attends, e.g. Te Kohanga Reo, Kindergarten etc.

8. **Momo tangata:** Enter the child’s ethnicity.

9. **Pūtea tautoko:** Select the check box if the child is moderated.

10. **Iwi:** Enter the Iwi for the child.

    To add multiple Iwi for a child, enter an Iwi, press enter and then press down the arrow key. Enter the next Iwi for the child.

11. **Hapū:** Enter the Hapū for the staff member.
    To add multiple Hapū follow the same process as for Iwi above.
**Child’s Caregivers**

<table>
<thead>
<tr>
<th>Te Whanau (Ngā Mātua)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wāhi Kāinga</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Āu Nama Waea (kāinga)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Āu Nama Waea (mahi)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

1. **Te Whānau (Ngā Mātua):** Enter the name(s) of the primary caregivers of the child.

2. **Wāhi Kāinga:** Enter the home address of the child’s primary caregivers.

3. **Āu Nama Waea:** Enter the caregivers home phone number and work phone number.

The phone numbers are entered using a masked edit component. The masked edit validates the text the user enters against a mask that encodes the valid forms the text can take. In this case the home and work phone numbers entered can take the form (00) 000-0000.

a. Click on the text box.

b. Enter only the numbers for the phone number ignoring any other characters. E.g. for the phone number (09) 678-9999, enter 096789999. The masked edit will correctly format the number.
Referral Details

1. **Te Kaitono**: Enter the name of the person who referred the child. Note: If the referrers details are not stored in the contact list a message box will appear asking you if you would like to enter the referrer into the contact list.

   ![Ngā Whakapa](image)

   Clicking on ‘Yes’ will display another form asking you to enter the name of the organisation the referrer works for and the Rōpu the referrer belongs in.

   ![Rōpu](image)

   ![Kalta pai](image)
Click on *Kei te pai* when you have finished entering the information and the form Te Whakapa will be displayed. (See Te Whakapa on page ? to continue).

2. **Te Rā:** Enter the date the child was referred.

3. **Tou Whanaungatanga/Herenga ki te Tamaiti:** Enter the relationship between the child and the referrer.

4. **He aha ngā take o tēnei tono?:** Enter details of why the child was referred.

**Additional Notes**

*He kōrero hirahira:* Enter any miscellaneous notes that maybe helpful with caring for the child.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

**Navigating through the records**

[Diagram showing navigation buttons: Move to the first record, Move to the next record, Move to the previous record, Move to the last record]
Adding a New Record

Click on the navigational button + to add a new record.

Deleting a Record

1. Navigate to the record you would like to delete.
2. Click on the navigational button - to delete a record.
3. A message box will appear to confirm the deletion of the record. Click on OK to delete the record or Cancel to cancel the request.

Printing the Report for Kōrero mō ia Tamariki

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Whānau: [Ngā mātua, ngā tuakana/teina, me ngā kaitautoko pūrātata ki tēnei tamati]:

Wairua: [Kei te tau te tamiti he aha rānei?]
Tirohanga Tuatahi

This section of Tamariki maintains details of the initial evaluation of a child.

1. Select the tabbed section Whānau:
   Whānau: (Ngā matua, ngā tuakana/teina, me ngā kaitautoki piriata ki tēnei tamaiti: Enter the names of the parents, brothers/sisters, and significant others who share a close relationship with the child and family.

2. Select the tabbed section Ko te Pūtake o te Tono:
   Ko ēnei ngā mea āhua uaua ki a ia: Enter details of what the child finds difficult.

3. Select the tabbed section Ona painga:
   Ko ēnei ngā mea tino kaha/pai o taku tamaiti: List the details of what the child likes and/or is good at.

4. Select the tabbed section Ngā uaua:
   Ko te Pūtake o te Tono: Enter the key referral issues for the child.

1. Select the tabbed section Wairua:
   Wairua: (Kei te tau te tamaiti he aha rānei?): Comment on how the child settles within the environment and their well-being.

2. Select the tabbed section Mouri Ora:
Mouri Ora: (Kei te aro ia ki ngā mai? He aha ōnā kaha?): Comment on how the child attends to activities and their motivational factors.

3. Select the tabbed section Hau Ora:
   Hau Ora: (Kei te pēhea tōnā tiaki i a ia anō?): Comment on what self-help and self-concept skills and awareness are present.

4. Select the tabbed section Hau Whenua:
   Hau Whenua: (Kei te pēhea te noho I roto I te whānau? Ka pā ōnā uaua ki ētahi atu?): Comment on how the child relates to and interacts with family and peers and whether specific needs or difficulties impact on this and/or other areas of development.

5. Select the tabbed section Hau Moana:
   Hau Moana: (Ka taea e ia te whai haere i ngā mahi o te wā/rā? Pēhea tana māramatanga me te kōrero o te reo?): Comment on how the child responds to routines or directions and how the child communicates and shows understanding of communication.

6. Select the tabbed section Hau Tangata:
   Hau Tangata: (Kei te pēhea ōnā mahi ā ringa, ā hinengaro, ā ti nana): Comment on fine and gross motor skills and cognitive development.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

Deleting a Record

1. Navigate to the record you would like to delete.

2. Click on the navigational button to delete a record.

3. A message box will appear to confirm the deletion of the record.

4. Click on OK to delete the record or Cancel to cancel the request.
Printing the Report for Tirohanga Tuatahi

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
He ahu aromatawai: He Aromatawai

Kōrero mō ia Tamariki | Tirohanga Tuatahi | He ahu aromatawai | He Ahutanga Whakamua

He Aromatawai

Whakarapopoto Mahi

He Aromatawai

Wairua | Mouri Ora | Hau Ora | Hau Aio | Hau Whenua | Hau Moana | Hau Tangata

Tamariki

Ka whakalite te whanuitanga o nga tokomouri

Kua timata te whakapuaki i ona ake tokomouri, ka aro atu hoki ki te tokomouri o ona hoa

Ina e taea ana, ka tautoko nga uuuitanga o etahi atu, a ka toro ki tetahi atu ranei hei awhina.

Kiaikō/Kaitiaki

Ka tuki awhina ki nga tamariki kia whakapuaki tika to ratou tokomouri e.g. Te kōrero tuturu mo te mahi tika; Te whakamahi ahuratanga tika

Matua

Ka whakatauahia te whakapuaki tika i ou ratou ake tokomouri nga; Ko te tumanako he whakapuaki a waha, engan kei te mōhio ka ona e taea tenet ene; momo whakapuaki. He hononga o tenet wahanga ki te wahanga hau ora.
He Aromatawai

He Aromatawai is an assessment report showing the progress of a specific child. The information in the report is not stored in the database. It is a standard report that represents the level a child is at in regards to certain activities, behaviours etc. The report can be saved, and later retrieved to compare the progress the child has made. He Aromatawai is divided into three sections:

- He Aromatawai
- Reo: Anei etahi tauira reo ka rangoa
- Korero Whakarapopoto

He Aromatawai

Select each section of the tab control and check the corresponding check box to determine the level the child is currently at. Selecting the first check box for level 1, the second for level 2 and the third for level 3. The corresponding picture for that level will appear in the image component e.g.
Click on the button  "Tamariki: He ahu aromatawai" to clear all check boxes and images.

To change the main text from Māori to English and vice versa, click on the main menu option "Tamariki: He ahu aromatawai".

The following form will appear. On the Reo section select your choice of language.
Reo: Anei etahi tauira reo ka rangoa

Enter some samples of Māori language being used by the child, teacher(s) and parent(s). Click on the tab control to change from child, teacher(s) and parent(s).

Click on the button **Wkakakorengia te katoa** to clear all text.

Korero Whakarapopoto

Enter the summary of the child’s assessment.

Click on the button **Wkakakorengia te katoa** to clear all text.
Printing the Report for He Aromatawai

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
He ahu aromatawai: Whakarapopoto Mahi

Whakapopoto Mahi

Rā 11/09/2002
Wā 2 15 pm

Ko wai i konei

Ngā mahi ako

Ngā mātakitaki
Whakarapopoto Mahi

Whakarapopoto Mahi contains information on a staff member's home visit with a child. The learning activities, observational notes, suggestions, comments, and the date of the next appointment are recorded.

1. **Rā**: Enter the date of the appointment.
2. **Wā**: Enter the time of the appointment.
3. **Wahi**: Enter the place where the visit occurred.
4. **Ko wai i konei**: Enter the names of those who were present during the visit.

Scroll down to continue.
1. **Ngā mahi ako**: Enter the learning activities of the child.

2. **Ngā mātakikitaki**: Enter any observations notes from the visit.

3. **Ngā whakāro puaki**: Enter suggestions.

4. **Hononga ki te whānau**: Enter link to whānau.

---

1. **He korero anō**: Enter any comments.

2. **Rā ka hui anō**: Enter the date for the next home visit.

3. **Wā ka hui anō**: Enter the time for the next home visit.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

**Navigating through the records**

- Move to the first record
- Move to the next record
- Move to the previous record
- Move to the last record
Adding a New Record

Click on the navigational button + to add a new record.

Deleting a Record

1. Navigate to the record you would like to delete.
2. Click on the navigational button – to delete a record.
3. A message box will appear to confirm the deletion of the record.
4. Click on OK to delete the record or Cancel to cancel the request.

Printing the Report for Whakarapopoto Mahi

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
He Ahutanga Whakamua

Ingoa o te tamaiti

Kūrero mō ia Tamariki | Tirohanga Tuatahi | He ahu aromatawai | He Ahutanga Whakamua

Ko te ra/ka hui ano 20/11/2002 | 1 | :00 | pm

He korero anō

Ko enei nga tangata i hui ai, i whakarite i tenei ahutanga whakamua
He Ahutanga Whakamua

The early intervention plan contains teaching goals and strategies to support the child’s development. The plan is based on assessment as well as parent and family priorities and routines. The meeting to evaluate the child’s needs can be attended by whanau (family), hapu (sub-tribal relations) and iwi (tribal relations).

1. Ingoa o te Kaimahi: Select from the drop down combo box the name of the staff member who recorded and wrote the plan.
2. Rā: Enter the date of the meeting.
3. Ko te ra/ka hui ano: Enter the date and time of the next meeting.
4. He korero ano: Enter any additional comments.
5. He ēnei nga tangata i hui ai, i whakarite i tēnei ahutanga whakamua: Click on the button to enter the names of the people involved in the meeting.

Click on the navigational button to save the changes to the record, or click on the navigational button to cancel the changes.

Navigating through the records

Adding a New Record

Click on the navigational button to add a new record.
Deleting a Record

1. Navigate to the record you would like to delete.

2. Click on the navigational button to delete a record.

3. A message box will appear to confirm the deletion of the record.

4. Click on **OK** to delete the record or **Cancel** to cancel the request.

---

Printing the Report for He Ahutanga Whakamua

1. Click on the menu item Whakakōnae.

2. Then on the menu item Tiro tānga.
Te Whāriki – He Ahu Whakamua mā
Te Whāriki – He Ahu Whakamua mā

1. Rā: Enter the date of the planning meeting.
2. Ngā Taumata whahirahira: Enter the names of those who attended the meeting.
3. Ngā Mōhiotanga: Enter details of what the child knows and what they’re doing that’s good.
4. Ngā Whāinga whakako: Enter the details of the goals that are being worked towards.
5. Ngā Rautaki whakako: Enter the names of those who will be working towards these goals.
6. Ngā Raueme: Enter details of the resources required.
7. Ngā Arotakenga: Enter details of the evaluation of the meeting.

Adding a New Record

Click on the navigational button + to add a new record.

Deleting a Record

1. Navigate to the record you would like to delete.
2. Click on the navigational button – to delete a record.
3. A message box will appear to confirm the deletion of the record.
4. Click on OK to delete the record or Cancel to cancel the request.
Printing the Report for Te Whāriki – He Ahu Whakamua mā

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
Ngā Whakapa

The contact list contains information on organisation that Ohomairangi associate with. These may be specific people or organisation that referred the child/ren, Early Childhood Centres, General Practitioners etc.

1. **Ingoa**: Enter the name of the contact person.
2. On the tab control select the type of organisation. The following types are available:
   - Matauranga
   - Hauora
   - Toko Te Ora
   - ano / ētahi atu
   - Te katoa
3. **Rōpu Mahi**: Enter the name of the organisation.
4. **Wahi Tuku Reta**: Enter the street address of the contact person.
5. **Suburb**: Enter the suburb of the contact person.
6. **Tāone**: Enter the city or town.
7. **Wahi Tuku Reta**: Enter the postal address.
8. **Nama Waea**: Enter the phone number.
9. **Waea Whakaahua**: Enter fax number.
10. **Imera**: Enter their email address.
11. **Korero ano**: Enter any additional comments.
12. **Kape tā**: If you would like to include the organisation in reports, make sure this check box is checked.

Navigating through the records
Adding a New Record

Click on the navigational button \( + \) to add a new record.

Deleting a Record

1. Navigate to the record you would like to delete.
2. Click on the navigational button \( - \) to delete a record.
3. A message box will appear to confirm the deletion of the record.
4. Click on OK to delete the record or Cancel to cancel the request.

Printing the Report for Ngā Whakapa

1. Click on the menu item Whakakōnae.
2. Then on the menu item Tiro tānga.
3. Select the type of report you would like to print.
Ripota

- Whakapapa whakarongo
- Whakapaia kaimahi
- Whakapaia tamariki

Ngā ripota: ma tūtū, ma rua te mara mārama.

Ngā papatauira kaimahi:
- Korero mo ia kaimahi
- Ratakia Mahi
- Whakapakari Tanga
- Whakatau Mahi
- Whakapakari Kaimahi
- Utunga

Ngā papatauira tamariki:
- Korero mo ia tamariki
- He Aromatawai
- Whakarapopoto Mahi
- He Ahutanga Whakamua
- Te Whāriki
- He Tiro Whanui
Ripota

There are various outputs for the system provided as reports. The reports are divided into three sections:

- **Ripota:** derived reports that represent multiple aspects of the system for special reporting requirements.
  - Ngā Ripota Matua
  - Ngā Huritau a Nga Tamariki
  - Taipakeke
  - Rārangi Arowhai

- Ngā papatauira kaimahi: standard reports for the kaimahi
  - Kōrero mo ia Kaimahi
  - Rātaka Mahi
  - Kaimahi mo te wa Rātaka Mahi
  - Te Whakapakari Tangata
  - Te Whakatau Mahi
  - Te Whakapakari Kaimahi
  - Utunga

- Ngā papatauira tamariki: standard reports for the tamariki
  - Korero mo ia tamariki
  - He Aromatawai
  - Whakarapopoto Mai
  - He Ahutanga Whakamua
  - Te Whaariki
  - He Tiro Whanui

All reports can be viewed by clicking on the relevant button.

**Ngā Ripota Matua**

The Milestones Report displays the distribution of hours for Early Intervention services provided for children during a set period.
1. Click on the [Ngā ripota matua] button. The following form will appear.

2. Select the period in which you would like the information in the report to represent.
3. Click on [Kei te pai] to continue or [Whakakorengia] to return to the form Ripota.

Ngā Huritau a ngā Tamariki (Children’s Birthdays)
Ngā Huritau a ngā Tamariki displays a list of the children’s birthdays separated into the month in which they were born.

Taipakeke (Report on the Children’s Age)
A report showing how many children of different age groups are currently in the client-base.

Rārangi Arowhai (Checklist)
Rārangi Arowhai relates to the checklist found in the form tamariki. The report informs staff of what actions have taken place and what actions require urgent attention in regards to the child’s educational needs.

The following are the templates for all the reports.
## Details of Children Services Provided

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Birth</th>
<th>Paraprofessional Support</th>
<th>Early Intervention Teaching</th>
<th>Specialist Speech</th>
<th>Specialist Educational</th>
<th>Service Co-ordination</th>
<th>Specialist AODC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bella S</td>
<td>31/01/2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Jason D</td>
<td>08/04/2001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Mary B</td>
<td>24/11/2000</td>
<td>7</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mere T</td>
<td>27/11/1998</td>
<td></td>
<td>6</td>
<td></td>
<td>5</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Sharon J</td>
<td>24/09/1999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>7</td>
<td>11</td>
<td>12</td>
<td>9</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Hours recorded in half hour blocks

All Early Intervention and Specialist Services are Centre based
Ngā huritau a ngā tamariki

<table>
<thead>
<tr>
<th>Nga</th>
<th>Huritau</th>
<th>Tamariki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hānuere</td>
<td>Bella S</td>
<td>31 2000</td>
</tr>
<tr>
<td>Äperira</td>
<td>Jason D</td>
<td>8 2001</td>
</tr>
<tr>
<td>Hepetema</td>
<td>Sharon J</td>
<td>24 1999</td>
</tr>
<tr>
<td>Noema</td>
<td>Mary B</td>
<td>24 2000</td>
</tr>
<tr>
<td>Tapeka</td>
<td>Mere T</td>
<td>27 1998</td>
</tr>
</tbody>
</table>

5
Te mahitahi ki ngā tamariki, whanau me ngā whare kohunghunga

<table>
<thead>
<tr>
<th>Ngā tumanako</th>
<th>Ngā ahuatanga arotake</th>
<th>Nga korero arotake</th>
<th>Te Arotake</th>
</tr>
</thead>
</table>

Mahi / Kirimana anō

<table>
<thead>
<tr>
<th>Ngā tumanako</th>
<th>Ngā ahuatanga arotake</th>
<th>Nga korero arotake</th>
<th>Te Arotake</th>
</tr>
</thead>
</table>

Mahi a ropumahi, ropu whakahaere ranei

<table>
<thead>
<tr>
<th>Ngā tumanako</th>
<th>Ngā ahuatanga arotake</th>
<th>Nga korero arotake</th>
<th>Te Arotake</th>
</tr>
</thead>
</table>
Ohomairangi Trust  
Early Intervention Service  
PO Box 23185 Hunters Corner Papatoetoe

He Ahu Whakamua mo

<table>
<thead>
<tr>
<th>Wairua</th>
<th>Whāinga</th>
<th>Te whakamihi me tona wa</th>
<th>Utu</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Mouri Ora</th>
<th>Whāinga</th>
<th>Te whakamihi me tona wa</th>
<th>Utu</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hau Ora</th>
<th>Whāinga</th>
<th>Te whakamihi me tona wa</th>
<th>Utu</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hau Aio</th>
<th>Whāinga</th>
<th>Te whakamihi me tona wa</th>
<th>Utu</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hau Whenua</th>
<th>Whāinga</th>
<th>Te whakamihi me tona wa</th>
<th>Utu</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hau Moana</th>
<th>Whāinga</th>
<th>Te whakamihi me tona wa</th>
<th>Utu</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hau Tangata</th>
<th>Whāinga</th>
<th>Te whakamihi me tona wa</th>
<th>Utu</th>
</tr>
</thead>
</table>
## Ohomairangi Trust Rātaka

<table>
<thead>
<tr>
<th>Mane</th>
<th>Tūrei</th>
<th>Wenerei</th>
<th>Tāte</th>
<th>Paraire</th>
<th>Paunga o te wiki</th>
<th>Haora</th>
<th>Korero ano</th>
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<td><strong>Te whakahaeretanga o Ohomairangi</strong></td>
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<td><strong>Whakaaetanga</strong></td>
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<td>Toputanga haora</td>
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</tbody>
</table>

Wharangi1
## Ohomairangi Trust Rātaka

<table>
<thead>
<tr>
<th>Ingoa o te Tamaiti</th>
<th>Haora mahi</th>
<th>Mane</th>
<th>Tūrei</th>
<th>Wenerei</th>
<th>Tātē</th>
<th>Paraire</th>
<th>Haora</th>
<th>Korero ano</th>
</tr>
</thead>
</table>

## Whakaaetanga

<table>
<thead>
<tr>
<th>Toputanga haora</th>
</tr>
</thead>
</table>

Wharangi1
## Rārangi arowhai

### Aroha Gray

<table>
<thead>
<tr>
<th>Date Referred</th>
<th>Allocated to Key worker</th>
<th>First Contact</th>
<th>Assessment Summary</th>
<th>Most Recent Contact</th>
<th>Review Assessment</th>
</tr>
</thead>
</table>

### Mera Penehira

<table>
<thead>
<tr>
<th>Date Referred</th>
<th>Allocated to Key worker</th>
<th>First Contact</th>
<th>Assessment Summary</th>
<th>Most Recent Contact</th>
<th>Review Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/08/2002</td>
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<td>1/08/2002</td>
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</tr>
</tbody>
</table>
Ohomairangi Trust Early Intervention Service
He Kohinga Whakāro Mo te Tipuranga o Te Tamaiti

Ingoa o te tamaiti:

Tōna Huritau:

Te Rā Tono Mai:  Tēnei Rā:

Wāhi Kāinga:

Whare Kohungahunga:

Ko te Putake

Whānau:

Hapū me te

Ko ēnei ngā

Ko ēnei ngā

E Whakāe

Tohu o te

Wharangi 1
Te Whakapakari Kaimahi

Tūnga Mahi
Rā Timatanga
Ngā Rā
Ehia Rā
Wānanga
Kaiwhakahaere
Utu S
Wairua:
(Kei te tau te tamaiti he aha rānei?)

Mouri-Ora:
(Kei te aro ia ki ngā mahi? He aha ōna kaha?)

Hau-Ora:
(Kei le pehea tōnā tiaki i a ia anō?)

Hau Whenua:
Kei te pehea te noho i roto i te whānau whānui? Ka pā ōna uaua ki ētahi atu?

Hau Moana:
Ka taea e ia te whai haere i ngā mahi o te wārā? Pēhea tana māramatanga me te kōrero o te reo?

Hau Tangata:
(Kei te pehea ōna mahi ā ringa, ā hinengaro, ā tīnana)

Whānau, Hapu, Iwi Education Plan:
## Claim for Reimbursement of Expenses

<table>
<thead>
<tr>
<th>Details of Travel</th>
<th>Date</th>
<th>From</th>
<th>To</th>
<th>Return KMs</th>
<th>Rate</th>
<th>Amount</th>
<th>Job Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>Date</td>
<td>Details</td>
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<td>Amount</td>
<td>Job Cost</td>
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<tr>
<td>Meals</td>
<td>Date</td>
<td>Details</td>
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<td></td>
<td></td>
<td>Amount</td>
<td>Job Cost</td>
</tr>
<tr>
<td>Sundry</td>
<td>Date</td>
<td>Details</td>
<td></td>
<td></td>
<td></td>
<td>Amount</td>
<td>Job Cost</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>Date</td>
<td>Details</td>
<td></td>
<td></td>
<td></td>
<td>Amount</td>
<td>Job Cost</td>
</tr>
</tbody>
</table>

**TOTAL EXPENSES**

Signed
Date Paid
Cheque No.

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Page 1
### Supervision and Feedback

<table>
<thead>
<tr>
<th>Ngā tumanako</th>
<th>Ngā ahuatanga arotake</th>
<th>Nga korero arotake</th>
<th>Te Arotake</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Signed:

Kaimahi | Rā | Kaimahi | Rā |
Peer Supervisor | Rā | Peer Supervisor | Rā |
He Whakamaarama

Na Te Kopae Piripono me tou tatou mahi rangahau tenei aromatawai i hanga. Ko tona tino kaupapa ko te tirohanga ki te tipuranga o te tamaiti i roto i tona kopae, i roto i tona whanau, hapu, iwi. E hangai ana tenei wahanga o te aromatawai ki te aahuatanga o te tuakana me te teina. E toru nga ropu aromatawai kua uru ki roto, ara, ko nga tamariki, ko nga kaiako/kaitiaki, ko nga matua. (Kei nga matua te tikanga mo te urunga mai o te whanau whanui me tona hapu, iwi). Kua wawahinga te aromatawai nei kia noho i roto i tetahi kaupapa maturanga Maori, ara, ko te 'Mana Kaitiakitanga' (Waikerepuru, 1999)

Te Kohikohinga o Nga Whakaaturanga

E toru nga wahanga o te kohinga nei hei mahi, kia taea ai te whakaoti i tenei aromatawai:

1. Te matakitaki tamariki: Ma nga kaiako/kaitiaki me nga matua enei e whakahaere. He pai mehemea ko etahi o nga matakitaki ka oti i te kainga, ko etahi ki te kopae, ko etahi kei ko atu. Kua apiti nei he pepa matakai, whakaarotahi ki nga aahuatanga o te aromatawai nei, engari ka taea tonu te kohi whakaaturanga ke atu. Kia nui ake i te kotahi matakitanga me oti i mua o te whakaki i te pepa aromatawai nei.

2. Te hui kaitiaki/kaiako: Me whai wa nga kaiako/kaitiaki ki te korero a mua o te whakakingia o te pepa aromatawai. Ma te korero ano i roto i nga huihuinga
Wairua

_Tamariki_

Ka whakakite te whanuitanga o nga tokomouri

Kua timata te whakapuaki i ona ake tokomouritanga, ka aro atu hoki ki te tokomouritanga o ona hoa

Ina e taea ana, ka tautoko nga uiuitanga o etahi atu, a ka toro ki tetahi atu ranei hei awhina

_Kaiako/Kaitiaki_

Ka tuki awhina ki nga tamariki kia whakapuaki tika to ratou tokomouritanga eg. Te korero tuturu mo te mahi tika; Te whakamihihuatanga tika

_Matua_

Ka whakatauirahia te whakapuaki tika i ou ratou ake tokomouritanga NB: Ko te tumanako he whakapuaki a waha, engari kei te mohio kaori etahi e taea tenei momo whakapuaki. He hononga o tenei wahanga ki te wahanga hau ora.

Mouri Ora

_Tamariki_

Ka aro atu ki te whanui o nga taua takaro, nga mahi takaro hoki

E puare ana ki nga whakawhitiwhiti o ona hoa, a, mana ano e timata etahi o ana mahi takaro/ako. Ka whakautia mehemea kei te awhina e tetahi matua.

Mana ano e timata i tana ake mahi takaro, ka noho tau hoki, a ka tautoko etahi atu tamariki kia uru mai ki te takaro

_Kaiako/Kaitiaki_

Ka hanga te marautanga kia nui nga momo takaro ma nga tamariki ano e timata, kia ea hoki te whanuitanga o nga hiahia tamariki

_Matua_

Ka whakatauirahia tona ngakaunui ki te whanuitanga o nga koranganga o te ao

Hau Ora

_Tamariki_

Ka whakakite i etahi o ona uiuitanga eg. Ka tangi ia ina e hiakai ana

Kei te ako ki te whakapuaki whakaaro mo ona uiuitanga Ka mohio, ka whakapuaki hoki ona uiuitanga.

Ka mohio ki era o nga tamariki iti iho, a, ka tautoko hoki

_Kaiako/Kaitiaki_

Ka hangai tika nga whakawhitiwhiti ki nga tamariki, e pa ana ki ou ratou oranga, a-tinana, a-wairua, a-ngakau hoki

_Matua_

Ka whakatauirahia e ia he oranga pai eg. Taha tinana, taha wairua, taha mahi...
Hau Aio

**Tamariki**

Ka aro atu ki nga karakia, nga waiata hoki eg. Ka tau, ka kata, ka matakitaki ranei

Kua timata te uru mai ki nga karakia, nga waiata hoki

Mana ano e timata i tana ake mahi takaro, ka noho tau hoki, a ka tautoko etahi atu tamariki kia uru mai ki te takaro

**Kaiako/Kaitiaki**

Ka hanga te marautanga kia mui nga momo takaro ma nga tamariki ano e timata, kia ca hoki te whanuitanga o nga hiahia tamariki

**Matua**

Ka uru atu nga karakia, nga waiata hoki i roto i nga whakaritenga ia ra, o te kainga

Hau Whenua

**Tamariki**

Ka mohio, ka aro atu hoki ki nga tangata taunga, a, kua tau hoki i roto i tona whanau

Kua tau ki te taha o etahi atu matua

Ka taea te whakaingoatia, te korero hoki mo etahi ahuatanga o tona ake whanau, hapu, iwi. (eg. Maunga, waka, awa etc, ranei ko nga ahuatanga whai take ki tona ake whanau)

**Kaiako/Kaitiaki**

Ka whakakitea tona mohiotanga o ia tamaiti, whanau, hapu, iwi o roto o te Kopae, ia ia e mahi ana i te marautanga. Ka kite te kaha me te pumanawa hoki o ia tamaiti

**Matua**

Kua uru mai ki te whanuitanga o nga mahi a whanau, hapu, iwi (Ahakoa pehea te ahuatanga o tona ake haputanga, iwitanga - tera pea he hanga rereke mo nga tangata e noho tawhiti ana i tou ratou kainga tuturu)

Hau Moana

**Tamariki**

Ka taea te whakatau pai i a ia a muri i tetahi raru pera i te wehenga i ona matua

Ka taea te huri haere i nga wahi kua mohio ketia

Ka tau ia ahakoa nga tinihanga ki nga tikanga mahi. Ka mohio ki nga uauatanga o te huri haere mo nga tamariki nohi, a ka tautoko hoki

**Kaiako/Kaitiaki**

Ka taea te whakanekenke tikanga mahi kia tutuki pai etahi atu akoranga katahi ka puta mai

**Matua**

Ka hanga pai nga tikanga mahi ia ra, ka whakamarama hoki ki nga tamariki ina he tinihanga
Hau Tangata

*Tamariki*

Ka tau ia ahakoa ko ia noaiho, kei te taha ranei o etahi atu

Ka takaro ia ki te taha o etahi atu, a, kua timata ia ki te takaro whakawhiti ki ona hoa

Ka takaro whakawhiti ki ona hoa, a, ka tika hoki ona whakawhitinga ki nga matua. Eg. Pakeke, matua, kaumatua. Ka whakautia hoki i enei whakawhitinga.

*Kaiako/Kaitiaki*

Ka tautoko, ka whakatauirahia hoki nga painga o te tupuranga motuhake, o te tupuranga a whanau, a ropu hoki

*Matua*

Kei te ora pai tona whanaungatanga i roto i te Kopae, te whanau whanui, te hapu me te iwi (Ahakoa pehea te ahuatanga o tona ake haputanga, iwitanga - tera pea he hanga rereke mo nga tangata e noho tawhiti ana i tou ratou kainga tuturu)

Reo: Anei etahi tauira reo ka rangona

Tamaiti

Kaitiaki/Kaiako

Matua
Korero Whakarapopoto:
<table>
<thead>
<tr>
<th>Whakarapopoto Mahi (Intervention Summary)</th>
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<tbody>
<tr>
<td><strong>Ingoa o te tamaiti</strong></td>
</tr>
<tr>
<td><strong>Wāhi (place of visit)</strong></td>
</tr>
<tr>
<td><strong>Ko wai I konei (who was present)</strong></td>
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</tbody>
</table>

| **Ngā mahi ako (learning activities)** |
| **Ngā mātakitaki (observational notes)** |
| **Ngā whakāro puaki (suggestions)** |

| **Hononga ki te whānau (link to whānau)** |
| **He korero anō (comments)** |

| **Whakaritenga hui anō (next appointment)** |
He Ahutanga whakamua ma

(Early Intervention Plan for)

Rā huritau:  

Ra/huritau:

Rā hui:

Ko enei nga tangata i hui ai, hei whakarite i tenei ahutanga whakamua:

(people involved in the planning meeting):

Ingoa  

Hononga ki te tamaiti:

Kei roto i enei tuhinga korero ko nga whainga whakaako, nga rautaki whakaako, hei tautoko i te whakatipuranga o te tamati nei. E hangai ana te katoa o enei korero ki te aromatawai, ki e hiahia me te ahuatanga o ona matua me te whanau hoki.

(This plan contains teaching goals and strategies to support the child's development. The plan is based on assessment as well as parent and family priorities and routines.)

Ko te ra/ka hui ano:

(next meeting daytime):

He korero ano:

(any additional comments):

Na  

(The plan was recorded and written by the above named person)
### He Tiro Whanui

*(Client Survey)*

Kia rongo korero nga matuaa nga kaiako, whanau whanui o te tamaiti

Homai koa i ou whakaro, i ou whakutu ki enei patai, hei awhina i a tatou ki te whakapakari i ou matau mahi. Kia ora.

| Tuatahi:                                    | He aha nga ahuatanga tino pai, tino kaha o Ohomairangi?  
|                                            | *(What are the strengths of Ohomairangi early intervention services? What have been the benefits to you?)* |
| Tuarua:                                    | He aha nga ahuatanga hei whakapakari i te mahi o Ohomairangi?  
|                                            | *(What improvements could you suggest to support Ohomairangi early intervention service?)* |
| Tuatoru:                                   | Tohungia nga mea kua kitea e koe i roto i nga mahi o Ohomairangi  
|                                            | *(Tick the boxes that apply to you)* |
|                                            | Hangai ana nga mahi ki nga ahuatanga o toku ake (te) whanau (hapu & iwi).  
|                                            | *(Intervention ie related to my/childs family, and hapu and iwi as appropriate).* |
|                                            | Kei te marama pai au ki nga mahi akoranga mo taku/te tamaiti.  
|                                            | *(I understand the intervention strategies and goals).* |
|                                            | Kua whai wahi au i roto i nga whakaritenga katoa mo taku/te tamaiti eg aromatawai, mahere ako.  
|                                            | *(I have participated in all aspects of intervention eg planning, goal setting, assessment).* |
|                                            | Kua whai wahi au ki te tuku patai, kia rongo whakautu hoki, ina kaore au e marama.  
|                                            | *(I have been able to ask questions and have them answered when I don't understand).* |
Appendix D

Glossary of Māori Terms
**Glossary**

### A.

<table>
<thead>
<tr>
<th>Aromatawai</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Āu Nama Waea (Kāinga)</td>
<td>Telephone Details (home)</td>
</tr>
<tr>
<td>Āu Nama Waea (Mahi)</td>
<td>Telephone Details (work)</td>
</tr>
<tr>
<td>Āwhina</td>
<td>Help</td>
</tr>
</tbody>
</table>

E puare ana ki ngā whakawhitihiti o ōna hoa, a, mana anō e tīmata ētahi o ana mahi tākaro/ako. Ka whakautia mehemea kei te āwhina e ūtahi matua. Responds to interactions from others and is beginning to initiate some activities for self. Maintains a level of involvement with assistance (adult).

### E.

<table>
<thead>
<tr>
<th>E Hia Rā</th>
<th>Number of Days</th>
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<tbody>
<tr>
<td>ētahi atu</td>
<td>Sundry</td>
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</tbody>
</table>

### H.

<table>
<thead>
<tr>
<th>Haora</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haora mahi</td>
<td>Hours</td>
</tr>
<tr>
<td>Haora mō te wiki</td>
<td>Hours per week</td>
</tr>
<tr>
<td>Hapū</td>
<td>Sub-tribe</td>
</tr>
</tbody>
</table>

Hau Moana: (Ka taea e ia te whai haere i ngā mahi o te wā/rā? Pēhea tana māramatanga me te korero o te reo?) Hau-Moana: (How does the child respond to routines and directions? How does the child communicate and show understanding of communication?)

Hau Tangata: Hau-Tangata: (Comment on fine and gross motor skills, and cognitive development)

<table>
<thead>
<tr>
<th>Hauora</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hau-Ora: (Kei te pēhea tōnā tiaki i a ia anō?)</td>
<td>Hau-Ora (What self help and self concept skills and awareness are present?)</td>
</tr>
</tbody>
</table>

Hau-Whenua: (Kei te pēhea te noho i roto i te whānau? Ka pā ōna uaea ki ūtahi atu?) Hau-Whenua (How does the child relate to and interact with family and peers? Do specific needs or difficulties impact on this and/or other areas of development)

He aha Ngā take o tēnei tono?

He ahu aromatawai Assessment Plan

He Aromatawai

He kōrero hirihira Special Notes

He māuiuiitanga kei ā koe? Do you have any illnesses or allergies?

He rongoa kāore e pai ki tōu tīmara? Are you allergic to any medication?

He take anō e pā ana ki tōu oranga? Do you have any other health issues?

hīporete Password

Hokinga mai Return
<table>
<thead>
<tr>
<th>I.</th>
<th>Email</th>
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</thead>
<tbody>
<tr>
<td>Imera</td>
<td>Supports the needs of others when able, and/or seeks help from tuakana or other</td>
</tr>
<tr>
<td>Inoa</td>
<td>Name</td>
</tr>
<tr>
<td>Inoa anō</td>
<td>Also known as</td>
</tr>
<tr>
<td>Inoa o te tamaiti</td>
<td>Child's Name</td>
</tr>
<tr>
<td>Iwi</td>
<td>Tribe</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>K.</th>
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</thead>
<tbody>
<tr>
<td>Ka aro atu ki nga karakia, ngā waiata hoki eg. Ka tau, ka kata, ka matakitaki ranei</td>
<td>Responds to karakia and waiata eg. Settles, babbles, laughs, and/or watches others</td>
</tr>
<tr>
<td>Ka aro atu ki te whanui o nga taonga takaro, nga mahi takaro hoki</td>
<td>Shows an interest in a range of toys and activities</td>
</tr>
<tr>
<td>Ka hanga pai nga tikanga mahi ia ra, ka whakamarama hoki ki nga tamariki ina he tinihanga</td>
<td>Is able to organise appropriate routines for children each day, and supports children to cope with changes to routine</td>
</tr>
<tr>
<td>Ka hanga te marautanga kia nui nga momo takaro ma nga tamariki ano e timata, kia ea hoki te whanuitanga o nga hiahi tamariki</td>
<td>Structures curriculum to allow for a range of child initiated activities and other activities, to meet the range of children's needs</td>
</tr>
<tr>
<td>Ka hangai tika nga whakawhitihitihi ki nga tamariki, e pa ana ki ou ratou oranga, a-tinana, a-wairua, a-ngakau hoki</td>
<td>Interact appropriately with children and adults in relation to their physical, emotional and spiritual well being</td>
</tr>
<tr>
<td>Ka mohio ki era o nga tamariki iti iho, a, ka tautoko hoki</td>
<td>Is able to recognise and express own physical needs. Recognises needs of younger children and supports their expression and/or fulfilment</td>
</tr>
<tr>
<td>Ka mohio, ka aro atu hoki ki nga tangata taunga, a, kua tau hoki i roto i tona whanau</td>
<td>Recognises and responds to familiar adults and is secure in own whanau</td>
</tr>
<tr>
<td>Ka taea te huri haere i nga wahi kua mohio ketia</td>
<td>Is able to transition between familiar settings with ease eg. Home, marae, kopae</td>
</tr>
<tr>
<td>Ka taea te whakaingoatia, te korero hoki mō etahi ahuatanga o tona ake whanau, hapu, iwi. (eg. Maunga, waka, awa etc, ranei ko nga ahuatanga whai take ki tona ake whanau, hapu, iwi)</td>
<td>Is able to name and talk about aspects of own whanau, hapu and iwi eg. Maunga, iwi, hapu and family members</td>
</tr>
<tr>
<td>Ka taea te whakanekeke tikanga mahi kia tutuki pai etahi atu akoranga katahi ka puta mai</td>
<td>Prompts children to express emotions in appropriate ways using positive reinforcement and specific praise</td>
</tr>
<tr>
<td>Ka taea te whakatau pai i a ia a muri i tetahi raru pera i te wehenga i ona matua</td>
<td>Is able to be settled after an (emotional/physical) upset with reasonable ease eg. In relation to separation from parents</td>
</tr>
<tr>
<td>Ka takaro ia ki te taha o etahi atu, a, kua timata ia ki te takaro whakawhiti ki ona hoa</td>
<td>Plays alongside others and is beginning to engage in interactive play</td>
</tr>
<tr>
<td>Ka takaro whakawhiti ki ona hoa, a, ka tika hoki ona whakawhitinga ki nga matua. Eg. Pakeke, matua, kaumatua. Ka whakautia hoki i enei whakawhitinga.</td>
<td>Plays with other children and actively engages with adults in appropriate ways eg.</td>
</tr>
<tr>
<td>Ka tau ia ahakoa ko ia noaiho, kei te taha ranei o etahi atu</td>
<td>Enjoys being around others aswell as having time alone</td>
</tr>
</tbody>
</table>
Ka tau ia ahakoa nga tinhanga ki nga tikanga mahi. Ka mohio ki nga uuaatanga o te huri haere mō nga tamariki nohi, a ka tautoko hoki.  
Ka tautoko, ka whakatauirahia hoki nga painga o te tupuranga motuhake, o te tupuranga a whanau, a ropu hoki.  
Ka tuki awhina ki ngā tamariki kia whakapuaki tika to ratou tokomuri tanga eg. Te korero tuturu mō te mahi tika; Te whakamihī ahuatanga tika.  
Ka uru atu ngā karakia, nga waiata hoki i roto i ngā whakaritenga ia ra, o te kainga.  
Ka whakahuatia i etahi karakia, i etahi waiata hoki, a, kei te mohio hoki ki ngā putaketanga o te korero. Ka whakatu tenei mohiotanga i a ia e takaro ana, ranei i roto i ona whakautu ki nga patai o nga kalako/kaitiaki.  
Ka whakakite i etahi o ona uuiutanga eg. Ka tangi ia ina i haakai ana  
Ka whakakite te whanuitanga o nga tokomouri  
Ka whakakitea tona mohiotanga o ia tamaiti, whanau, hapu, iwi o roto o te Kopae, i a ia e mahi ana i te marautanga. Ka kite te kaha me te pumanawa hoki o ia tamaiti.  
Ka whakatauirahia e ia he oranga pai eg. Taha tinana, taha wairua, taha mahi,...  
Ko te tumanako he whakapuaki a waha, engari kei te mohio kaori etahi e taea tenei momo whakapuaki. He hononga o tenei wahanga ki te wahanga hau ora.  
Ka whakatauirahia tona ngakaunui ki te whanuitanga o nga akoranga o te ao  
Ka whakatauirahia tona ngakaunui ki te whanuitanga o nga akoranga o te ao Models an enthusiastic approach to own learning and life experiences  
Kai  
Kaimahi  
kaimahi mō te wa  
Kaiwhakahaere  
Kape tā  
kaua e waiho kia mahea  
Kei te ako ki te whakapuaki whakaaro mo ona uuiutanga Kahoki ona uuiutanga. mohio, ka whakapuaki  
Kei te orai pai tona whananungatanga i roto i te Kopae, te whanau whanui, te hapūi me te iwi (Ahakoa peheha te ahuatanga o tona ake haputanga, iwitanga - tera pea he hanga rereke mo ngā tangata e noho tawhiti ana I tou ratou kainga tuturu)  
Kei te pai  
Kei te pehea ōnā mahi ā ringa, ā hinengaro, ā tīnana  

Key Referral Issues  
Ko te Pūtake o te Tono  
Kī  
kīmihia  
Find

Copes with changes in routine and environment. Recognises need and supports transition of other children also.  
Encourages and models both independent and interdependent development within.  
Prompts children to express emotions in appropriate ways using positive.  
Include karakia and waiata in daily routines.  
Is able to recite karakia and waiata, and demonstrates an understanding of basic elements eg. Includes in play and/or responds appropriately to questions.

Can express some basic physical needs eg. Cries when hungry or tired.  
Displays a range of emotions.  
Contributions to curriculum planning demonstrate an understanding of individual children, whanau, hapu and iwi. Strengths and potential are recognised.  
Model appropriate expression of emotions.  
Models a healthy balanced lifestyle eg. Diet, exercise, work and recreation.

Meals  
Staff member  
Temporary staff  
Facilitator  
Print  
Cannot be blank!  
Is learning to express physical needs verbally.  
Models healthy relationships with others in kopaes, whanau, hapu and iwi.
<table>
<thead>
<tr>
<th>kimihia te kaimahi</th>
<th>Find staff member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kirimana</td>
<td>Work Contract</td>
</tr>
<tr>
<td>Kirimeta</td>
<td>Kilometres</td>
</tr>
<tr>
<td>Ko ēnei ngā mea āhua uaua ki a ia</td>
<td>These are what our child finds difficult:</td>
</tr>
<tr>
<td>Ko ēnei ngā mea tino kaha/pai o taku tamaiti</td>
<td>These are what our child likes and/or is good at:</td>
</tr>
<tr>
<td>Ko te ingoa i runga i tōu pūtea peke</td>
<td>Name of your bank account</td>
</tr>
<tr>
<td>Kōrero anō</td>
<td>Comments</td>
</tr>
<tr>
<td>Kōrero mo ia kaimahi</td>
<td>Personal Details</td>
</tr>
<tr>
<td>Kua mohio, kua marama ki te whanuitanga o ngā karakia, nga waiata hoki, a, ka taea te whakawhiti kōrero ki nga tamariki me ngā matua e pa ana ki enei. Ka kite hoki I tona ngakau nui ki ngā āhuatanga o te karakia me te waiata.</td>
<td>Know a range of karakia and waiata and can discuss vocabulary and meaning with other adults and children. Includes an element of enjoyment and portrays contextual expression.</td>
</tr>
<tr>
<td>Kua tau ki te taha o etahi atu matua</td>
<td>Has developed relationships with other adults whom s/he is happy to be left with</td>
</tr>
<tr>
<td>Kua timata te uru mai ki nga karakia, nga waiata hoki</td>
<td>Is beginning to participate in karakia and waiata</td>
</tr>
<tr>
<td>Kua timata te whakapuaki i ona ake tokomouritanga, ka aro atu hoki ki te tokomouritanga o ona hoa</td>
<td>Responds to the emotions of others and is beginning to express own emotions</td>
</tr>
<tr>
<td>Kua uru mai ki te whanuitanga o nga mahi a whanau, hapu, iwi (Ahakoa pehea te āhuatanga o tona ake haputanga, īwitanga - te ra peha he hanga rereke mo nga tangata e noho tawhiti ana i tou ratou kainga tuturu)</td>
<td>Involvement in whanau, hapu and iwi is apparent at a variety of levels</td>
</tr>
<tr>
<td>kua utua</td>
<td>Paid</td>
</tr>
</tbody>
</table>

**M.**

<table>
<thead>
<tr>
<th>mahi / kirimana anō</th>
<th>Project Work/Other Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mahi a ropumahi, ropu whakahaere ranei</td>
<td>Team and/or Skills and Responsibilities</td>
</tr>
<tr>
<td>Mai</td>
<td>From</td>
</tr>
<tr>
<td>Mana ano e timata i tana ake mahi takaro, ka noho tau hoki, a ka tautoko etahi atu tamariki kia uru mai ki te takaro</td>
<td>Can initiate and sustain own play and encourages other children's involvement</td>
</tr>
<tr>
<td>mana whakahaere</td>
<td>Administration</td>
</tr>
<tr>
<td>Matauranga</td>
<td>Education</td>
</tr>
<tr>
<td>Mauri-Ora: (Kei te aro ia ki ngā mahi? He aha ōnā kaha?)</td>
<td>Mouri-Ora: (How does the child attend to activities? Motivational factors.)</td>
</tr>
<tr>
<td>Momo tangata</td>
<td>Ethnicity</td>
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**N.**

<table>
<thead>
<tr>
<th>Nama IRD</th>
<th>IRD number</th>
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<tbody>
<tr>
<td>Nama Waea (kāinga)</td>
<td>Phone (home)</td>
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<tr>
<td>Nama Waea (waea pūkoro)</td>
<td>Phone (mobile)</td>
</tr>
<tr>
<td>Ngā āhuatanga arotake</td>
<td>Review Measures, processes, data</td>
</tr>
<tr>
<td>Ngā āhuatau</td>
<td>Birthdays</td>
</tr>
<tr>
<td>Ngā āhuatau a ngā tamariki</td>
<td>Children's birthdays</td>
</tr>
<tr>
<td>Ngā āhuatau a Ngā tamariki</td>
<td>Children's birthdays</td>
</tr>
<tr>
<td>Ngā kōrero arotake</td>
<td>Review Comments</td>
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<tr>
<td>Ngā papa tauirū tamariki</td>
<td>Children's templates</td>
</tr>
<tr>
<td>Ngā rā</td>
<td>Dates</td>
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<tr>
<td>Ngā ripoata matua</td>
<td>Milestones report</td>
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<tr>
<td>-------------------------</td>
<td>-----------------------------</td>
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<tr>
<td>Ngā Tamariki o te Kaimahi</td>
<td>Staff members clients/children</td>
</tr>
<tr>
<td>Ngā Tika Ngā Tiaki</td>
<td>Measures</td>
</tr>
<tr>
<td>Ngā tumanako</td>
<td>Expectations</td>
</tr>
<tr>
<td>Ngā uaua</td>
<td>Difficulties</td>
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<tr>
<td>Ngā whakakpa</td>
<td>Contacts</td>
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<tr>
<th>O.</th>
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<tbody>
<tr>
<td>Ōna painga</td>
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<td>Rā Timata</td>
<td>Date from</td>
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<td>Rā Timatanga</td>
<td>Start Date</td>
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<tr>
<td>Rā Whakamutu</td>
<td>Date to, End date</td>
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<tr>
<td>Rā Whānau</td>
<td>Date of birth</td>
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<tr>
<td>Rangi</td>
<td>Days</td>
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<td>Rātaka Mahi</td>
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<td>Ripoata</td>
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<td>Rūpu</td>
<td>Team</td>
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<td>Tamariki</td>
<td>Children</td>
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<tr>
<td>Tāna Hononga ki ā koe</td>
<td>Relationship to you</td>
</tr>
<tr>
<td>Tāna Nama Waea</td>
<td>General Practitioner's phone</td>
</tr>
<tr>
<td>Tāna Nama Waea (kāinga)</td>
<td>Emergency Phone (home)</td>
</tr>
<tr>
<td>Tāna Nama Waea (waea pūkoro)</td>
<td>Emergency Phone (mobile)</td>
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<td>tāone</td>
<td>City</td>
</tr>
<tr>
<td>Tau</td>
<td>Year</td>
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<tr>
<td>Te Arotake</td>
<td>Final Review</td>
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<tr>
<td>Te ata whakararangi</td>
<td>Details</td>
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<tr>
<td>Te He</td>
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<td>Te Kaitono</td>
<td>Referrer</td>
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<tr>
<td>Te katao</td>
<td>All</td>
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<tr>
<td>Te mahitahi ki Ngā tamariki, whanau me ngā whare kohungunga.</td>
<td>Work with Children, Families and Early Childhood Facilities</td>
</tr>
<tr>
<td>Te nama pūtea pēke</td>
<td>Bank number</td>
</tr>
<tr>
<td>Te nui</td>
<td>Amount</td>
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<td>Te Rā</td>
<td>Date referred</td>
</tr>
<tr>
<td>Te ra utu</td>
<td>Date Paid</td>
</tr>
<tr>
<td>te reo pākehā</td>
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</tr>
<tr>
<td>Te Tari Matauranga</td>
<td>Ministry of Education</td>
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<tr>
<td>Te whakahaeretanga o Ohomairangi</td>
<td>Ohomairangi Management</td>
</tr>
<tr>
<td>Te whakamahi me tona wa</td>
<td>Action and Timeline</td>
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<tr>
<td>Te Whakapakari Kaimahi</td>
<td>Professional Development</td>
</tr>
<tr>
<td>Te Whakapakari Tangata</td>
<td>Personal Development</td>
</tr>
<tr>
<td>Te whakatau mahi</td>
<td>Performance Agreement</td>
</tr>
<tr>
<td>Te Whanau (Ngā Mātua)</td>
<td>Family (Parents/Caregivers)</td>
</tr>
<tr>
<td>Tiro tanga</td>
<td>Print preview</td>
</tr>
<tr>
<td>Tirohanga Tuatahi</td>
<td>Initial Evaluation</td>
</tr>
<tr>
<td>Toko I te Ora</td>
<td>Social Services</td>
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<tr>
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<tr>
<td>toputanga kiromita</td>
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<tr>
<td>Tōu tākuta</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Tou Whanaungatanga/Herenga ki Te Tamaiti</td>
<td>Relationship</td>
</tr>
<tr>
<td>Tōu Whare Pūtea</td>
<td>Bank</td>
</tr>
<tr>
<td>Tribe</td>
<td>Iwi</td>
</tr>
<tr>
<td>Tu Mana?</td>
<td>Status</td>
</tr>
<tr>
<td>Tuhia tou ingoa kia watea te haere</td>
<td>You must enter a staff name before you can continue!</td>
</tr>
</tbody>
</table>

| Tūnga Mahi | Position |

<table>
<thead>
<tr>
<th>U.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utu</td>
</tr>
<tr>
<td>Utu ia kiromita</td>
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<thead>
<tr>
<th>W.</th>
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</thead>
<tbody>
<tr>
<td>wahanga</td>
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<tr>
<td>Wāhi Kāinga</td>
</tr>
<tr>
<td>Wāhi Noho</td>
</tr>
<tr>
<td>Wairua: (Kei te tau te tamiti he aha rānei?)</td>
</tr>
<tr>
<td>waitohu</td>
</tr>
<tr>
<td>Wānanga</td>
</tr>
<tr>
<td>Whāinga</td>
</tr>
<tr>
<td>Whakaaetanga</td>
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<tr>
<td>Whakāhua</td>
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<tr>
<td>Whakākōnae</td>
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<tr>
<td>whakakorengia</td>
</tr>
<tr>
<td>whakakorengia?</td>
</tr>
<tr>
<td>whakapaunga</td>
</tr>
<tr>
<td>whakatau mō te tangata hara</td>
</tr>
<tr>
<td>whakatuturu</td>
</tr>
<tr>
<td>Whānau</td>
</tr>
<tr>
<td>Whānau: (Ngā mātua, Ngoa tuakana/teina, me ngā kaitautoko piritata ki tēnei tamaiti)</td>
</tr>
<tr>
<td>Whanaunga Tuatahi</td>
</tr>
<tr>
<td>wharangi</td>
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<tr>
<td>where kohungahunga</td>
</tr>
<tr>
<td>Whare Kohungahunga</td>
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<td>Whare noho</td>
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<tr>
<td>wiki</td>
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<tr>
<td>----------------</td>
</tr>
<tr>
<td>Whakakorengia te katoa</td>
</tr>
</tbody>
</table>