

3.0. Whakawhiti - He urupounamu ā-tauira ki ngā whakapātari me ngā whai wāhitanga mō ngā kaieke pahikara i roto i te hāpori tata

WHAKAMAHERE, WAIHANGA, POHEWA, RANGAHAU

Me arohaehae me te whakaaro auaha mō ngā kaieke pahikara i roto i te hāpori. Kōwhiria tētahi o ngā huatau e whai ake hei whakawhānui i tō whakaaro mō ngā kaieke pahikara, hangaia rānei tāu ake.

3.1. Me WHAKAMAHERE he papa tākaro eke pahikara i roto i tō hāpori mō ngā kaieke pahikara me ngā Pūkenga Kōeke 1. Tirohanga:

Kei te hiahia te kāwanatanga ā-rohe ki te whakapakari kirirarau e uara ana me te whakamahi i ngā whai wāhitanga ikiiki toitū i roto i te hāpori tata. Ko tētahi kaupapa ko te mahi tahi ki ngā taiohi ki te whakawhanake i ngā kōwhiringa ikiiki toritori (te hīkoi me te eke pahikara).

E whakaatu ana ngā rangahau kei te hiahia ngā kaieke pahikara hou ki ngā papa tākaro kia ngahau, ā, kia haumarū ai rātau i te wā e whakaharatau ana i te eke pahikara.

Kua tonoa tō kura ki te tautohu me te hoahoa i tētahi papa tākaro mō ngā kaieke pahikara whai pūkenga Kōeke 1 e hiahia ana ki te whakaharatau i te eke pahikara i tētahi pāka paetata, i te takiwā kura, i ngā whare hāpori, ngā tūnga waka rānei kāore i te whakamahia rānei, aha atu, aha atu.

Me mātua tōtika ngā papa tākaro mō ngā kaieke pahikara hou kua tutuki nei i a rātau te akoranga whakangungu pūkenga Pahikara Kōeke 1, ā, me whai kōwhiringa uaua ake mō ngā kaieke pahikara matatau ake i a rātau ka whakawhanake pūkenga hou.

Ko ngā āhuatanga matua mō ēnei wāhi mātātoa kia haumarū, ā, kia tino arohia e ngā taiohi.

Kei te hiahia te kāwanatanga ā-rohe ki te whakauru mai i ngā tamariki ki te hoahoatanga i te mea he auau te wareware i ngā kaihoahoa pakeke ngā wāhi motuhake, tūtohu whenua me ngā whakapātari e hiahia ana ngā tamariki ki te hōpara ina eke pahikara me ētahi atu.

Me tuku e koe tētahi mahere o ō ara me ngā papa tākaro e marohitia ana, tae atu ki ngā tuhinga e whakamārama ana he aha i whakaurua mai ngā tini āhuatanga me ngā wāhi. Me tautohu anō tō marohitanga i ngā rauemi, aratohu me ngā rauemi whakatairanga e aro ana ki ngā ākonga i tutuki i te akoranga whakangungu Pūkenga Pahikara Kōeke 1.

Whakaputaina tō mahere ara pahikara me ō rauemi tautoko hei mātārere, hei aratohu hāereere ki tētahi paetukutuku, hei Google Map, hei whakaaturanga whakaahua, hei pānui rongorau mō te pouaka whakaata tamariki, hei ataata hīkoi, hei toi ara hīkoi, ki tētahi takotoranga rānei ka whakariteritea e koe.

3.2. WAIHANGA ngā ara pahikara ngahau i roto i tō rohe

Waihanga ngā ara pahikara ngahau i roto i tō hāpori tata mō ngā kaieke pahikara whai pūkenga Kōeke 2, 3, teitei ake rānei.

Me tuari tētahi mahere rauemi 'E hia te tawhiti mai i konei ki korā?' mō ngā ara pahikara ka hangaia e koe ki tō rohe. Whakamahia ngā raraunga ine aronga whānui, rerekē hoki kua kitea e koe.

Ki tētahi mahere o te akomanga/kura/wāhi paetata, tuhia tētahi ara pahikara paetata ka tono ki ngā ākonga ki te tuhi i ngā tohutohu tika.

Tonoa ngā ākonga ki te mahi takirua hei waihanga i ō rātau ake ara me te tuhi tohutohu hei whai mā tētahi hoa.

Tirohia ngā ara i tohua e ngā ākonga. Tonoa ia takirua o ngā ākonga ki te tuhi i ngā tohutohu hei whai mō tētahi o ngā ara.

Waihanga ki tētahi takotoranga tūtohu kia taea ai te māka tika, hē rānei mēnā kei te hē ā rātau tohutohu i te riunga.

3.3. PŌHEWA - Whakaaro arohaehae, auaha hoki mō te wāhanga o te kaieke pahikara kirirarau i roto i ngā hapori me ngā tāonenui anamata.

Tirohanga:

Mā ngā rori e māmā ake, e haumarū ake te nekeneke rawa, tāngata hoki. He rawa tūhonohono ngā rori e pae ana i tō kura me tō pokapū toa hokohoko paetata mō ngā haerenga haumarū ake.

Ka whai wāhi atu ngā kirirarau ki ngā rawa tūhonohono maha. He maha ngā whakapātari mō te whakamahi tahi i ngā rori paetata. Ka manaaki ngā kirirarau tētahi i tētahi ina whakamahi tahi ana i ngā rawa pērā i ngā rori paetata.

Me he kaieke pahikara kirirarau koe:

- ka rongohia tō reo, e whai wāhi ana koe, he hira koe, ā, ka whai hua āu mahi
- mā ngā tikanga me ngā ture e tiaki ō motika me te whakamōhio ki a tātau ō kawenga hei kaieke pahikara, hei kirirarau
- ka whakatūturu ngā tikanga me ngā ture kei te noho tahi, kei te mahi tahi tātau e ai ki ngā tikanga tika, haumarū hoki.

Pohewatia he pūtea a tō hapori, tāonenui rānei hei whakatū i ētahi **'takiwā pahikara anake'** puta noa i ngā hapori paetata. Kei te hiahia tō kura me tō hapori ki te tono. Mahi tahi me ētahi atu ki te waihanga i tētahi kaupapa marohi mō te hanga takiwā pahikara anake i roto i tōu rohe paetata.

1. Tīpakohia tētahi takiwā/wāhi ikiiki toritori e tūtata ana ki tō kura, kāinga rānei ka aukatia ngā waka mīhini katoa (ā-penehīni, ā-hiko rānei). Tohua tēnei rohe ki tētahi mahere.
2. Whiriwhiri ka pēhea te pānga atu ki ngā tāngata, ngā wāhi me te aorangi nei.
3. Whakaaro ki ngā tāngata me ngā rōpū ki tō hapori. Ko wai ka whai huanga i tētahi ture 'takiwā pahikara anake'? Ko wai ka whakataumahatia? Ko wai te hunga kāore e pāngia? Whakamahia tētahi mahere HookED SOLO Discuss (Describe++) hei tautoko me te āki i te whakaaro hōhonu ake. (http://pamhook.com/wiki/HookED_Describe_Plus_Plus_Map)
4. Tautohua ngā rawa hapori katoa kei roto i te takiwā me torotoro ai e te iwi whānui.
5. Waihanga tētahi mahere e whakaahua ana me pēhea te mahi tahi a ngā kirirarau hei whakatūturu ka taea e tāngata katoa kei te hiahia ikiiki i roto i tēnei takiwā ki te pērā.
6. Waihangatia ngā ture mā ngā kaiwhakamahi pahikara me ngā kaihīkoi e whakamahi ana i te takiwā.
7. Me hanga he rauemi mō ngā tino pātai (NGĀ TINO PĀTAI) hei āwhina ki te whakautu i ngā pātai pēnei i ēnei:
 Ka pēhea te mino pahikara a ngā kirirarau?
 Ka pēhea te ako a ngā kirirarau ki te eke pahikara?
 Ka pēhea te āhei atu o ngā kirirarau kāore i te mōhio ki te eke pahikara ki ngā rawa i roto i te takiwā?
 Ka pēhea tō whakahoki mai i ngā pahikara mai i ngā wāhi i whakarērea atu, otirā mēnā ka heria atu ki waho o te takiwā?
 Ka pēhea te auau o tō aroturuki i ngā pahikara mō ngā take hauora me te haumarū?
8. Hangaia he mahere pūtea. Me whakarite e koe he mahere tahua mō ngā utu rawa me ngā whakapaunga ā-tau. Hei tauira:

NGĀ UTU

Ngā pahikara – ngā momo pahikara pai mō
 ngā kirirarau rerekē
 Ngā teihana pahikara – ngā wāhi hei tiki, hei waiho pahikara
 Raihana pahikara – kōeke pūkenga o te kaiwhakamahi
 Te hangarau whaiwhai pahikara
 Ngā whakaaetanga whakamahi, rīhi rānei
 Te whakatika me te tautiaki pahikara
 Te tohatoha pahikara
 Te putunga
 Ngā ratonga kaimahi
 Te inihua
 Te wāhi tari
 Te pūtaurima paetukutuku
 Ngā whaipanga

TE TAHUA

9. Waihanga he kaupapa whakatairanga pāpāho pāpori me ngā rauemi whakatairanga e whakamārama ana i te kaupapa o te takiwā pahikara, ā, ka pēhea te āwhina i ngā tāngata, ngā wāhi me te aorangi nei anō hoki.

3.4. RANGAHAU i ngā whakaaro o ngā kaieke pahikara mō te eke pahikara i ngā rori paetata

He mea urutau mai i te Rauemi Marautanga a Waka Kotahi: He kaiwhakamahi rori ngā tāngata katoa. He aha ngā āhuatanga e whakaawe ana i te whakamahi a ngā kaieke pahikara i ngā rori paetata?

Te rapu i ngā whakaaro o ngā kaieke pahikara mō tētahi rori paetata

He aha ki ngā kaieke pahikara ngā raruraru me ngā whai wāhitanga i ngā rori paetata?

Kohikohi raraunga

Tonoa ngā ākongā ki te:

1. Kōwhiri i ētahi kaieke pahikara ki tō kura, hapori paetata rānei me te titiro ki te rori mai i ō rātau tirohanga.

Hei tauria, ka taea pea e koe:

- te uiui ngā kaieke pahikara mō ō rātau kare ā-roto ina whakamahi ana i te rori, tērā rānei
- te uiui ngā kaieke pahikara. Tonoa rātau ki te whakamārama i tā rātau tirohanga me whakamōhio mai te pūtake o ō rātau whakaaro, ā, ka rapu i ō rātau whakaaro mō te rori.

2. Uiui i ngā kaiwhakamahi rori. Waihanga i tētahi rangahau tuihono hei kohikohi raraunga mai i ngā kaieke pahikara ki tō hapori mō ō rātau kare ā-roto ina whakamahi ana rātau i te rori.

- Ko ētahi rangahau tuihono me ngā kaihanga pōti e hāngai ana ko:

1. Google Forms: https://support.google.com/drive/answer/87809?hl=en&ref_topic=1360904
2. SurveyMonkey: www.surveymonkey.com
3. PollDaddy: <http://polldaddy.com>

- Tirohia tēnei *rangahau tīpako*:
- Kōrero mai mō te wāhanga o te rori paetata e kōhukihuki ana i a koe, e noho hīrokiroki rānei koe. Pāwhiria te wāhi hāngai o te mahere, ka pāwhiri ki te kara ka tō ki te pūwāhi ake o te wāhi. Tērā rānei, ka taea e koe te peke atu ki te wāhi ake i runga i te mahere mā te tāuru i tētahi tātai poutāpetā, ingoa tiriti me te tapatāone rānei ki te pouaka i raro ka neke i te kara mā te pāwhiri me te tō.



1. How do you mainly travel on [insert road name]?

- ☐ Passenger
☐ Cyclist
☐ Pedestrian
☐ Driver
☐ Other:

2. Has anything made you feel unsafe when travelling on [insert road name] recently?

Tick any that apply

- ☐ No/Nothing
☐ Other people's driving
☐ Other people's parking
☐ Volume of traffic
☐ Speed of traffic
☐ Road layout
☐ Weather conditions
☐ Other road users (e.g. cyclists, pedestrians)
☐ Traffic congestion/delays
☐ Other:

3. To what extent have you felt unsafe when travelling on [insert road name]?

1 2 3 4 5

Hardly at all ☐ ☐ ☐ ☐ ☐ To a great extent

4. Where in particular do you feel unsafe on [insert road name]?

5. What could be done to make you feel safer when you are travelling on [insert road name]?

6. What do you most enjoy when using [insert road name]?

3. Uiuitia ngā kaieke pahikara. Tonoa rātau ki te whakamārama i tā rātau tirohanga me whakamōhio mai te pūtake o ō rātau whakaaro, ā, ka rapu i ō rātau whakaaro mō te rori.

Pepa tuhinga uiui

Kaieke pahikara	Whakaahuahia tā rātau tirohanga ki te rori. Hei tauira, he aha ngā raruraru me ngā whai wāhitanga kei te tukuna e te rori mō ngā kaiwhakamahi rori? <i>[Tohua te tirohanga hei takatika, whakakāhore, ngākau tapatahi rānei.]</i>	Whakamārama he aha i pēnei ai ō rātau whakaaro.	He aha tā rātau e whaiwhakaaro ana e pā ana ki te rori?

I muri mai, tuhia he rārangi o ngā kaiwhakamahi rori rerekē i roto i tō hapori.

- Hei tauira: Ngā kaitaraiwa, ngā pāhīhī, kaihīkoi, kaieke pahikara. Ngā tamariki, taiohi, kaumātua.
- Te hunga tauhou ki te rohe, ngā kainoho mai rā anō, ngā manuhiri wā poto, ngā kaiheke hou me ngā tūruhi.
- Ngā kōhungahunga, ākonga kura tuatahi, ākonga kura tuarua, ākonga whare wānanga, kaimahi, te hunga kore mahi me te hunga kua tāoki.
- Ngā tohunga toi, kaihanga mahere tāone, kaitōrangapū ā-rohe, kaihīkoi kurī, mātua whai kōhungahunga, kaitaraiwa pahi, pāhīhī pahi, kaituhi tohu, kaimāka rori, kaiako, rangatira toa kawhe, kaihanga whare, kaitaraiwa karere, kaitaraiwa taraka, kaitaraiwa tekehi, kaikuti makawe, kaiheri parehe, kaitatai arowhenua, ngā Māori o te rohe, kaipūtaiao, kaiomaoma, kaihīkoi tere, kaihanga mahere, kaipūkaha waka, kaimahi wāhi tāia, kaiwhakahaere pakihi iti, kaipupuri toa, kaiwhakahaere teihana penehīni, ngā rata o te rohe, ngā nēhi ohotata, ngā kaitiro tiro tūnga waka, ngā āpiha pirihihana.

Me whakapā atu ki ngā kaiwhakamahi rori rerekē i roto i tō hapori paetata. Me pōhiri mai i a rātau ki tō akomanga me te whakautu pātai mō te rori mai i tā rātau tirohanga.

- Uiuitia ia kaiwhakamahi rori kia mōhio ai tā rātau tirohanga mō te rori. He tā rātau titiro? He aha ngā mea e ngahau ana ki a rātau mō te rori? He aha e kaingākau ana tēnei ki a rātau? He aha ngā painga o te whakamahi i te rori? He aha ngā mate? He aha ngā whakapātari (ngā raruraru me ngā whai wāhitanga) e tukuna ana e te rori? He aha ngā mea kāore rātau i te mōhio mō te rori? He aha ngā mea kāore i te pai ki a rātau mō te rori? He aha ngā mea e kiriweti ai rātau mō te rori? He aha ngā mea pai ki a rātau mō te rori? He aha ngā mea e menemene ai rātau mō te rori? Mēnā ka taea e rātau te whakarerekē te āhua o te rori, ahakoa pēhea, he aha ka whakarerekētia? He aha te take ka whakarerekētia e rātau? He aha te mea ka toko ake ki ō rātau whakaaro mō tēnei?
- Pātai ki ia rōpū he aha ō rātau whakaaro mō ngā kaieke pahikara i te rori? Ka pēhea te kaha o te tūpono ka whakamahia e rātau he pahikara ki te rori?

Ka tukuna e ngā hono e whai ake ngā mōhiohio hei āwhina i a koe ki te hanga pātai tōtika:

- Ngā Kura BBC – Bitesize – He aha i pai ai tētahi uiui pai (pāhekoheko):
www.bbc.co.uk/schools/gcsebitesize/maths/statistics/questionnairesact.shtml
- Ngā Kura BBC – Bitesize – Ngā Uiui:
www.bbc.co.uk/schools/gcsebitesize/dida/using_ict/questionnairesrev1.shtml

- I mua i te uiui, tukuna he tauākī ā-tuhi ki ngā kaiwhakamahi rori e āta whakamārama ana i te kaupapa o ngā pātai me te whakamahinga o ngā mōhiohio ka riro mai. Me rapu anō e koe te whakaaetanga a te kaiwhakamahi rori hei tiaki i ā rātau whakautu. Kaua e whakamahia ngā mōhiohio mā tētahi āhuatanga e mōhio ai tētahi tangata.
- Me mahi ā-rōpū ki te kohikohi me te whakahiato i ēnei mōhiohio. Ka taea e koe ngā pūmanawa tuihono mahi ngātahi te whakamahi pērā i a Google Docs kia wātea ai ēnei raraunga ki ngā mema katoa o te rōpū. Me whakamahi ngā āki e whai ake hei ārahi i ō whakaaro.

Pepa tuinga uiui

Kaiwhakamahi rori	Whakaahuahia tā rātau tirohanga mō te rori. He aha ngā whakapātari (ngā raruraru me ngā whai wāhitanga) e tukuna ana e te rori? Ka pēhea te kaha o te tūpono ka eke pahikara rātau ki te rori? <i>[Tohua te tirohanga hei takatika, whakakāhore, ngākau tapatahi rānei.]</i>	Whakamārama he aha i pēnei ai ō rātau whakaaro.	He aha tā rātau e whaiwhakaaro ana e pā ana ki te rori?
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Te tātari i ngā whakaaro o ngā tāngata mō tētahi rori paetata

He aha ngā mea ka kitea e ngā kaiwhakamahi rori he raruraru, he whai wāhitanga hoki i ngā rori paetata?

E ai ki te āhua o ngā raraunga, me te taumata o tō rātau mārama ā-tatauranga, ka taea pea e ngā ākonga te:

- Kōmaka ngā kaiwhakamahi rori, ngā raraunga tauoti rānei mō ā rātau tirohanga rerekē ki ngā rōpū, ka kōrero mō ngā otinga.
- Tatauhia ngā kaiwhakamahi rori i roto i ngā rōpū hei whakataurite i ngā rōpū.
- Me whakarōpū me te whakariterite i ngā raraunga kōwae mō ngā kaiwhakamahi rori, ka whakatakoto atu mā tētahi āhuatanga raupapa, pērā i te tūtohi tatau, kauwhata whakaahua, kauwhata pou rānei.
- Kōwhiri me te whakamahi i tētahi takotoranga tōtika hei whakaatu i ngā raraunga matawhāiti mō ngā kaiwhakamahi rori; ko ngā kōwhiringa pea ka taea ko ngā kauwhata pou me ngā kauwhata rautō.
- Whakatakotohia ngā raraunga tauanga mō ngā kaiwhakamahi rori me ā rātau tirohanga mā ngā tikanga rerekē, hei tauira, ngā raraunga whakataurite māmā i roto i ngā kauwhata rautō taha ki te taha.
- Whakatakotohia ngā raraunga whakataurite mō ngā kaiwhakamahi rori me ā rātau tirohanga mā ngā whakaaturanga tatauranga tōtika, hei tauira, ngā kauwhata rautō taha ki te taha me ngā kauwhata kauamo.

Tonoa ngā ākonga ki te whakarōpū me te whakarōpū anō i ngā raraunga i kohia i mua kia taea ai ngā whakaaturanga maha te whakamahi (ngā whakaaturanga tauanga) hei whakaatu i ngā raraunga taketake kia pai ake te mārama ki te tikanga o ngā raraunga mō ngā tirohanga o ngā kaiwhakamahi rori mō ngā rori paetata.

Ngā āki matapakī [whakaaro-takirua-tuari, ngā rōpū iti, ērā rānei ko ngā matapakinga akomanga whānui anake]

- Tirohia ngā tikanga rerekē kua whakaaturia ngā raraunga.
- He aha ngā kaha me ngā ngoikoretanga o ia whakaaturanga? Ki ō whakaaro he aha i pērā ai? He aha ngā whakaaro ka toko ake ki a koe i tēnei?
- Mēnā he kirirarau koe e whakamahi ana i ngā rori paetata hei kaieke pahikara, kaihihi, pāhihi rānei, he aha ngā mea whaitake hei tuari mō ēnei whakaaturanga o ngā raraunga hei whakaatu i ngā tirohanga o ngā kaiwhakamahi rori paetata?

Mahi Hokahokai: Aromātaihia ngā kaha me ngā ngoikoretanga o ngā whakaaturanga raraunga rerekē i whakamahia hei tātari i ngā tirohanga kaiwhakamahi rori mō tētahi, ētahi rānei o ngā rori paetata. Whakamahia ngā otinga o te arotakenga hei tuku matapae me te kimi kitenga pāngarau mō ngā tirohanga a ngā kaiwhakamahi rori.

He aha ngā whakapātari (ngā raruraru me ngā whai wāhitanga) mō ngā kaieke pahikara i tētahi rori paetata?

Me karawhiu whakaaro mō ngā whakapātari rori paetata (ngā raruraru me ngā whai wāhitanga).

Hei tauira:

- *Ngā whai wāhitanga mai i ngā rori paetata:* kāore he utu hei whakamahi, he ngāwari te kōwhiri ara, ngā ikiiki kūaha ki te kūaha, ka taea e te katoa te rori te whakamahi, he tūnga waka māmā mō ngā waka, ā, ka taea māmātia ngā whakawhitinga rori mā-raro
- *Ngā raruraru me ngā rori paetata:* ka pōkea te rori, kāore he whakaurunga tūnga mō ngā pahikara, ngā mata hīrokiroki, ngā waka hohoro te haere, ikiiki i te wā popoke

Te whakaara pātai

Tonoa ngā ākongā ki te:

- Whakaara pātai hei tūhura i ngā whakapātari (ngā raruraru me ngā whai wāhitanga) e whakaaturia ana e tētahi, ētahi rānei o ngā rori paetata.
- Tautohua te taupori tīpakonga, hei tauira, 'ngā kaieke pahikara' – ngā whānau, ngā whanaunga me ngā hoa o ngā ākongā i te kura e eke pahikara ana i ngā rori paetata.
- Tautohua te rahinga tīpako.
- Tautohua ngā taurangi hei ine e ai ki tō pātai tūhura, hei tauira, te tatau o ngā kaieke pahikara i whakapātarihia, i whiwhi painga rānei i tētahi rori paetata i roto i ngā marama e ono kua hipa (ngā raraunga matawhāiti), te pakeke o ngā kaiwhakamahi rori i whakapātarihia, i whiwhi painga rānei i tētahi rori paetata i roto i ngā marama e ono kua hipa (ngā raraunga matawhāiti), te momo kaiwhakamahi rori i whakapātarihia, i whiwhi painga rānei i roto i ngā marama e ono kua hipa (ngā raraunga matawhāiti), te wāhi i noho kore haumarū, i āhuareka rānei ngā kaieke pahikara i tētahi rori paetata (ngā raraunga matawhāiti), te momo whakapātari, painga rānei i whai wāhi mai (ngā raraunga matawhāiti), te taumata o te hiranga o te whakapātari, painga rānei (ngā raraunga matawhāiti).
- Hoahoatia he tikanga mō te kohikohi raraunga. Hei tauira, whakamahia ngā rangahau, ngā tiroiro, ngā uiui, patapatai rānei.

Te kohikohi raraunga

Tonoa ngā ākongā ki te:

- Kohikohi raraunga, hei tauira, te tuhi i ēnei raraunga rangahau ki tētahi tūtohi tatau.
- Kōmaka, whakariterite me te whakaraupapa i ngā raraunga.
- Whakarāpopotohia ngā raraunga.

Te whakaatu i ngā raraunga

Tonoa ngā ākongā ki te whakaatu i ā rātau raraunga mā te tikanga tōtika rawa, hei tauira, ngā kauwhata pou, kauwhata pouhere, tūtohi tatau, kauwhata whakaahua, kauwhata tāhei, kauwhata porohita, ngā tūtohi, kauwhata ira, ngā rangatū wā.

Ngā matapakī otinga

Tonoa ngā ākongā ki te:

- Matapakī i ngā āhuatanga o te whakaaturanga raraunga. Whakamahia ngā kupu pērā i waenganui, hora, mōwaho, toharite, tau toharite, tauputu.
- Whiriwhiria he whakataunga mai i ngā tātaritanga raraunga mō ngā whakapātari e mōhiotia ana (ngā raruraru me ngā whai wāhitanga) ina whakamahi ana i tētahi rori paetata.
- Tukuna he kōrero whānui mai i ō raraunga (he tauākī e tuku whakapae ana, he whakamārama i te pūtake me te tuku taunakitanga mai i ngā raraunga) me pēhea tō whakahaere pai rawa i ngā raruraru me te whai i ngā whai wāhitanga e tukuna ana e tētahi rori paetata.

Mā te whakamahi i ngā whakairoiro mōhiotia hei whakapuaki i tētahi kōrero me ngā raraunga

Tonoa ngā ākongā ki te:

- Whakaaturia ngā raraunga mā tētahi tikanga ka whakamōhio i ētahi atu mō te rori paetata.
- Whakamahia ngā whakaaturanga raraunga i roto i tētahi whakairoiro mōhiotia hei whakapuaki kōrero mō ngā tirohanga rerekē a ngā kaieke pahikara mō tētahi rori paetata. He aha ngā whakaaro o ngā kaieke pahikara mō tēnei rori paetata?
- Me uru ki tō whakairoiro mōhiotia ko ngā atahanga taikaha, ngā tauanga hira, raraunga hoki me te whakamahi i ngā kupu pūtaiao me te reo hangarau.

Rangahauhia ngā tikanga rerekē e whakamahia ana ngā whakairoiro mōhiotia hei whakapuaki kōrero me ngā raraunga i mua i tō hanga mahere mō tau ake whakairoiro mōhiotia.

Ko ngā wāhi tōtika ko:

- Ngā whakairoiro mōhiotia i Mashable: www.pinterest.com/mashable/infographics
- Daily Infographic: <http://dailyinfographic.com>

Tonoa ngā ākongā ki te:

- Hopu tirohangamata o ngā tirohanga tiriti a Google Maps o te rori (hopukina rānei āu ake whakaahua o te rori).
- Whakamahia ēnei hei papamuri ina mahi pānui, tāpirihia rānei ēnei atahanga ki tētahi papatono kiriata pērā i te MS PowerPoint, Apple Keynote rānei.
- Tāpirihia ngā atahanga o ngā tāngata e whakamahi ana i te rori i hangaia e koe, me ngā pātai ā-waha, ā-tuhi rānei, ki ngā pānui (kiriata rānei).

Ngā āki matapaki [whakaaro-takirua-tuari, ngā rōpū iti rānei, ngā matapakinga akomanga whānui rānei]

- Tirohia ngā whakairoiro mōhiohio ka whakaaroaro mō ngā kōrero ka kōrerohia mō ngā rori paetata me ngā kaieke pahikara.
- He aha ngā kōrero ka kōrerohia e rātau? He aha i pērā ai ki a koe? He aha ngā whakaaro ka toko ake ki a koe?
- Mēnā he kirirarau koe e whakamahi ana i ngā rori paetata hei kaieke pahikara, he aha ngā mea whaitake hei tuari mai i ō kōrero whakairoiro mōhiohio? Me whakaaroaro mō ngā pātai ka hiahia pea tētahi kaiwhakamahi rori ki te pātai ki ngā kaieke pahikara. Me whakaaroaro mō te whakairoiro mōhiohio ka whakamahia pea e tētahi kaiwhakamahi rori hei whakapuaki kōrero.

Te waihanga mahere ki tētahi mahere ritenga ake mā Google Maps:

www.google.com/earth/outreach/tutorials/custommaps.html. Kia hāngai te tāpiri atu i ngā atahanga me ngā pātai ka tāmau i tētahi mahere whakakaupapa ā-ākongā i roto i tētahi rangitaki akomanga, wiki rānei.

3.5. WHAKATŪHIA he toa tautiaki pahikara 'whakatū ohore'

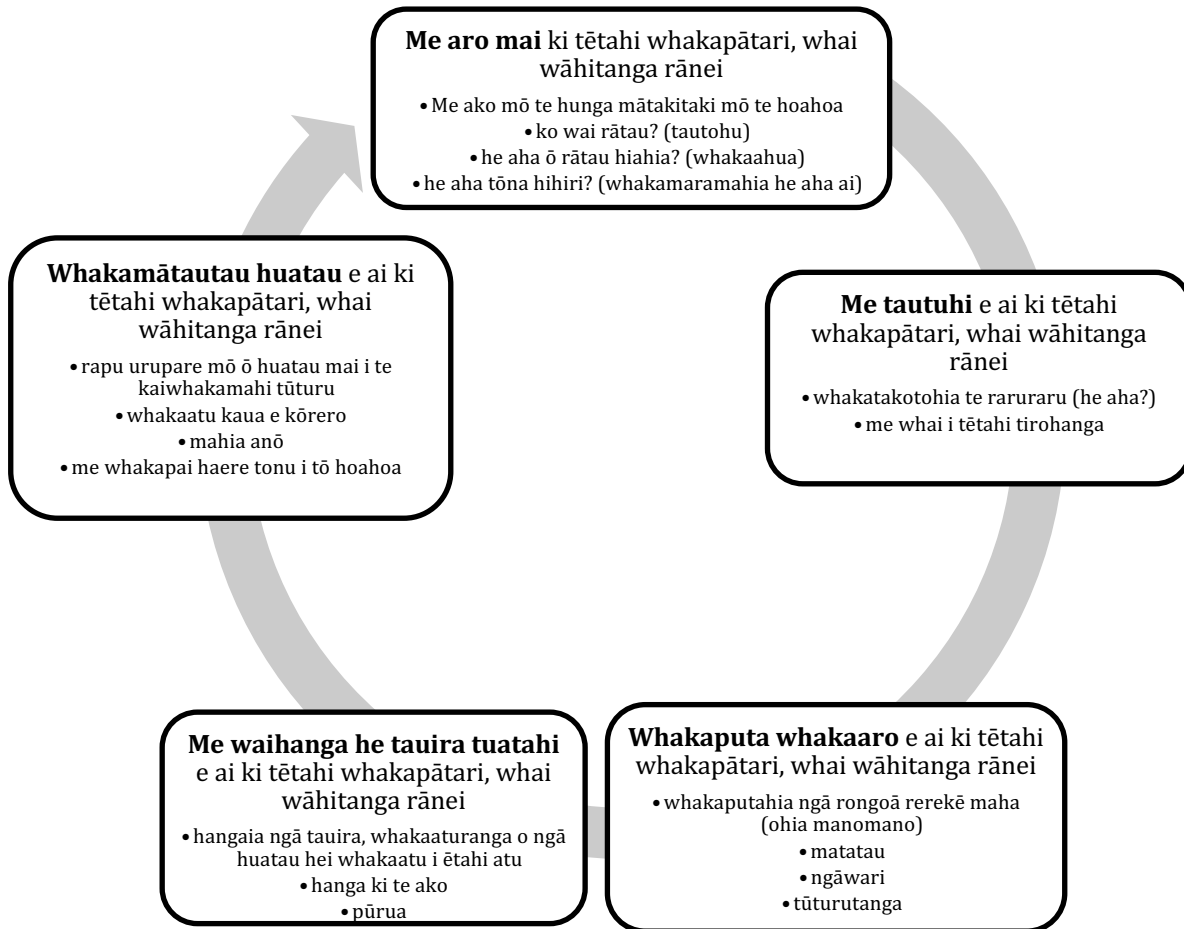
WHAKATŪPATO:

*Ki te tautiaki haere tonutia e koe tō pahikara ka whakarākeihia tō wheako eke pahikara me te āwhina kia haumarua ake koe. Ko te rahinga o ngā mahi tautiaki ka taea e koe anō kei tō kaha me ō utauta kei a koe. He maha ngā āhuatanga o te tautiaki pahikara he uaua, ā, me whai mōhiotanga motuhake me ngā pūkenga. Ki te hē te whakatikatika ka tino mōrea pea ki te kaieke **nō reira mēnā kei te māharahara koe, he pai ake kia waiho mā tētahi mātanga i tētahi toa pahikara tō pahikara e tautiaki.** Mō Ngā Utauta - Te Tikanga Rori Whaimana o Aotearoa*

Tirohia te:

- Te Tikanga Whaimana o Aotearoa Mō Ngā Kaieke Pahikara mō ngā mōhiohio me pēhea te tautiaki pai rawa i tētahi pai rawa. <https://www.nzta.govt.nz/resources/roadcode/cyclist-code/about-equipment/checking-and-maintenance/>
- Auckland Transport: Ngā wāhanga peka ki te tautiaki pahikara. <https://at.govt.nz/about-us/news-events/free-bike-skills-and-maintenance-sessions-on-offer/>
- Whakaaro Hoahoa. He akoranga ohore mariko mō te whakaaro hoahoa. <https://dschool.stanford.edu/resources-collections/a-virtual-crash-course-in-design-thinking>

Me whakamahi ko ngā wāhanga tukatuka o te **whakaaro hoahoa** hei whakarite i tētahi whai wāhitanga ki te āwhina i ngā tautiaki auau mō ō rātau pahikara ina tutuki i a rātau ngā wāhanga pūkenga.



1. Me aro mai ki tētahi whakapātari, whai wāhitanga rānei:

Me ako mō te hunga mātakitaki mō te whai wāhitanga hoahoa

- ko wai rātau? (tautohu)
- he aha ō rātau hiahia? (whakaahua)
- he aha tō rātau hihiri? (whakamaramahia he aha ai)

Uiuia ngā rangatira o ngā pahikara i roto i te hāpori mō ngā raruraru tautiaki pahikara noa e pā mai ana ki a rātau, kāore e mahia hoki/rānei e rātau.

2. Me tautuhi e ai ki tētahi whakapātari, whai wāhitanga rānei

whakatakotohia te raruraru (he aha?)

me whai i tētahi tirohanga

3. Whakaputa whakaaro e ai ki tētahi whakapātari, whai wāhitanga rānei

whakaputahia ngā rongoā rerekē maha (ohia manomano)

- matatau
- ngāwari
- tūturutanga

Hei tauira:

Wehea mai he wāhi papamahi e taea ai e ngā rangatira o ngā pahikara te tautiaki ō rātau pahikara me ētahi atu. Me mahi tahi me te pakeke tōtika, toa pahikara rānei ki te hoahoa me te whakatū i tētahi kaupapa hei āwhina i ngā kaieke pahikara kia tutuki i a rātau ngā whakaritenga tautiaki ina eke pahikara. Hei tauira, whakatūhia he toa tautiaki peka noa/whakatū ohore i te takiwā kura.

Tukuna ngā awheawhe tohutohu ā-ringa kia ako ai ngā rangatira o ngā pahikara ki te tautiaki i ō rātau ake pahikara.

Mahia ngā ataata tohutohu hei whakamārama i ngā wāhi uaua o te tautiaki pahikara.

Tukuna ngā whai wāhitanga hei whakaharatau mā ngā rangatira o ngā pahikara me ngā pahikara pakaru wātea, kāore i te whakamahia rānei i mua i tā rātau whakatika i tō rātau ake.

Tukuna he ratonga whakataka mā ngā kaieke pahikara e hiahia ana kia tirohia, kia whakamahia ō rātau pahikara i a rātau e warea ana ki mahi kē i te wā tina.

Whakaratoa ngā rauemi tautiaki pahikara -hinu, ngā papanga horoi, aha atu, aha atu, hei tauwhitiwhiti mō ētahi atu mahi.

Whakaratoa ngā ratonga o tētahi kaipūkaha pahikara mō ngā mahi whakatika tautiaki nui, whakatika hoki.

Whakaratoa tētahi ratonga patowaea hei whakamahara i ngā kaieke pahikara mō tā rātau mahi tautiaki whai ake.

4. Me waihanga he tauira e ai ki tētahi whakapātari, whai wāhitanga rānei:

- hangaia ngā tauira, whakaaturanga o ngā huatau hei whakaatu ki ētahi atu
- hanga ki te ako
- pūrua

Hei waihanga i tētahi wāhi peka mai/whakatū ohorere tauira me:

Kimi me te whai whakaaetanga hei whakamahi i tētahi wāhi i roto i te takiwā kura.

Me whakarite ka pēhea te hoahoa i te wāhi hei tuku urunga mō ngā pahikara me ngā tāngata kei te tautiaki.

Tūhuratia he pēhea te māmā o te whakarite i ngā mahi tautiaki a ngā ākonga, ngā utauta motuhake, rauemi rānei e hiahia ana, me ngā mōrea hāngai, aha atu, aha atu.

Tīpakohia ngā raruraru ka taea te whakarite i runga i te māmā, haumarua hoki me tō toa tautiaki peka mai/whakatū ohorere.

Kimihia ngā utauta me ngā rauemi e hiahia ana. Ka mate pea koe ki te whakariterite ki te mino, te mahi moni rānei kia taea ai he utauta, rauemi hoki mō tō toa.

Me whakarite ka pēhea tō pānui me te whakamāketi i tō toa tautiaki.

Me whakarite ka pēhea tō whakarewa i tō toa tautiaki.

Me whakarite ka pēhea tō urupare ki ngā kiritaki. Ka tukuna e koe he pūrongo whānui mō ngā mea i oti me ngā hapa me tiroiro kē e tētahi mātanga? Me tono ngā urupare kiritaki mō ngā mahi i oti me ngā tūtohutanga. Ka pēhea te āhua o te pūrongo? Ka pēhea tō whakatakoto atu?

Whakahaerenga mōrea - Tautohua ngā mōrea ka taea o te mahinga. Me whakamahi he hoahoa neketai hei tātari i ēnei mōrea. Me whakaū ngā rautaki hei karo, hei whakaiti rānei i ia mōrea. Hei tauira, me whakarite ka tiroiroa ngā mahi tautiaki e tētahi pakeke tōtika, kaipūkaha rānei i mua i te heritanga o ngā pahikara kia ekehia.

5. Whakamātautau huatau e ai ki tētahi whakapātari, whai wāhitanga rānei;

- rapu urupare mō ō huatau mai i te kaiwhakamahi tūturu
- whakaatu kaua e kōrero
- mahia anō
- me whakapai haere tonu i tō hoahoa

6. Whakarewahia ō huatau hoahoa.

- Hei tauira, tukuna he wāhi tautiaki pahikara i roto i te takiwā kura e āhei ai ngā kaieke pahikara ki te tūtakitaki here ki te kōrerorero pahikara me te tautiaki i ō rātau pahikara.
- Me arotake haere tonu i ō hoahoa.