



MONASH University
Library

Evaluating your educational/training programs: Towards the comprehensive and systematic approach

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Contexts

- Originally started as 'Evaluation Project' within the Library (but it's not about a feedback form!).
- Evolved into a series of workshops and training programs outside the Library.
- The current workshop is based on the workshop offered as part of a Graduate Certificate of Academic Practice (GCAP) unit/subject.

Aims of the workshop today

- Discuss what a comprehensive and systematic evaluation of any educational/training program would look like (for you)
- Project management approach to evaluation

Deliverable of the ‘workshop’ today

- You will be prompted to respond to some questions and discussion points.
- Write down your response, ideas and comments as you go through.
- Verbalise your ideas during discussion time; this will help consolidating your ideas (yes – it is true).
- *...et voilà!* You will have a good list of things to think about later to make your evaluation systematic and comprehensive (...well, in theory).

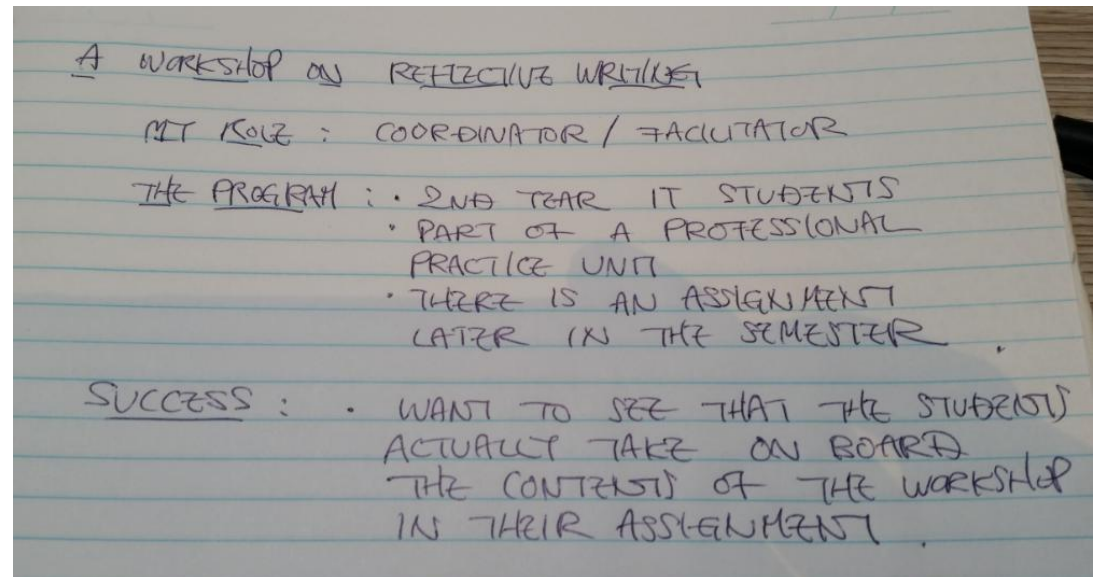
(Loose) structure of this workshop

- What is evaluation? – the first half an hour
- What and how do we evaluate? – the second half an hour
- How do we communicate? – the last half an hour

Part 1: What is evaluation?

Exercise 1: Conceptualising the program's 'success'

- Choose a program you have been involved as a case study, and write down (and discuss with others if time allows):
 - A little bit about the program and its context
 - Your role in the program
 - What you consider as successful outcomes of the program



Exercise 1: Conceptualising the program's 'success' - debrief

- What makes your program a 'success'? Is it...
 - How smoothly and efficiently it run?
 - How well the participants and staff responded?
 - How much the participants learnt from the program?
 - How much the participants take away form the program?
 - How it impacts the organisation, industry and beyond?

The five levels of evaluation to be used today

| Levels of evaluation | Descriptions |
|----------------------|---------------------------------------------------------------------------------------------------------------|
| Infrastructure | Evaluation of infrastructure examines the <i>accessibility, efficiency and sustainability of the program.</i> |
| Perception | Evaluation of perception examines <i>participants' reactions and perceived learning</i> |
| Learning | Evaluation of learning examines <i>participants' knowledge and skills acquisition</i> |
| Behaviour | Evaluation of behaviour examines <i>participants' applications of the learnt knowledge and skills</i> |
| Outcomes | Evaluation of outcomes examines <i>long-term impacts and sustained effects of the learning and teaching</i> |

Adapted by the presenter, based on Kirkpatrick (1994) and The Rugby Team (2009)

What is evaluation?

“Evaluation is the systematic assessment of the **worth or merit** of **some object**” ([Trochim, 2006a](#))

- So which **object**?
- **Worth or merit** for what/whom?
- And what do we mean by **worth or merit**?

The five levels of evaluation

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| Outcomes | Evaluation of outcomes examines <i>long-term impacts and sustained effects of the learning and teaching</i> |

Adapted by the presenter, based on Kirkpatrick (1994) and The Rugby Team (2009)

Part 2: What and how do we evaluate?


Level 1: Infrastructure

QUESTIONS

- Is the administration and logistics of the program feasible, effective and sustainable?
- Was the program accessible and equitable for participants, and how was it attended/accessed by participants?

METHODS AND DATA

- Statistics and attendance type (e.g. no. of sessions, no. of attendees, compulsory vs. voluntary)
- Collecting qualitative data using structured observation and informal questions/feedback from staff and participants



“The number of learning skills orientation classes held in the Hargrave-Andrew Library has dropped from 21 classes over the first two weeks in 2009 to merely 8 classes over the first three weeks in 2016.”

...but we now reach the first-year students in their respective curricula.

“As of 2016, there is no generic research data management programs offered by the Library for the current graduate students in the Faculty of Information Technology.”

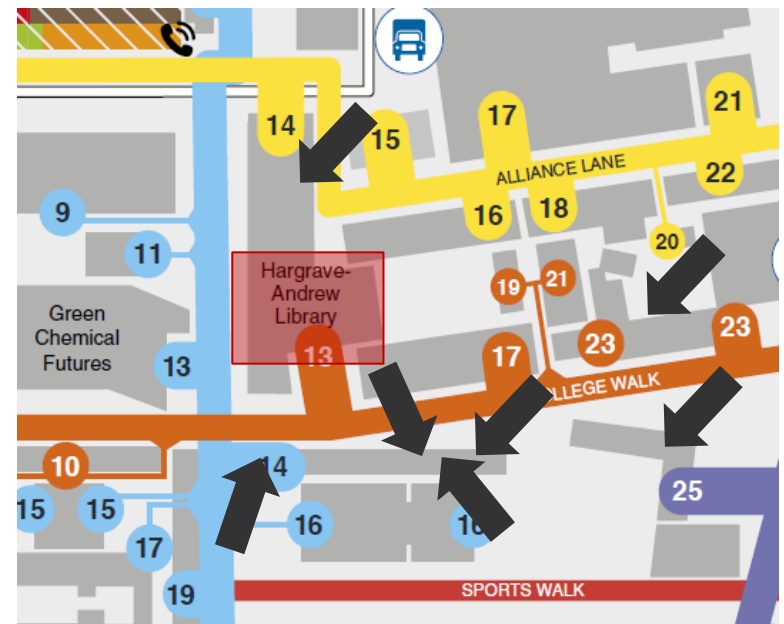
...but we see them as part of their faculty induction and the coursework components of their candidature.

Students' learning spaces circa 2013



A threat to the Library?

Students' learning spaces in 2016

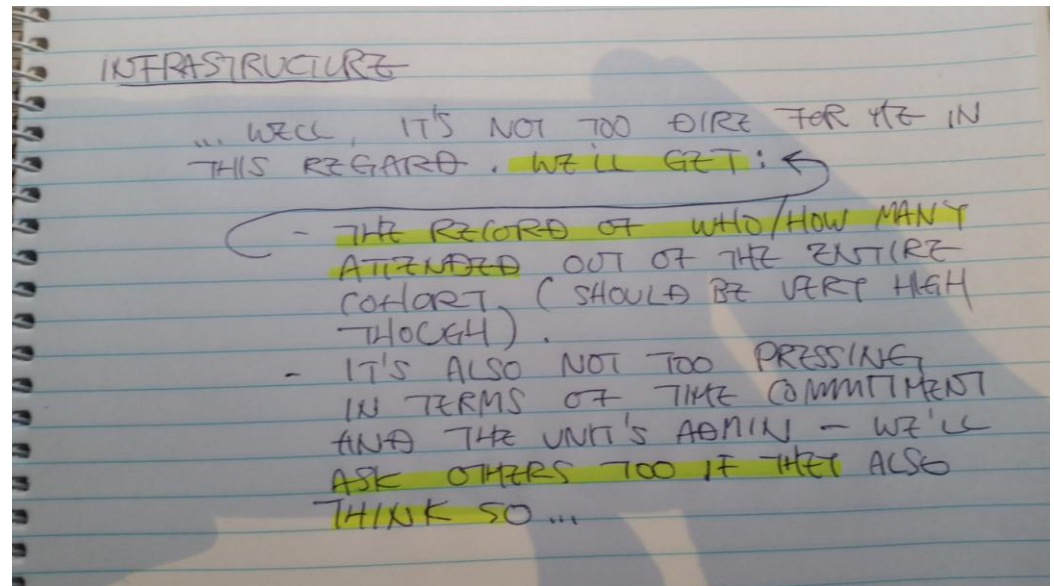


...well, not quite.

Exercise 2a: Infrastructure

Take a moment and write down (and discuss with others if time allows):

- What kind of 'questions' are relevant to your program, and why?
- What kind of 'data' do you already have, and how has it been used?
- Now you think about it, what kind of 'methods and data' would you be using to evaluate this aspect of the program?



Level 2: Perception

QUESTIONS

- Was the program relevant to participants' needs and interests?
- Did the participants like the program and/or find it useful for their learning?
- Do they know that they learnt what we think we taught?

METHODS AND DATA

- Constructive alignment
- Surveys (including pre- and post-surveys)
- In-class activities (e.g. diagnostics, pre-class activity)

A usual suspect...

Information research and Learning Skills Feedback Form 2009

1. This session PAC2331 1st Workshop

2. Date and starting time: 25th March 2009

3. Presenter: Tomas Zahora/Noriaki Sato

4. Branch hosting session

Berwick Caulfield Gippsland Hargrave-Andrew

Law Matheson Peninsula Pharmacy N/A

5. Your faculty

Art & Design Arts BusEcon Educ Eng Info Tech Law

Medicine, Nursing & Health Pharmacy Science N/A

6. Your level

Undergraduate Honours Postgraduate Academic Staff Library Staff

Other

7. I understood the purpose of the session.

Strongly agree Agree Neutral Disagree Strongly Not applicable

8. I have learned something today that I will use in my studies or research.

Strongly agree Agree Neutral Disagree Strongly Not applicable

9. The learning activities helped my understanding.

Strongly agree Agree Neutral Disagree Strongly Not applicable

10. I understood the presenter's explanations.

Strongly agree Agree Neutral Disagree Strongly Not applicable

11. I would recommend this session to another student.

No Yes

12. Please state something that you can apply to your studies or research.

13. Other comments.

Table 1: Summary of the feedback (1: Strongly agree; 2: Agree)

| | |
|--------------------------------------------------------------------------|------------------|
| Question 7: I understood the purpose of the session | 1.717948718 |
| Question 8: I have learned something today that I will use in my studies | 1.780645161 |
| Question 9: The learning activities helped my understanding | 1.922580645 |
| Question 10: I understood the presenter's explanations | 1.806451613 |
| Question 11: | |
| I would recommend this session: 145/157 | 92.36% (145/157) |
| I would not recommend this session to others: 7/157 | 4.46% (7/157) |
| Recommendation neutral or not entered: 5/157 | 3.18% (5/157) |

...and another.

26 responses in total

Average ratings (1 = extremely useful; 2 = useful; 3 = moderately useful; 4 = of some use; 5 = not useful at all):

- Introductory session: 1.8
- Preparing a poster: 1.8
- Writing a research paper: 2.1
- Presenting a poster: 2.1

Comments:

- Endnote session was good.
- Endnote session was useful, but I have found that Mendelay is netter than Endnote.
- Preparing a poster and talking about poster can be combined.
- A very good programme! Need more free lunch though!
- Fantastic programme :P
- Overall, enjoyable to get in touch with fellow research students to talk about their topics. Found people with common topics.
- Writing a research paper could have be done earlier.
- I found it hard to make time to come to all sessions because I had to do lab work at these times. I think it would be easier to come to the sessions if they were all on one day.
- Well done!
- The interaction is good.
- Sessions were well prepared and presented.
- The majority of the content of this lecture series is common sense. The more specific requirements for posters and reports will prove particularly useful still.
- The time for the sessions often interfered with experiments. Might have been better to have them at the start or end of the day, rather than the middle. :)
- Not on at great time of day... Fairly interruptive to lab work. On a whole, reasonably good activities.
- Larger and more in depth session.
- I liked when we got lunch included.
- You look cute. Good job.

SESSION / COURSE EVALUATION FORM

Title: Summer Research Program Seminars

Date: December 2011-February 2012

Teachers: Noriaki Sato and Tomas Zahora

To what extent have these sessions been useful in helping you with the requirements of the Summer Research Project?

| | | |
|--------------------------------------------------|-------------------|--|
| 1. Introductory activity at Induction day | Extremely useful | |
| | Useful | |
| | Moderately useful | |
| | Of some use | |
| 2. Preparing a poster | Not at all useful | |
| | Extremely useful | |
| | Useful | |
| | Moderately useful | |
| 3. Writing a research paper | Of some use | |
| | Not at all useful | |
| | Extremely useful | |
| | Useful | |
| 4. Talking about your poster | Moderately useful | |
| | Of some use | |
| | Not at all useful | |
| | Useful | |

Comments

Thank you for your input.

...and pre- and post-survey as part of class activities

Evaluation Form: *Pre-session survey*

Research training module for FIT HDR students: Intellectual property, research data management, and publication strategies

Question 1: I understand the concepts of intellectual property (IP), copyright and authorship, and how these concepts apply to my research project.

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

Question 2: I understand the concept of Research Data Management (RDM) and its relevance to my research project.

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

Question 3: I have a reasonable understanding of the current publication practice and trends in IT fields, and how this implicates to my research project.

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

Question 4: I understand the concept of bibliographic data management, and its relevance to my research project.

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

Question 5: What do you expect to learn from this session?

Evaluation Form: Post-session survey

Research training module for FIT HDR students: Understanding research as a process (including formulation of research questions)

Question 1: The session and its contents were targeted at the right level.

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

Question 2: The teaching materials used/provided (e.g. slides, handouts) were useful.

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

Question 3: The exercises were targeted at the right level.

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

Question 4: The teaching was effective.

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

Question 5: I understand the concepts of intellectual property (IP), copyright and authorship, and how these concepts apply to my research project.

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

Question 6: I understand the concept of Research Data Management (RDM) and its relevance to my research project.

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

Question 7: I have a reasonable understanding of the current publication practice and trends in IT fields, and how this implicates to my research project.

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

Question 8: I understand the concept of bibliographic data management, and its relevance to my research project.

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

Question 9: The session addressed the expectations you described at the beginning of the session.

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

Question 10: Overall, you are satisfied with the session.

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

Question 11: You would recommend this session to other PhD students.

- Yes
- No

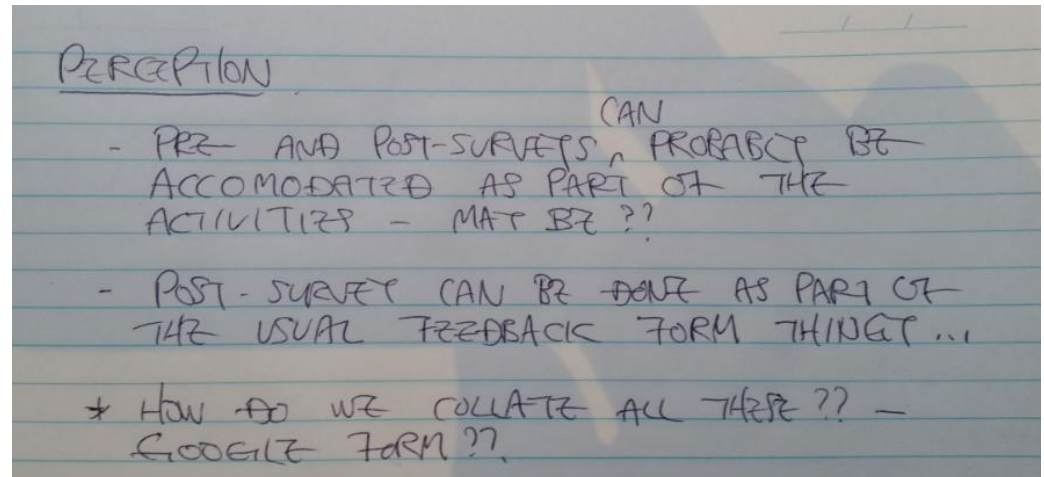
Feedback and suggestions:

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Exercise 2b: Perception

Take a moment and write down (and discuss with others if time allows):

- What kind of 'questions' would be relevant to your program, and why?
- How have you been using a survey or a questionnaire? If so, how purposefully are you using it?
- Now that you think about it, what kind of 'methods and data' would you be using to evaluate this aspect of the program?



Levels 3 and 4: Learning/behaviour

QUESTIONS

- Is the program aligned with the learning outcomes? (Level 3)
- How does the program contribute to participants' authentic learning experience outside the program? (Level 4)
- Did the program achieve what was set out as the learning outcomes of the program? (Level 3)
- Did participants recognise the relevance of the skills learnt and apply in their authentic learning experience outside the program? (Level 4)

METHODS

- Constructive alignment
- In-class activities (e.g. quiz, tests) and assessment (if applicable)

Levels 3 and 4: Learning/behaviour

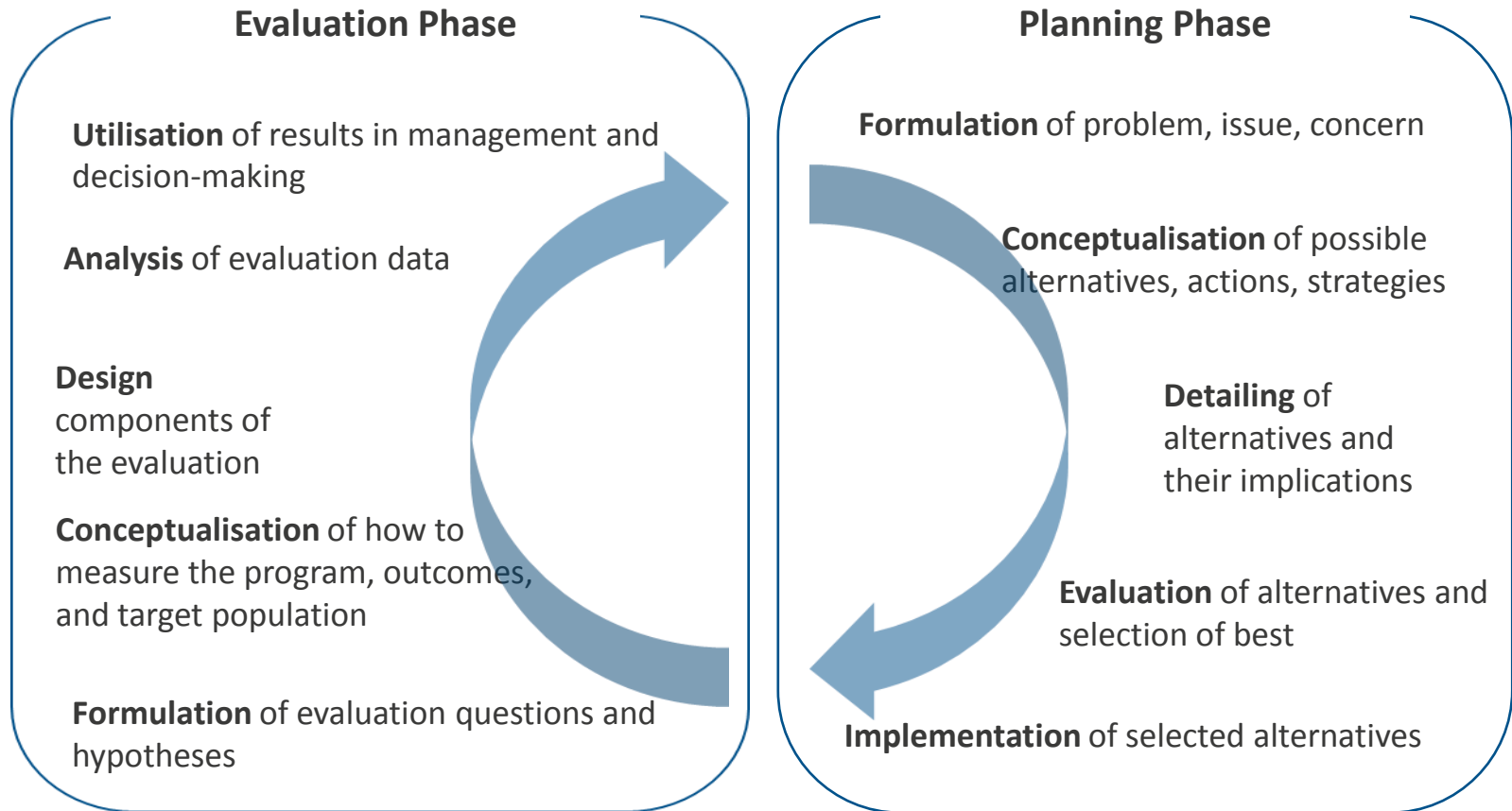
QUESTIONS

- Is the program aligned with the learning outcomes? (Level 3)
- How does the program contribute to participants' authentic learning experience outside the program? (Level 4)
- Did the program achieve what was set out as the learning outcomes of the program? (Level 3)
- Did participants recognise the relevance of the skills learnt and apply in their authentic learning experience outside the program? (Level 4)

METHODS

- Constructive alignment
- In-class activities (e.g. quiz, tests) and assessment (if applicable)

Evaluation/Planning Cycle



(Trochim, 2006b)

Rubrics for consistent marking

Assessment form for the evaluation of MCE 1100 essays 2011

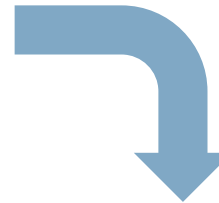
Student name/ID

Essay title

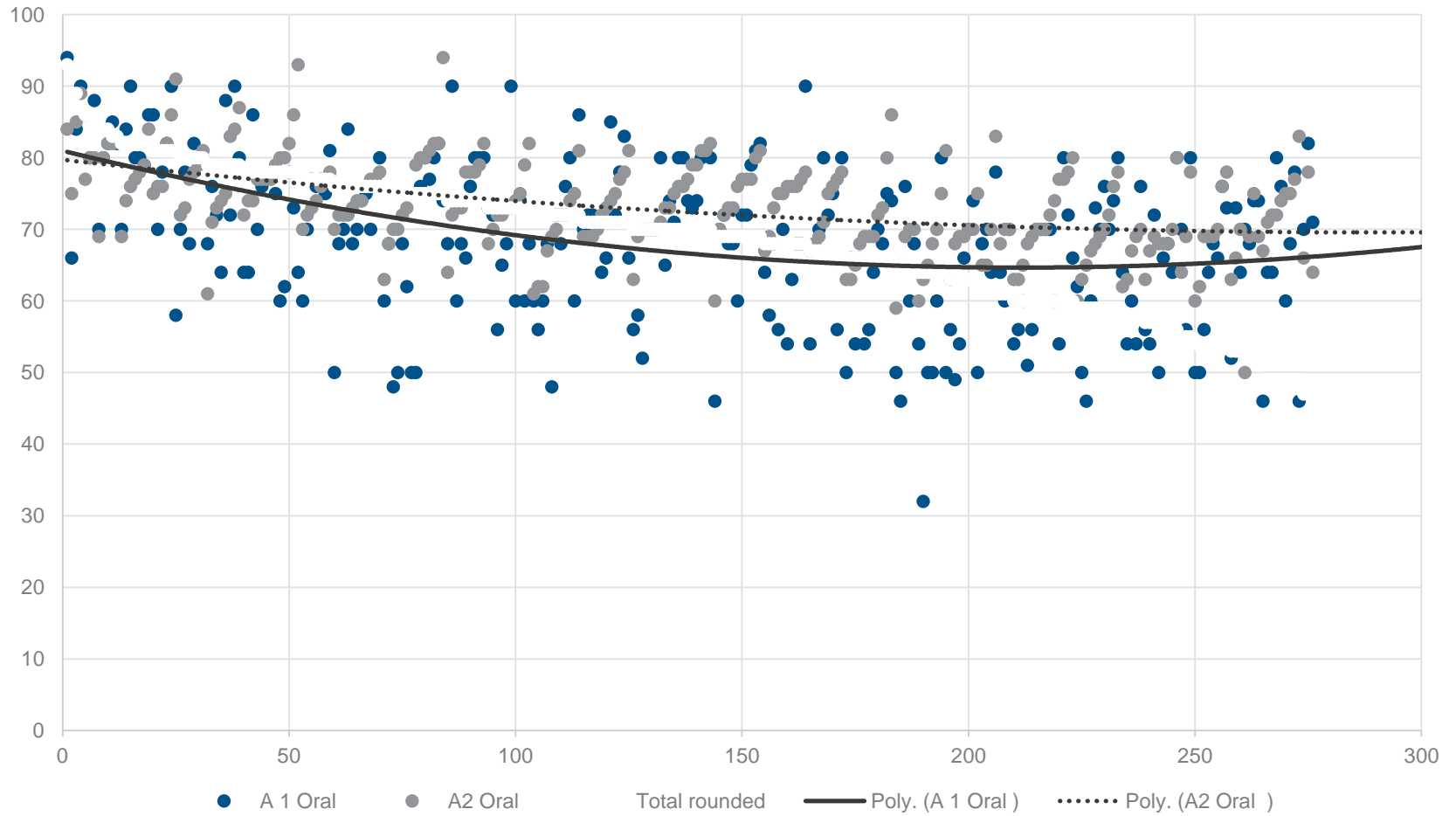
Assessor

| Structure | * ✓ ✓ ✓ ✓ ✓ ✓ | Mark |
|--------------------------------------------------------------------------------------------------------------------|---------------|------|
| Abstract - clear summary of the main points and conclusions | | /10 |
| Introduction - background and rationale for the essay and an indication of what to expect in the body of the essay | | |
| Appropriate use of sections, headings | | |
| Logical order and path | | |
| Development of valid case or argument | | |
| Use of relevant illustrations / tables | | |
| Appropriate length | | |
| Conclusion – succinct summary of the main findings | | |

Sample rubrics with permission by Dr Tomas Zahora



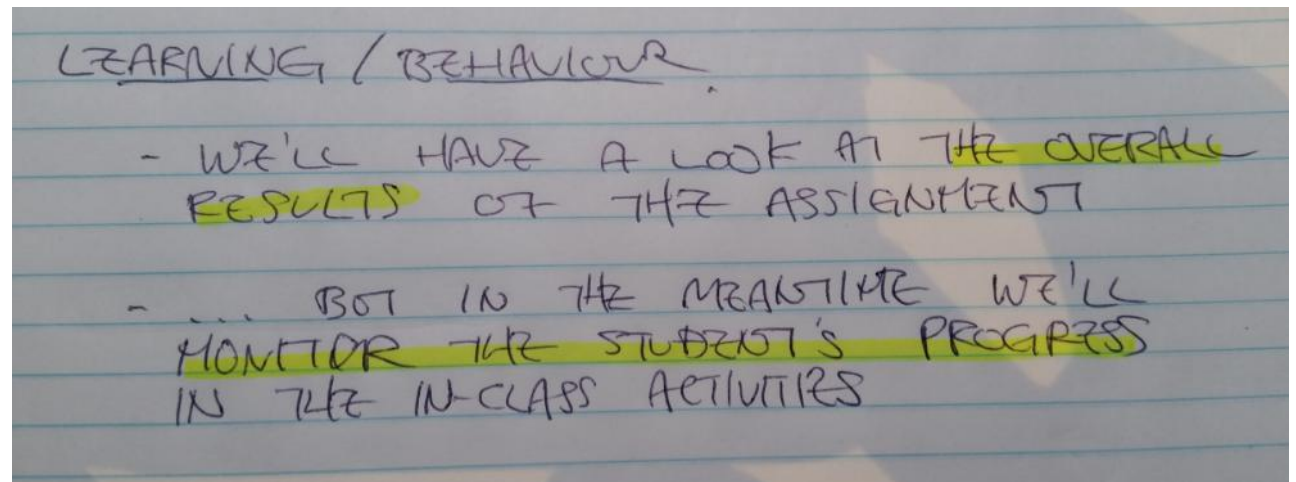
| Understanding and knowledge | F. Students communicate knowledge and process | Appropriate style (F3) | Presentation is not clear, language is seldom discipline-specific, and grammar is problematic | Presentation is mostly clear, with a strong attempt at using discipline-specific language, with some grammatical issues | Presentation is clear, uses mostly discipline-specific language, with few grammatical issues | Presentation is clear, uses discipline-specific language with no grammatical issues |
|------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Identification of central issues and concepts | | Logical order and focus (F3) | The presentation is unfocussed and disorganised | The presentation does not have a strong focus, and individual parts do not always logically cohere | The presentation is focused and most of its elements follow logical order | The presentation has a clearly communicated, distinct focus, and all elements of the presentation follow logical order |
| Depth and breadth of coverage of topic | | Ability to answer questions on technique and critique (F3) | Some questions are answered, but language and perspective are not discipline-specific | Most questions are answered, but language is not always discipline-specific | All questions are answered using discipline-specific language but do not range outside of the article itself | All questions are answered using discipline-specific language and reflect multiple perspectives |
| Accuracy | | Interactivity | Presenter is distracted by the slides or the paper and does not engage with the audience | Presenter attempts some engagement with the audience | Presenter's engagement with the audience is consistent, with appropriate choice of questions for the audience | Presenter engages the audience visually and by asking questions so as to maximise their understanding and impact of the |
| Clarity and precision in describing and using c | | | | | | |
| Critical analysis of published literature | | | | | | |
| Explanation of techniques used to examine th | | | | | | |
| Ability to formulate own questions and develop conclusions | | | | | | |
| Referencing | | | | | | |
| All cited references listed systematically in a b | | | | | | |
| An appropriate number of relevant sources cit | | | | | | |
| references) | | | | | | |
| Uniform and accurate reference style | | | | | | |



Exercise 2c: Learning/behaviour

Take a moment and write down (and discuss with others if time allows):

- What kind of 'questions' are relevant to your program, and why?
- What kind of 'methods and data' would you be using to evaluate this aspect of the program?
- If not possible in your specific context, why do you think it is?



Level 5: Outcomes/long-term impacts

QUESTIONS

- How is the program aligned with the outcomes and attributes defined by your institution/organisation (e.g. Graduate Attributes, strategic initiatives)?
- How did the program impact on the participants' outcomes beyond your institution?

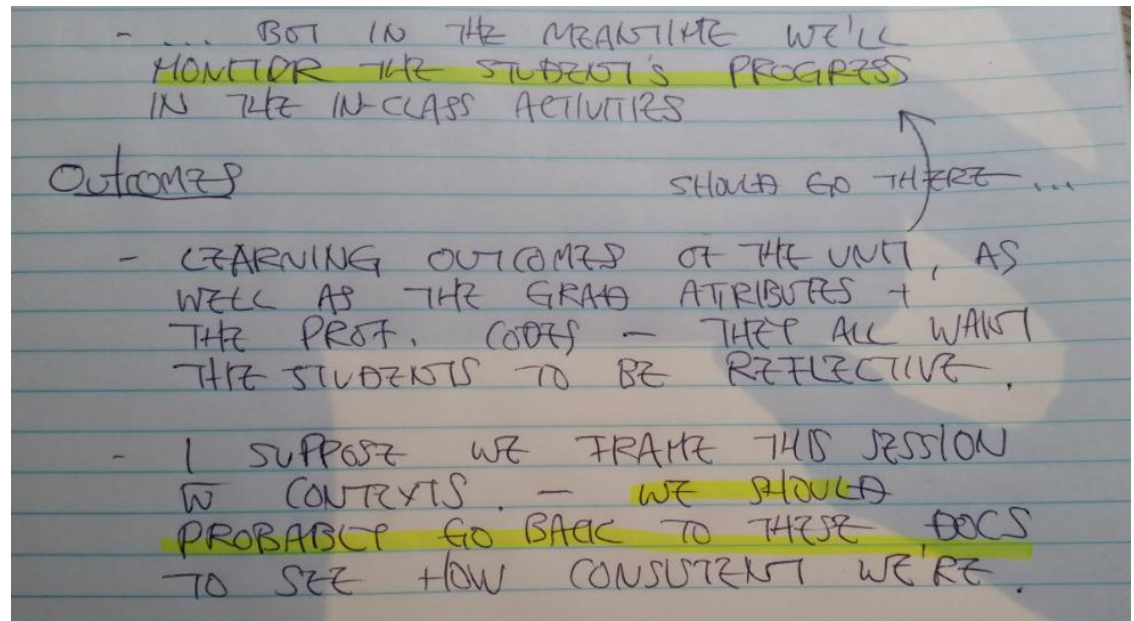
METHODS

- Constructive alignment (as part of planning)
- ???

Exercise 2d: Outcomes/long-term impacts

Take a moment and write down (and discuss with others if time allows):

- Can you identify the broader outcomes/attributes your program should be aligning to?
- How would you respond to such outcomes/attributes?



A WRAP-UP IN REFLECTIVE WORKSHOPS

KEY ROLE: COORDINATOR / FACILITATOR

THE PROGRAM:

- 2ND YEAR IT STUDENTS
- PART OF A PROFESSIONAL PRACTICE UNIT
- THERE IS AN ASSIGNMENT LINK IN THE SEMESTER

SUCCESS:

- WANT TO SEE THAT THE STUDENTS ACTUALLY TAKE ON BOARD THE CONTENTS OF THE WORKSHOP IN THEIR ASSIGNMENT

INFRASTRUCTURE

... WELL, IT'S NOT TOO EASY FOR ME IN THE REGARD. WE'LL GET:

- THE RECORD OF WHO/HOW MANY ATTENDED OUT OF THE ENTIRE COHORT (SHOULD BE VERY HIGH THOUGH)
- IT'S ALSO NOT TOO PRESSING IN TERMS OF TIME COMMITMENT AND THE UNIT'S ADMIN - WE'LL ASK OTHERS TOO IF THEY ALSO THINK SO...

Does yours look like this?

PERCEPTION

- PRE AND POST-SURVEYS CAN BE ACCOMMODATED AS PART OF THE ACTIVITIES - MAY BE??
- POST-SURVEY CAN BE DONE AS PART OF THE USUAL FEEDBACK FORM THING...
- + HOW DO WE COLLECT ALL THIS?? - SURVEY TOOL??

LEARNING / BEHAVIOUR

- WE'LL HAVE A LOOK AT THE OVERALL RESULTS OF THE ASSIGNMENT
- ... BUT IN THE MEANTIME WE'LL MONITOR THE STUDENTS' PROGRESS IN THE IN-COURSE ACTIVITIES

OUTCOMES

- GENERATING OUTCOMES OF THE UNIT, AS WELL AS THE GRAD ATTRIBUTES + THE PROF. CODES - THEY ALL WANT THE STUDENTS TO BE REFLECTIVE.
- I SUPPOSE WE FRAME THE QUESTION BY CONTENTS - WE SHOULD PROBABLY GO BACK TO THOSE DOCS TO SEE HOW CONSISTENT WE'RE.

...or better (of course)!

Lesson learnt 1: Planning as evaluation

| Levels of evaluation | To be evaluated during the planning |
|----------------------|-----------------------------------------------------------------|
| | To be evaluated after the delivery |
| Infrastructure | Logistics and administration |
| | Coverage and outreach |
| Perception | Relevance to participants' needs and interests |
| | participants' reactions and perceived learning |
| Learning | Relevance of the learning and teaching to the learning outcomes |
| | participants' learning and skills development |
| Behaviours | Transferability of the knowledge and skills taught |
| | participants' application of the knowledge and skills taught |
| Outcomes | Relevance of the learning and teaching to their contexts |
| | Long-term impacts of the learning and teaching |

Lesson learnt 2:

Methods discussed in this workshops

- Three main types of methods used:
 - Unobtrusive methods:
 - Collecting qualitative data using structured observation and informal questions/feedback.
 - Survey:
 - Mainly quantitative analysis of the data gathered through a formal instrument (i.e. questionnaire).
 - In-class activities and assessment:
 - Quantitative analysis of the data gathered through assessment tasks.

Lesson learnt 3: Don't give away your data alone (given them your narrative instead!)

- Data alone doesn't speak...
- The narrative makes the data meaningful, and the data will help you make the narrative more convincing.

Part 3: How do we communicate?

Exercise 3: Audience(s) of your evaluation

- Who would be interested?
- Who should be interested?
- Who may be interested?

- How would they hear you?
- What do they hear?
- Why would they listen (to you)?

Exercise 3: Audience(s) of your evaluation

- Who would be interested?
- Who should be interested?
- Who may be interested?

Your 'favourite' audience vs. 'hidden' stakeholders

- How would they hear you?
- What do they hear?
- Why would they listen (to you)?

The format you feel most comfortable vs. the format they find engaging

Legal, policy and ethical issues

How widely can you share your evaluation?

- Legal consideration: Privacy and confidentiality
- Policy consideration: Ethical clearance, data/record management and faculty academic procedures
- Ethical consideration: Participants anonymity, professional integrity and potential labelling of a particular cohort

Part 4: Conclusion – where from here?

Towards a community of practice

- Development of expertise of individual practitioners, through development of resources and staff training
- Communication of expertise to wider communities of practice, through leadership and publication
- Consolidation of expertise within the organisation, through strategic dissemination and documentation of the data

Thank you...

- Feel free to contact me at:

Noriaki.Sato@monash.edu

- Please fill in a feedback form at the following address:

<https://goo.gl/forms/GVPbsxZe4gFaDREO2>