Health 2019 v1.2

IA2 high-level annotated sample response

July 2018

Examination — extended response (25%) (Elective topic 2: Road safety)

This sample has been compiled by the QCAA to assist and support teachers to match evidence in student responses to the characteristics described in the instrument-specific marking guide (ISMG).

Assessment objectives

This assessment instrument is used to determine student achievement in the following objectives:

1. recognise and describe information from primary sources and secondary sources about the chosen topic in an alternate community context
2. comprehend and use the specified approaches, frameworks or resources as they relate to the chosen topic in an alternate community context
3. analyse and interpret information from primary sources and secondary sources about the chosen health-related topic and issues in an alternate community context
4. critique information to distinguish determinants that influence health status in an alternate community context
5. organise information about a chosen issue for a particular purpose
7. evaluate and reflect on an implemented diffusion action strategy for a chosen issue using RE-AIM and justify recommendations in an alternate community health context
8. make decisions about and use mode-appropriate features, language and conventions for a particular purpose.

Note: Objective 6 is not assessed in this instrument.

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For all Queensland schools

172047

Instrument-specific marking guide (ISMG)

Criterion: Recognising and comprehending

Assessment objectives

1. recognise and describe information from primary sources and secondary sources about the chosen topic in an alternate community context
2. comprehend and use the specified approaches, frameworks or resources as they relate to the chosen topic in an alternate community context

The student work has the following characteristics:	Marks
• accurate recognition and discerning description of relevant and provided contextual information from primary sources and secondary sources that includes - resources, barriers and enablers for the target group - data trends and the impact on the health status of the target group - determinants • succinct comprehension and perceptive use of the relevant - overarching health approaches, frameworks or resources - social ecological model level of influence - diffusion process variables.	5–6
• recognition and appropriate description of some contextual information from primary sources and secondary sources that includes - resources, barriers and enablers for the target group - data trends - determinants • comprehension and appropriate use of the - overarching health approaches, frameworks or resources - social ecological model level of influence - diffusion process variables.	3–4
• variable recognition and superficial description of some information about the chosen topic • superficial comprehension and use of aspects of - an overarching health resource - a diffusion of innovations concept.	1–2
• does not satisfy any of the descriptors above.	0

Criterion: Analysing, critiquing and organising

Assessment objectives

3. analyse and interpret information from primary sources and secondary sources about the chosen health-related topic and issues in an alternate community context
4. critique information to distinguish determinants that influence health status in an alternate community context
5. organise information about a chosen issue for a particular purpose

The student work has the following characteristics:	Marks
• insightful analysis and interpretation of relevant and provided contextual information related to implemented action from primary sources and secondary sources to draw conclusions about - data trends - barriers and enablers - personal, social and community resources • insightful critique of relevant contextual information using the social ecological model to distinguish the significant determinants that influence health in the alternate community context • coherent and effective organisation of information to achieve a particular purpose.	7–8
• purposeful analysis and interpretation of relevant and provided contextual information related to implemented action from primary sources and secondary sources to draw conclusions about - data trends - barriers and enablers - personal, social or community resources • purposeful critique of relevant contextual information using the social ecological model to distinguish the determinants that influence health in the alternate community context • effective organisation of information to achieve a particular purpose.	5–6
• appropriate analysis and interpretation of contextual information related to implemented action from relevant and/or provided primary sources and/or secondary sources to draw conclusions about - data trends - barriers or enablers - personal, social or community resources • appropriate critique of contextual information to distinguish the determinants that influence health • appropriate organisation of information to achieve a particular purpose.	3–4
• superficial analysis and interpretation of aspects of information about implemented action from sources • identification of determinants that influence health • organisation of aspects of information.	1–2
• does not satisfy any of the descriptors above.	0

Criterion: Evaluating and reflecting

Assessment objective

7. evaluate and reflect on an implemented diffusion action strategy for a chosen issue using RE-AIM and justify recommendations in an alternate community health context

The student work has the following characteristics:	Marks
• critical evaluation and insightful reflection on the innovation impact, methodology and resources using two relevant steps of RE-AIM • discerning justification of recommendations for future action that mediates, advocates or enables innovation uptake in an alternate community health context using the diffusion of innovations model.	7–8
• considered evaluation and purposeful reflection on the innovation impact, methodology and resources using RE-AIM • effective justification of recommendations for future action in an alternate community health context using the diffusion of innovations model.	5–6
• feasible evaluation and reflection on the innovation using RE-AIM • feasible justification of recommendations for future action in a community health context.	3–4
• superficial evaluation and reflection on aspects of the innovation • superficial or partial recommendations for future action.	1–2
• does not satisfy any of the descriptors above.	0

Criterion: Communicating

Assessment objective

8. make decisions about and use mode-appropriate features, language and conventions for a particular purpose

The student work has the following characteristics:	Marks
• discerning decision-making and accurate use of - written features to achieve a particular purpose - language for a community context - referencing and essay genre conventions.	3
• appropriate decision-making and use of - written features to achieve a particular purpose - language for a community context - referencing and essay genre conventions.	2
• variable and/or inappropriate use of - written features - language - referencing and/or essay genre conventions.	1
• does not satisfy any of the descriptors above.	0

Task

The local council member responsible for the Dartford region's 'Vision zero' road safety strategy has asked you to recommend one road safety innovation to diffuse into their community.

Compose an extended response to the question:

What is the likely impact and diffusion of the innovation selected for the Dartford region?

To complete this task, you must:

- **select** your diffusion action strategy innovation or the alternate innovation presented in the stimulus to answer the question
- **analyse** and **interpret** the significant features of the setting in the Dartford region to draw conclusions about
  - local or regional features and trends relevant to the selected innovation
  - the most significant barriers to and enablers of the selected innovation
  - existing personal, social and community resources
- **critique** information from the stimulus material using the community level of influence from the social ecological model to distinguish the most significant determinants that impact on road safety in the Dartford region relevant to the selected innovation
- use two of the RE-AIM steps — (R)each, (E)ffectiveness, (A)doption, (I)mplementation and (M)aintenance — to **evaluate** and **reflect on**
  - the characteristics of the selected innovation that would affect diffusion in the Dartford region
  - the likely impact on innovation uptake
- **justify** one recommendation that mediates, advocates or enables future action in the Dartford region based on the likely impact and diffusion of the selected innovation.

Sample response

Criterion	Marks allocated	Result
Recognising and comprehending Assessment objectives 1, 2	6	6
Analysing, critiquing and organising Assessment objectives 3, 4, 5	8	8
Evaluating and reflecting Assessment objective 7	8	8
Communicating Assessment objective 8	3	3
Total	**25**	**25**

The annotations show the match to the instrument-specific marking guide (ISMG) performance-level descriptors.

Recognising and comprehending [5–6] Succinct comprehension and perceptive use of the relevant social ecological model level of influence **Recognising and comprehending [5–6]** Accurate recognition and discerning description of relevant and provided contextual information **Communicating [3]** Discerning decision-making and accurate use of referencing conventions **Analysing, critiquing and organising [7–8]** Insightful critique of relevant contextual information	The Amy Gillett Foundation (AGF) 'cycle safe' innovation trialled at XXX SHS would be more compatible in the Dartford region and likely to diffuse and have a positive impact. The AGF 'cycle safe' innovation and diffusion action strategy had two components targeting cyclists and drivers in the school community setting. The methodology involved advocacy for mutual road respect through posters around the school and posts on social media advertising the AGF campaigns 'it's a two-way street' and 'a metre matters'. A ride to school day as part of Queensland Bike Week was the second component enabling the development of cycling skills and safe trip planning. The AGF 'cycle safe' innovation could have a positive impact on road safety in Dartford and reach the sustainability and institutionalisation stages of diffusion if the council endorses the 1 metre mandatory passing distances for bicycles and makes ecological improvements to the cycling infrastructure which is congruent with the 'safe roads and roadsides' short-term priority in their 'Vision zero' road safety strategy (Fig. 7). Data relating to the potential maintenance of the AGF 'cycle safe' innovation is not able to be evaluated as the action research was not implemented for 6 months. The population demographics, as features of the community setting in the Dartford region, would be highly compatible with the AGF 'cycle safe' innovation. The population age structure of Dartford (Fig. 1) indicates that the highest percentage of the population is in the 35–39 (25,932) and 40–44 (26,143) age groups. This would be a compatible target group to diffuse the AGF 'cycle safe' innovation if trends are comparable with Australian cycling participation rates. Regular or occasional cycling participation has increased 6% nationally from 13% of the population in 2005 to 19% in 2015 with the most significant increase in the 35–49 (8%) and 50–64 age groups (12%). (Roy Morgan 2015) Currently poor road behaviours and road rule compliance are contributing to road safety issues in Dartford. In 2016, 34% self-reported speeding and 64% ran red lights (Fig. 6) which increases the likelihood of collisions with cyclists particularly in low light conditions. The risk is evident in Dartford where near miss incidents with cyclists have risen by 8% over a 5-year period (Fig. 6). Impaired driving ability is highlighted in self-reported recreational drug use which has increased by 21% over a 5-year period (Fig. 6). A high rate of mobile phone use while driving/riding (Fig. 5b) is a significant risk factor for all

Analysing, critiquing and organising [7–8] Insightful analysis of relevant and provided contextual information **Recognising and comprehending [5–6]** Succinct comprehension and perceptive use of the relevant overarching health approaches **Evaluating and reflecting [7–8]** Critical evaluation and insightful reflection on innovation impact, methodology and resources using two relevant steps of RE-AIM **Evaluating and reflecting [7–8]** Critical evaluation and insightful reflection on innovation impact, methodology and resources using two relevant steps of RE-AIM **Evaluating and reflecting [7–8]** Discerning justification of recommendations for future action **Recognising and comprehending [5–6]** Succinct comprehension and perceptive use of the relevant diffusion process variables	road users. Crash severity data in Dartford highlights cyclists are involved in fatalities, hospitalised and treated for minor injuries more often than car users (Fig. 4b). Low speed cycling crashes could account for the higher morbidity rates. Road usage appears higher for cars than cyclists in Dartford possibly due to cycling infrastructure which is a 'Vision zero' short-term priority (Fig 7). The AGF 'cycle safe' innovation can enable the 'positive health, economic and environmental gains of cycling' (CARRS-Q 2016). The innovation would strengthen the skill development and safe trip planning personal resources for cyclists alongside advocacy to enable responsible road sharing through mutual respect. This salutogenic approach can move people towards a position of 'ease'. Several issues should be considered when developing a diffusion strategy for AGF 'cycle safe' in the Dartford region. The implementation of AGF 'cycle safe' at XXX SHS coincided with Queensland Bike Week which had a significant mass media and interpersonal social media profile with 97% of survey respondents aware of at least one Queensland Bike Week event. This impacted the dissemination stage of AGF 'cycle safe' diffusion because the 'ride to school day' advertising posted around the school was only seen by 43% of the school community. The social media posts on the school Facebook page had mixed success with the first post 'it's a two-way street' video having the highest profile with 138 views, 78 likes and 25 shares. Text posts had limited engagement indicating the value of a multimodal component. Photos of the 'ride to school' posters placed around the school were successful in diffusing key messages with 71 reactions, 24 messages of support for hosting a ride to school day and 24 shares. The Dartford council must provide sufficient funding for dissemination to increase the likelihood of adoption. When trialled at XXX SHS, adoption by middle school students was 45% higher than senior secondary students due to fewer complexity barriers. Senior student respondents reported three key barriers to adoption: 57% were concerned about being 'sweaty' at the end of the ride, 23% stated 'helmet hair' as a barrier and 19% were concerned about the security of their bike and carrying around a helmet. The AGF 'cycle safe' innovation trialled at XXX SHS was effective in increasing cycling participation rates. Prior to AGF 'cycle safe' week, the school had an average number of 276 cyclists riding to school daily. The 'ride to school day' increased this number to 321 with an associated increase in the number of parents riding with their children. This highlights efficacy can be developed with programs that build confidence and skills associated with trip planning and riding safely. The most significant enablers of implementation were the AGF resources and the sponsorship gained from local organisations to support the ride to school day. The AGF 'cycle safe' innovation could have a significant impact on road safety in Dartford and can increase cycling rates, particularly among middle school students. Impact could be enhanced among drivers with increased advocacy for community ecological improvements alongside campaigns directed at the individual and relationship levels of influence to develop cycling skills and mutual road use respect. Diffusion of the AGF 'cycle safe' innovation in Dartford is highly likely as it is compatible with council policy goal of 'more road users being alert, compliant and courteous' (Fig 7). AGF 'cycle safe' is able to be trialled and the results are observable therefore, the innovation should be implemented by the council as part of their 'Vision Zero' road safety strategy. **(992 words)**

Communicating [3] Discerning decision-making and accurate use of referencing conventions **Analysing, critiquing and organising [7–8]** Coherent and effective organisation of information to achieve a particular purpose Evident throughout the response **Communicating [3]** Discerning decision-making and accurate use of written features to achieve a particular purpose, language for a community context, referencing and essay genre conventions Evident throughout the response	Reference list: Amy Gillett Foundation 'Cycle safe communities', http://cyclesafe.gofundraise.com.au/ Accessed 5 April 2017 Centre for Accident Research & Road Safety-Queensland 2016 'Bicycle safety fact sheet', http://www.carrsq.qut.edu.au/publications/corporate/bicycle_safety_fs.pdf Accessed 5 April 2017 Department of Transport and Main Roads 2016 'Queensland Cycle Strategy 2011–2021', http://www.tmr.qld.gov.au/Travel-and-transport/Cycling/Cycling-strategies/Queensland-cycle-strategy-2011-2021 Accessed 5 April 2017 Roy Morgan Research 2015 'On your bike! Cycling participation picks up speed', http://www.roymorgan.com/findings/6237-cycling-participation-picks-up-speed-201505172306 Accessed 5 April 2017