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Experimenting with Experiential Learning: What lessons can we learn from research on authentic learning in health?

Liz Molloy Professor of Work Integrated Learning, MMS
and Director Interprofessional Learning and Practice Faculty MDHS
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Acknowledgements

Research Collaborators

Margaret Bearman, Deakin University

Stephen Billett, Griffith University

Christy Noble, University of Queensland

David Boud, Deakin University

MDANZ Research Team: Robyn Woodward-Kron, Jo Hughson, Stephen Lew, Mark Lavercombe, Agnes Dodds, Clare Delany

Good WIL Hunting Research Team

Charlotte Denniston, Leonie Griffiths, Tim Clement

Aviation-Medicine Inter-disciplinary exchange team

Michael Henderson, Mike Phillips, Margaret Bearman, Adam Cummings

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Key ideas this morning

1. While **experience** may be an important mediator of learning, **it doesn't necessarily lead to learning**

2. Learning in the workplace is **inherently tricky** –learners encounter a number of tensions, as well as varied systems, codified practices, peers, clients, and supervisors. This is made even harder when we ask students to make **transitions between workplace practice contexts**

3. We need to better design and signpost **'pedagogically rich activities'** within the workplace, and prime learners on how to **consider context** and **engage** in these activities



Key ideas this morning

4. We also need to acknowledge that with **power asymmetries** in our university and our affiliated workplaces- students may find it **difficult to engage in experiential learning opportunities** even when *they know what they should do*
5. Key **strategies to improve experiential learning**: 1) more emphasis on **priming** for tasks and context and where to hunt for **performance relevant information** and 2) cultivating **more candid and productive learning conversations** through learner preparation and 'industry' staff development
6. The merits of '**making the familiar strange**': Cross disciplinary exchanges to generate new ways of thinking about, and enacting experiential learning

“Making Strange”

“The purpose of art, then, is to lead us to a knowledge of a thing through the organ of sight instead of through recognition. By “enstranging” objects and complicating form, the device of art makes perception long and “laborious.”

Shklovsky 1991 p. 6





An inter-disciplinary exchange on experiential learning

The University collaboration (Uni Melb, Monash, Deakin) was sought by the aviation partners to research and improve their workplace-based and simulation-based learning

We could have audited the new context with our clipboards, but instead we suggested an exchange model.

We examined opportunistic teaching, learning through work, and feedback and assessment in the simulation based environment and the 'real' workplace environment (*flight deck and the operating theatre*).





ANSETT
Flight Simulation Centre

AIRBUS A320



AIRBUS A320



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Taking off at Auckland Airport...virtually





The team after an insitu code stroke simulation at St Vincent's Hospital





Train for how you play

The everyday and.....

Engine on fire

Icy runway

Terrorism

Heart attack of co-pilot

Turbulence

Birds in engine





Cardiac Surgery (real time)

A complex case (valve replacement) with two consultant cardiac surgeons, two consultant anaesthetists, their trainees, a cardiologist, radiologist, 8 nurses. And two observers (Med Ed Researcher and Pilot)





Outcomes of the inter-disciplinary exchange, investigating experiential learning

1. The merits of working with others from different disciplinary perspectives- making the familiar strange
2. The importance of developing 'technical' and 'non-technical' skills eg communication, team work, decision-making, and how assessment reinforces what the institution, or training body, values
3. The need for simulation-based education to improve the learning and practice of people in workplace settings (train for how you play)
4. The power of debriefing and feedback (including timing/sequencing, and skill of facilitators)



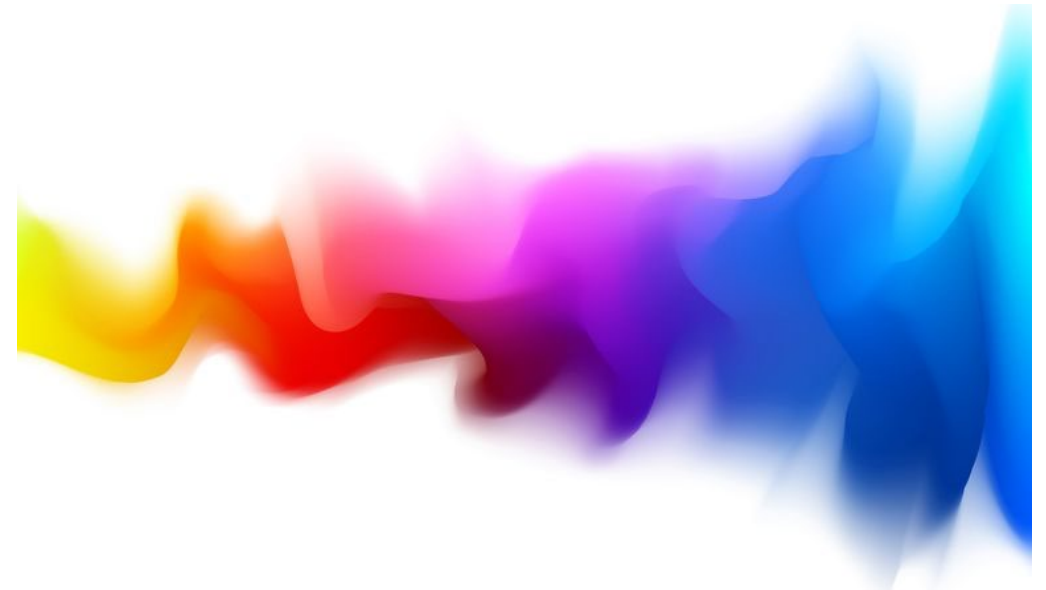
What is experiential learning?

Learning through experience.....

While experience may be the foundation for learning, it doesn't necessarily lead to it.

“Experience has to be arrested, examined, analysed, considered and negated to shift it to knowledge”

Christos, Ch 11 in Boud, Cohen and Walker (1993)





We need to do better when it comes to experiential learning

In the Faculty MDHS:

- Clinical placement backlog
- Health workforce fatigue
- Poor student engagement scores
- Data that indicate students are finding transition to placements and workforce difficult
- Urgent need to increase skills of clinical supervisors
- Demand for improved interprofessional team-based practice
- Recognition that training in 'profession-based silos' and 'training stage silos' (ignoring the learning continuum) does not meet workforce needs- 'we are not training for how we play'



We need to do better when it comes to experiential learning

Wider University: Melbourne Practice and Partnership Framework An Experiential Learning Roadmap 2019

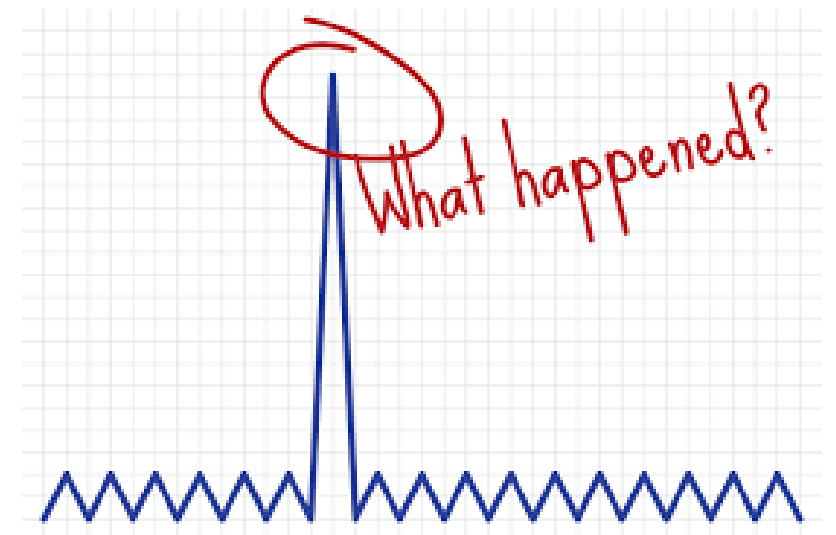
- Apply deep disciplinary knowledge
- Develop employability skills, including team-work, problem-solving, planning and organising, self-management and communication
- Have multi- and interdisciplinary learning experiences
- Work on authentic projects and activities that are both inspired and posed by industry and community partners



What does our course evaluation data suggest about transitions?

Movement from one state, condition, context or collection of circumstances to another

Teunissen & Westerman (2011)

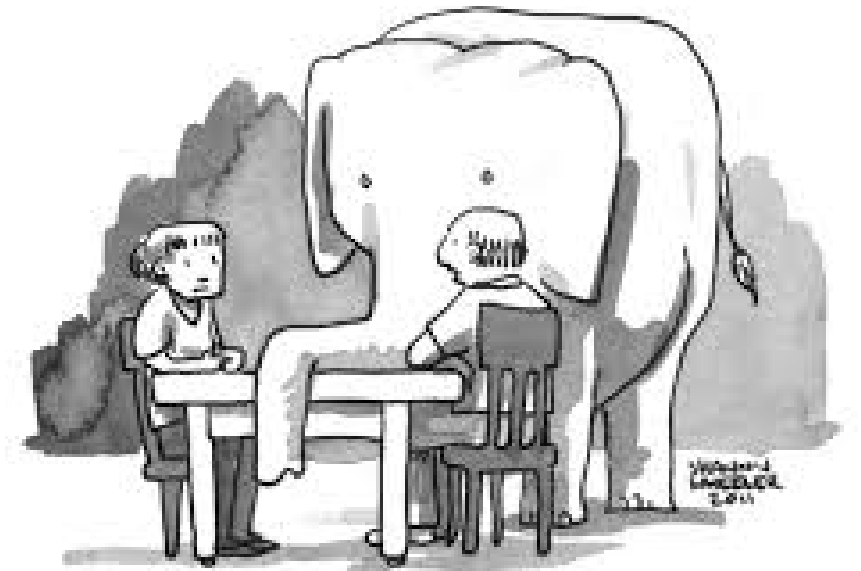


We've also paid little attention to three key tensions in experiential learning in the workplace

- 1) Service provision and learning
- 2) Learning/development and assessment
- 3) Vulnerability and credibility

Bearman, Molloy, Ajjawi, and Keating (2012)

Molloy, Woodward-Kron et al (2018)



"HONESTLY? I PREFERRED WHEN WE DIDN'T TALK ABOUT THE ELEPHANT"

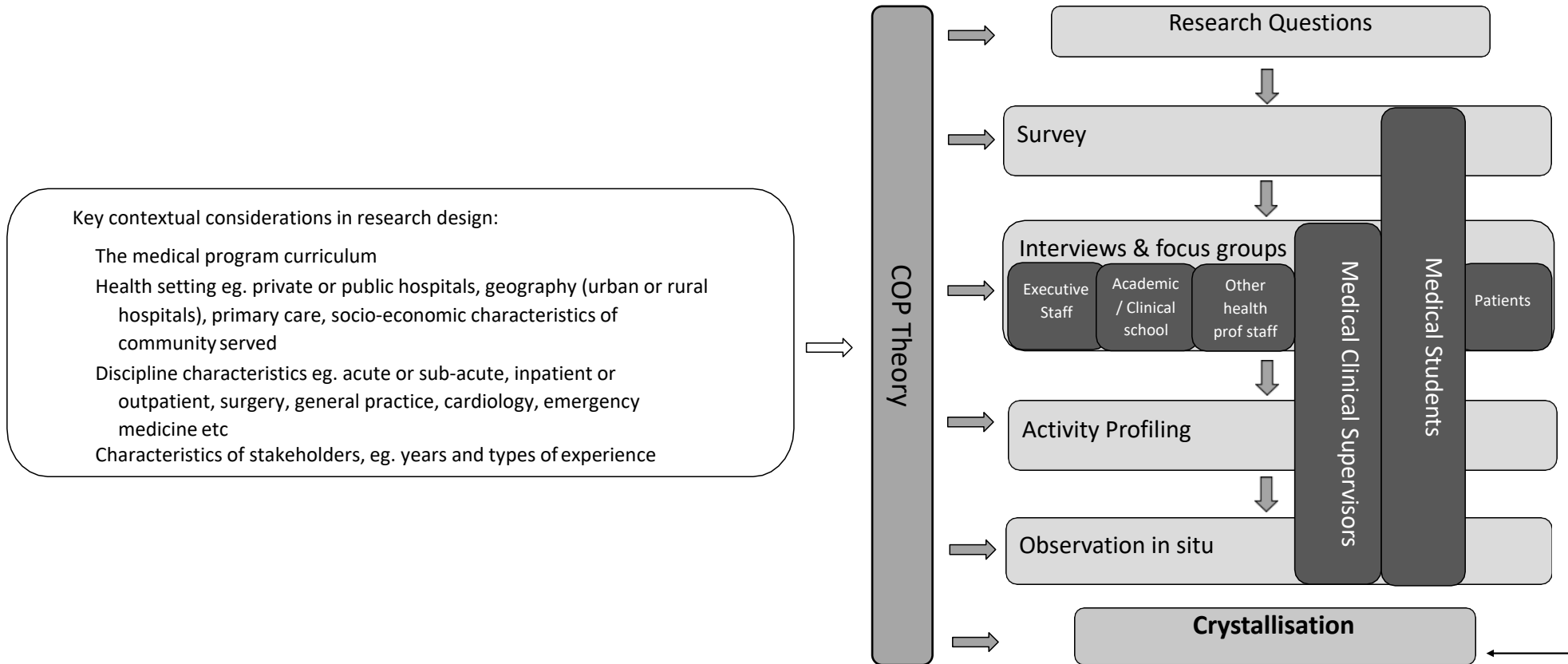


The service provision-learning tension

*“Medical students and other workplace learners provide immense value to patients, healthcare teams, and the systems in which they work. Although **we may never be able to fully quantify this value, having a better understanding of its scope and magnitude is an important and achievable goal.**”*

Ehrenfeld, Spickard and Cutrer (2016) p.127

Clinical Placement Research Framework



Molloy E, Lew S, Woodward-Kron R, Delany C, Dodds A, Lavercombe M, Hughson J (2018). Medical student clinical placements as sites of learning and contribution. Melbourne: University of Melbourne.



MDANZ Qualitative Results

Benefits associated with medical student clinical placements, challenging the ‘burden discourse’

- 1. Helping with work flow*
- 2. Enhancing clinicians’ reflective practice*
- 3. Heightening humanism*
- 4. Bolstering hospital reputation (virtuous cycle)*



Helping with work flow

*“I think it also **helps** with some of the **clinic workload** because it means we have somebody who can take histories, write some notes. So I think, potentially, **if you use them well, it can improve the efficiency of the clinic.**” (Clinical Supervisor)*



Enhancing clinicians' reflective practice

“Being asked how you are doing something or why you are doing something is always useful. You should ask yourself that all the time anyway. But it’s rather difficult when a young person says, ‘Why are you doing it that way when Professor X says you should do it this way?’” (Clinical supervisor focus group)



Implications

Students learn more when they are feeling, and being, useful

Feeling connected, and 'of service' has a bearing on their wellbeing

Health services and clients and students would like to know more about how students work in placements- and the ways in which they provide benefits

HOWEVER

We observed, and students talked about, **how difficult they found navigating how to learn in workplace environments.** We make assumptions that students know what to do, and what activities to 'milk' for their learning potential (eg ward rounds or family meetings).

<https://www.learnfox.co.uk/blog/10-ways-to-develop-a-culture-for-learning-in-the-workplace>





Study “Good WIL Hunting”

Before, During, After (task/encounter and wider placement)

Role rehearsal:

“History and exam role playing with real patients before we go on to wards. To practise asking permission to take a history from patients and the flow of patient communication” (Student B23)

What’s it going to look like, feel like, smell like...how can I access learning experiences?

“A placement info session with Q&A where all the basics of who is who and what to expect is explained and first year students are matched with second year mentors for ongoing support” (Student B52)



Not in the Cambridge Dictionary

Pedagogically rich activities

“Qualities of clinical activities and interactions that are particularly educationally or pedagogically-rich. That is, those that have high levels of potency to assist health practitioners’ learning, including some kinds of learning that might not otherwise occur”

Billett et al. 2018



Pedagogically rich activities

What do these **look like** in your workplace context?

To what extent do we make **assumptions** that learners know how to engage with these?

How could you better **prime learners** for what these look like and how to access them?





Priming makes us notice things

If the observer had access to the following things, they learnt just as much observing as they did 'doing' in the simulation-based activity

- Checklist/rubric to hone their observation
- Anticipation that they needed to provide feedback to the learner afterwards
- Expectation that they would have a turn next in the 'hot seat'

O'Regan et al. *Advances in Simulation* (2016) 1:4
DOI 10.1186/s41077-015-0004-8

Advances in Simulation

RESEARCH

Open Access



Observer roles that optimise learning in healthcare simulation education: a systematic review

Stephanie O'Regan^{1*}, Elizabeth Molloy², Leonie Watterson¹ and Debra Nestel²



Priming- some applications

Students observing clinicians in practice (modelling, seeing 'what good work looks like'- could use a checklist or rubric) Bearman, Molloy, Ajjawi, and Keating (2012)

Students observing peers in practice - engaging in 'standards of practice' and developing 'evaluative judgement' Tai et al (2016)

Helping prepare students for engaging in tasks –after reading the patient's medical history, what might they be looking for in the physical examination?

Helping students signpost to educators what aspect of their practice they want feedback on (sensitizing analytical gaze) Boud and Molloy 2012

A pedagogy for noticing

A close-up, high-resolution photograph of a human eye, focusing on the iris and eyelashes. The eye is looking slightly to the left. The background is a soft, out-of-focus skin tone.

'Noticing for Professional Practice' Interactive online Module for MDHS students

Active observation (intentional noticing) of a team-based interaction in healthcare

Feedback conversation with a member of the team just observed (from a different profession)

Critical reflection (written account)- on what was learned in terms of their noticing capacities, as well as what they noticed about interprofessional team-based care

Funded by LTI Grant 2021

<https://mdhs.unimelb.edu.au/interprofessionaleducation>

Mason, J. (2002)



Learners hunt for (or notice) certain things within their contexts to help make sense of their performance

- Preliminary findings of feedback cultures study:
- **In surgery**, the tissues held cues that were meaningful for trainees
- **In intensive care**, clinical outcomes were not seen as robust markers for performance, so opinions of others (professionals or family members held more weight)



Bearman, Molloy, Woodward-Kron, Ajjawi, Castanelli, Watling, Hilder 2021



A pedagogy for noticing

At all times learners and practitioners need to read their environments for the salient information needed to interpret cues that are key to:

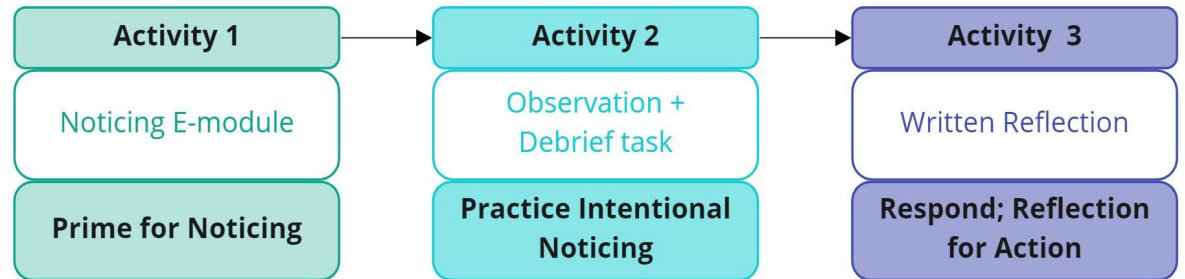
Attending to patients

Understanding the learning affordances within the health workplace, and

Registering and responding to colleagues' behaviours as they operate as an interprofessional team.

This reading the world for salient information, we refer to as 'Noticing'

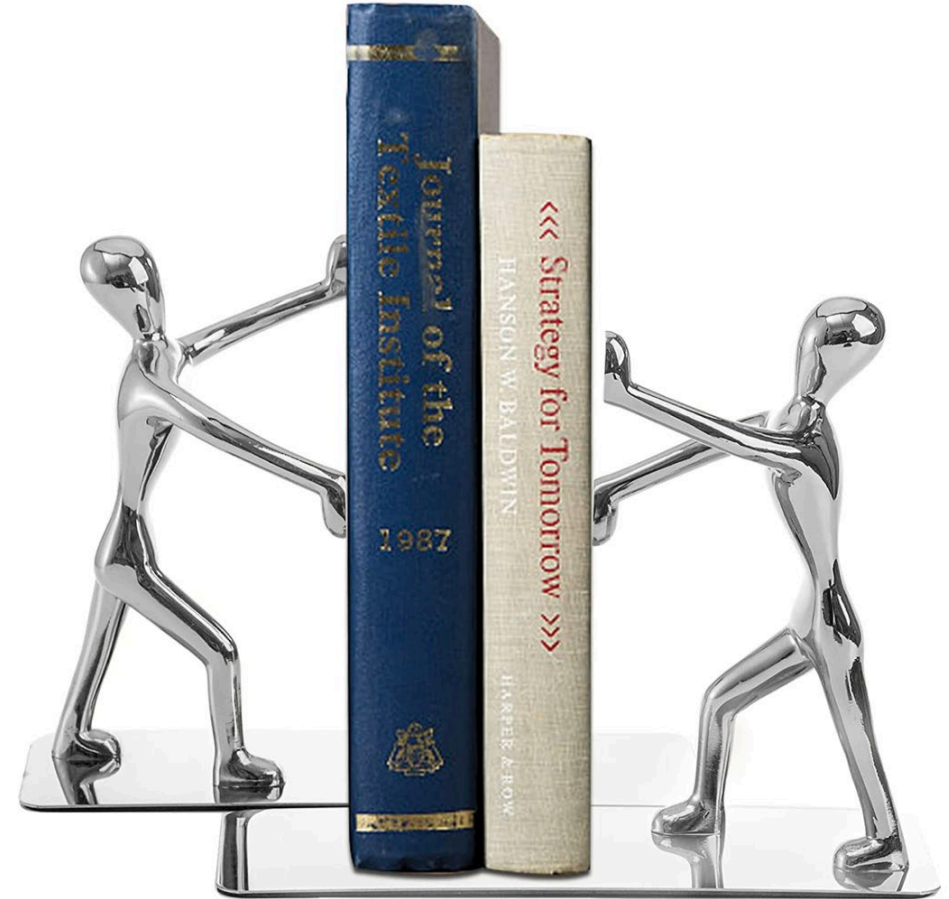
Noticing for Collaborative Practice Curriculum





Before During and **After**

We've talked about priming...
Now what about feedback in the
context of experiential learning?



Learner feedback literacy





Defining student feedback literacy

“The understandings, capacities and dispositions needed to make sense of information and use it to enhance work or learning strategies”.

Carless and Boud (2018)

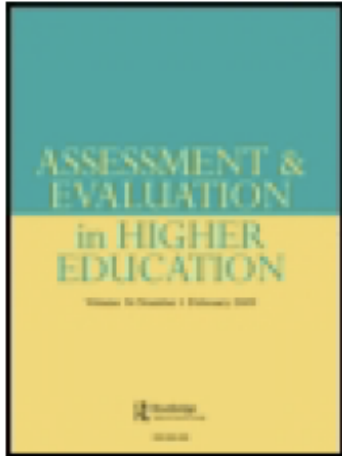


Only one partner is having feedback lessons (and often questionable ones)

In higher education in general, we spend much of our energy trying to improve teachers' ability to 'give feedback'

We seem to forget the role that students might play in the process





Assessment & Evaluation in Higher Education

ISSN: 0260-2938 (Print) 1469-297X (Online) Journal homepage: <https://www.tandfonline.com/loi/caeh20>

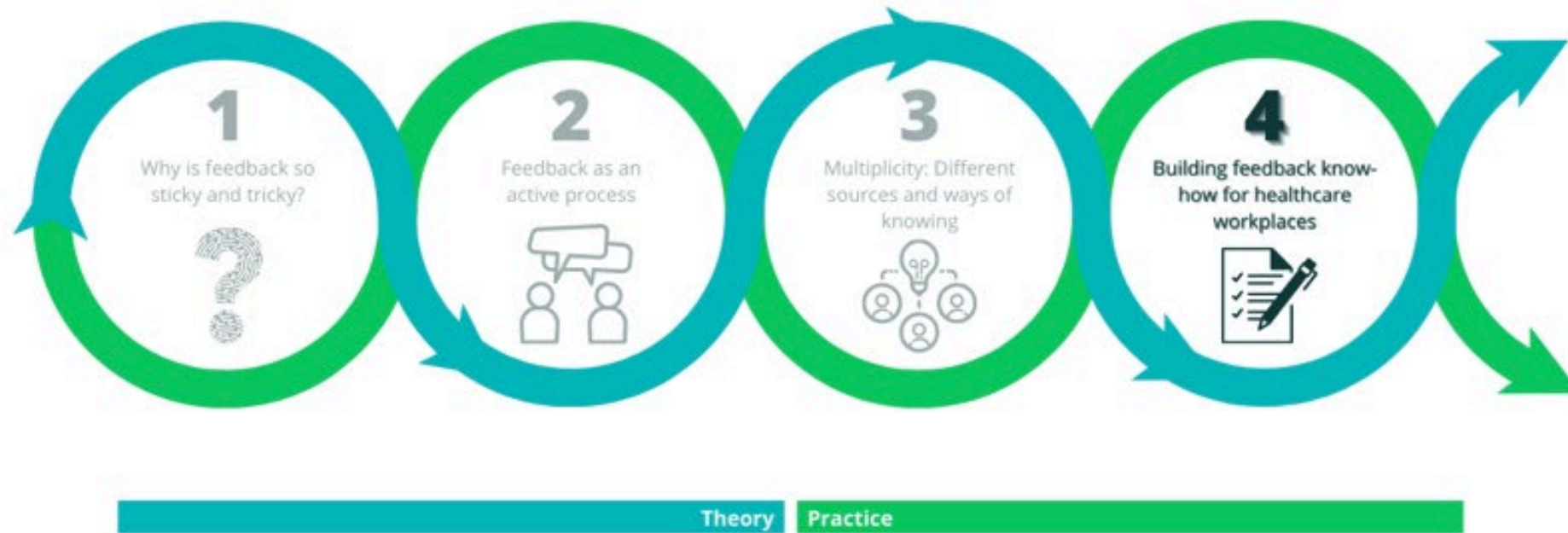
Developing a learning-centred framework for feedback literacy

Elizabeth Molloy, David Boud & Michael Henderson

To cite this article: Elizabeth Molloy, David Boud & Michael Henderson (2019): Developing a learning-centred framework for feedback literacy, Assessment & Evaluation in Higher Education

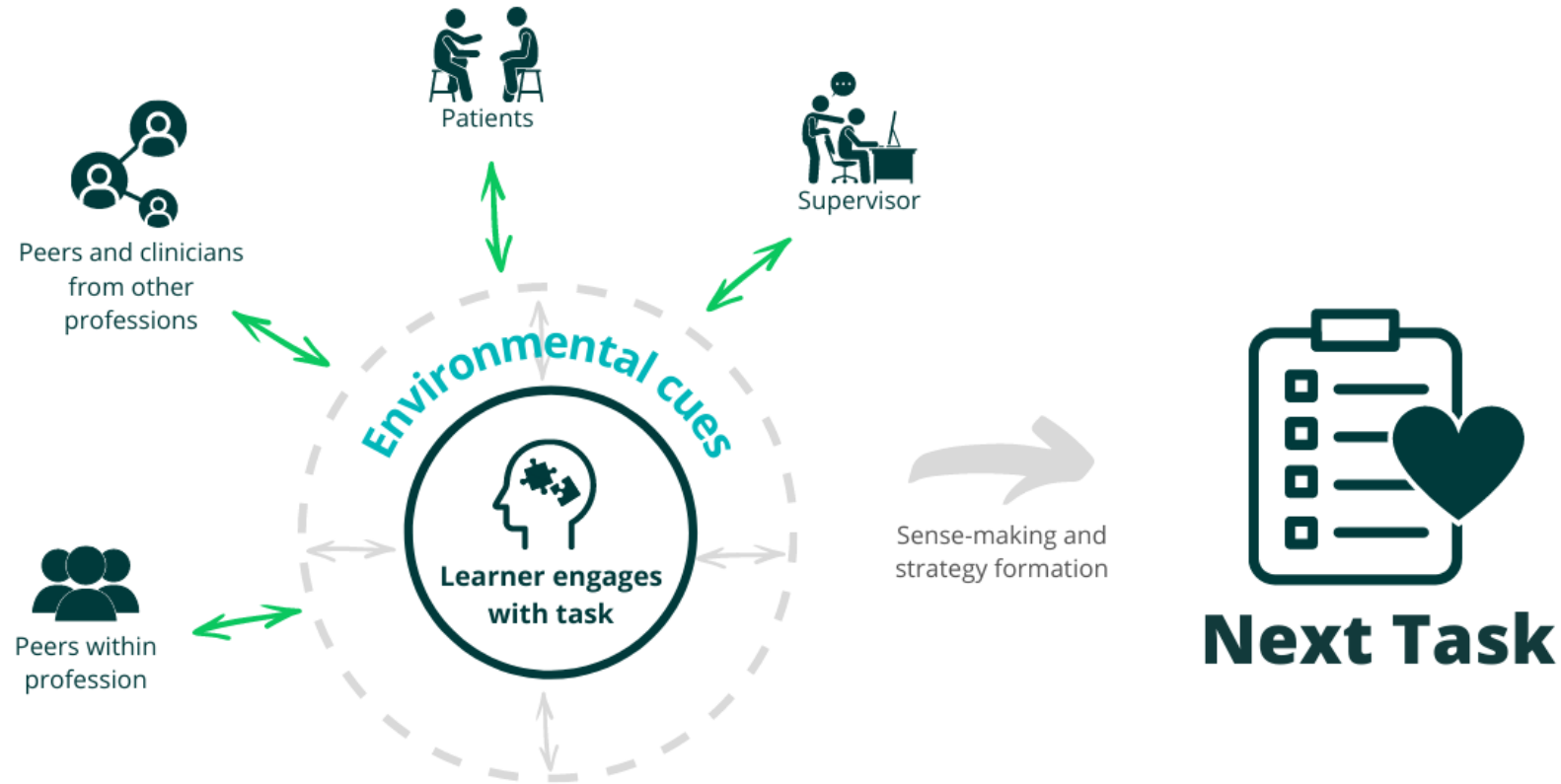
To link to this article: <https://doi.org/10.1080/02602938.2019.1667955>

Feedback Know-How in the Health Workplace



Synchronous learning: Building feedback know-how in the health workplace

Accessing cues and conversations as part of feedback know-how in the health workplace





“It’s yours to take”: generating learner feedback literacy in the workplace

Christy Noble^{1,2,3}  · Stephen Billett² · Lyn Armit⁵ · Leigh Collier⁶ · Joanne Hilder⁶ · Christine Sly¹ · Elizabeth Molloy⁴

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Abstract

Feedback can improve students’ learning and performance on clinical placements, yet students are often dissatisfied with the process. Attempts to improve feedback frequently focus on faculty development programs without addressing learners’ capabilities to engage with feedback. For feedback to be effective, students need to understand its processes and to translate this into practice. Developing student feedback literacy may enhance feedback



Permission to challenge the ritual of waiting for feedback

“Yeah, well as I say I was proactive I was hunting for it [feedback]. I was looking for it because I thought right, been to the workshop, I know how to ask for feedback, get on and do it”

(Nursing student 2 Noble et al 2019)



It needs to have an effect for learners to engage

*“Yeah don't be **afraid to initiate your own feedback**. As students we **just wait** because we wait for our assignments, **we wait for everything to just come to us in a feedback way**. You can actually go in there and **chase after your own feedback**. When you do that, it's **more fulfilling** anyway because **you're actually asking your specific questions** and you **get those answers**.”*

(Noble et al. 2019 nursing student 1)


It needs to have an effect for learners to engage





The business of developing people can be emotional





We like a 'stable self perception' and when that is
challenged it can

THREATEN OUR IDENTITY



How do learners and teachers spend energy in these learning conversations in the workplace?

Learners:

Presentation of capable self (not revealing too many deficits or struggles particularly when assessment is involved)

Appear open to the supervisor or senior's advice (lots of nodding)

Trying to decode their teacher's communication

Teachers:

Want to get their point across without upsetting the recipient

Keen to uphold 'standards' of work



“I sort of, kind of, just wanted to, if it’s ok, give you some feedback about areas you might consider improving if that’s alright with you”

The reluctance of supervisors to broach contentious topics reflects previous observational studies of feedback previously described as ‘vanishing’ (Ende 1983) and ‘mealy mouthed’ feedback (Molloy & Boud 2012).

University and workplace-based teachers want more professional development when it comes to supporting experiential learning/WIL



Good WIL Hunting: Risks owing to educator roles and skills

Dedicated WIL leads within Departments (many with doctorates or Masters in Clinical Education) reported that they were unable to exercise their pedagogical design skills, because the operational side of their roles consumed all of their time e.g securing partners or completing compliance checks

“I think for probably all of us, that you just feel like a spreadsheet jockey sometimes, and, and you've lost that that ability of what you really are in your job for as far as maintaining that quality” [FG2]

Denniston et al 2022

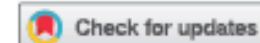


Interprofessional Learning Communities – A MMS and Goulburn Valley Health Partnership



Professional Learning Communities (PLCs) have been used to create positive cultural change in teacher education (Fullan 2016). A PLC is an ongoing process where educators work together in cycles of collective inquiry to achieve better results for the students they serve.

- An interprofessional group of 8 clinicians meet for an hour, once a month for 6 months (medicine, nursing, psychology, medical imaging, speech pathology, dietetics)
- Facilitated by experienced clinical educator and educator/ed researcher
- Each meeting, a person in the ‘hot seat’ brings a video of their own teaching practice or another artefact (teaching vignette or de-identified assessment form etc) as a trigger for discussion
- Stay tuned for results

TEACHING EXCHANGE



Video-triggered professional learning for general practice trainers: using the 'cauldron of practice' to explore teaching and learning

Tim Clement ^{a,b}, Duncan Howard^a, Eldon Lyon^{a,b}, Jonathan Silverman^b and Elizabeth Molloy ^c

^aMurray City Country Coast GP Training, Warrambool, Australia; ^bFaculty of Health, School of Medicine, Deakin University, Geelong, Australia; ^cDepartment of Medical Education, University of Melbourne, Melbourne, Australia

ABSTRACT

Many clinicians who take on a formal role of supervising or teaching trainees need to be taught how to teach and then continuously improve as educators. We describe the research-informed design of a novel professional development intervention that may be perceived by clinical educators as challenging, but being based on the key features of effective professional development is likely to lead to changes in their teaching practices. The video-club brings together a small group of clinical educators who have a shared interest in exploring their educator role and their teaching practices. It supports their learning through collective inquiry, using video-recordings of their authentic teaching practices as stimuli for discussion. A pilot has produced findings that are promising in terms of outcomes and impact. Participants responded to the educational design in the way that was envisioned and engaged with the requisite risk-taking and vulnerability that was necessary for their own learning and promoting learning for others.

ARTICLE HISTORY

Received 9 October 2019

Accepted 5 November 2019

KEYWORDS

Faculty development; medical education; reflective practice; video-based education; intellectual candour

Qualitative findings: working directly with experience

I think it is a unique learning experience and we're looking at what we actually do, not what we say we do, and it's, and it is, it is so helpful I think to do that, particularly in an environment that is, that is supportive and safe, where we're all showing ourselves and, in all of our mistakes and, and flaws and, and so, but it's a safe environment and a wonderful environment to learn in, I think. (Charles/O6/130319)

Clement et al 2019





Reimagining experiential learning at the University of Melbourne

What we've been doing and what we could be doing:

Introducing early WIL experiences in first year of programs (incorporating findings from MDANZ research)

Simulation-based learning with priming and debriefing (involving industry partners in the learning too)

Year 1 'Learning to learn in medicine' symposium

Feedback literacy program for students- 'feedback know how'

'Noticing' module and assignment for final year students

Interprofessional education and collaborative practice opportunities (formal 'Collaborative Practice Ready' Curriculum Framework, accreditation requirement)

Assessment of collaborative practice (not just individual practice) Assignment demanding critical reflection on noticings within team interactions etc **WE NEED TO DO MORE IN THIS SPACE**



Summary

Experiential learning in any field is hard to do well. Our student evaluations in medicine and broader MDHS show we could better prepare our learners (work-ready also means workplace learning ready)

We could do a better job in priming learners how to identify and access 'pedagogically rich activities' in their environments

If learners are feedback literate, they should have more capacity to seek out, make sense of, and use 'performance relevant information' (cues) and conversations embedded within everyday work to further develop

We could be partnering more effectively with our community to improve **both experiential learning** and the **impact of learner contribution to the work**

There's merit in putting our heads together across disciplines to make the familiar strange, designing shared resources for learners and educators to optimise experiential learning (with tailored exemplars)





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Contact

Professor Elizabeth Molloy

elizabeth.molloy@unimelb.edu.au

@emolloy1

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