Teaching Squares

Interdisciplinary reflection to enhance academic practice for student learning.

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Interdisciplinary reflection using Teaching Squares

to enhance academic practice

for student learning.

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Introduction

The act of being watched and watching others teach can feel risky and vulnerable (Berenson, 2017). Using a Teaching Square can provide the foundation to create a rich learning experience for individual participants to build supportive, non-judgmental teaching and learning communities within and across universities.

Teaching Squares are often cited as an alternative or first step towards peer review of teaching (Friedman et al., 2022; Harmon et al., 2024). Self-reflection on observation of a colleague(s) teaching has many terms, but for this guideline the term 'Teaching Square' will be used. This is the process whereby a collective group of four higher education (HE) academics, ideally from varied disciplines across the university come together and view an episode of teaching in order to provide an opportunity for self-reflection (Haave, 2014; Kirker et al., 2021). Furthermore, the implementation of Teaching Squares is designed to facilitate the building of a community of practice (Brown et al., 2024), and reduce the isolation recognised in teaching (Hattam & Weiler, 2022). HE academics typically are required to undertake some teaching, and this is even true for research focussed staff, who are required to teach students on how to undertake research (Colgan & DeLong, 2015). For some HE academics within health disciplines, they will typically have some clinical

background, but they may lack formal teacher training, for these reasons a process of reflection of teaching is critical (Harmon et al., 2022).

Enhancing teaching practice and student learning from self-reflection

Recognised as supporting good teaching practice (Hattam et al., 2019) and based on the findings of a current scoping review (Harmon et al., 2024), and pilot study (Brown et al., 2024), Teaching Squares can provide an optimal experience for those seeking knowledge on how best to engage newly appointed casual, fixed term and continuing HE academic staff to undertake collaborative and collegial interdisciplinary teaching. Using a Teaching Squares approach provides a safe learning environment to reflect on teaching, and can be the first steppingstone towards formative peer to peer and ultimately summative peer review of teaching.

Engaging in Teaching Squares contains the main characteristics of reflective practice interventions. Namely, use of a situation, inclusion of theory to improve both teaching practice and use of explicit reflective theory with a facilitator at hand (Richard et al., 2019). In addition, the relationships and networking gained from undertaking a Teaching Square can take on many characteristics, which can in some instances develop into mutual mentoring relationships (Friedman et al., 2022). The benefits of Teaching Squares include developing an atmosphere of inquisitiveness and constructive inquiry as opposed to that of criticism.

What are the benefits of being involved in a Teaching Square

Participating in Teaching Squares is an approach distinctly different from formal peer reviews but holds the potential to stimulate reflection on teaching practices. This has the potential to lead to transformative changes in student interactions, content presentation and assessment methods. Unlike formative or summative peer review, Teaching Square participants do not provide (or receive) direct feedback (Brown et al, 2024). Instead participating in a Teaching Square can instead provide energy and vitalise individual teaching practices through gaining new ideas (Berenson (2017) .

Teaching in higher education, as noted by Berenson (2017) is typically experienced as a private endeavour which will often take place behind either a computer screen or a closed door, and exclusively in front of students. While teaching can often be viewed as an independent activity, seeking out ways to engage in dialogue and exchange ideas around teaching is known to be beneficial (Friedman et al., 2022).

There are numerous reported advantages of participating in a Teaching Square (Brown et al., 2024 ; Friedman et al., 2022; Harmon et al., 2024; Hattam & Weiler, 2023; Hattam & Weiler, 2024; Lemus-Martinez et al., 2021; Weiler & Clifton, 2024). These include improving teaching practices and identification by self-reflection on one's own strengths and weaknesses thereby assisting with development of self-awareness (Brown et al., 2024 ; Haave, 2014) and strategies to address specific teaching challenges (Weiler & Clifton, 2024). This can lead to greater engagement and motivation to improve teaching. Involvement in the

process can also encourage collaboration and support among colleagues resulting in HE academics sharing their ideas, best practices and working together to identify and/or address common challenges (Harmon et al., 2022; Wilson et al., 2021).

A notable advantage is the flexibility of synchronous or asynchronous observation. This reflective engagement empowers educators, motivating sustained achievement. In higher education, evidence suggests that involvement in Teaching Squares plays a crucial role in fostering pedagogical reflection and improving practices (Brown et al 2024).

What makes Teaching Squares unique?

In contrast to traditional peer observation initiatives, Teaching Squares involve reflecting on what can be learned about one's own teaching by observing colleagues (Berenson, 2017). As opposed to evaluating others, the emphasis in Teaching Squares is on **self-evaluation** and **reflection** (Friedman et al., 2022). That is, it is non-judgemental (Atkins et al., 2018).

Use of Teaching Squares allows the development of peer professional networks which are useful not only for academic careers, but also for teaching support. The formal reflection process in Teaching Squares allows development and growth in teaching styles by encouraging individuals to critically assess their own practices and learn from peers' methods (Brown et al., 2024 ; Harmon et al., 2024). As recognised by Brown et al (2024), timing and time to participate are crucial aspects for future consideration.

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In order for the creation of supportive, open and energizing environments, there are four guiding principles for the foundations of Teaching Squares, as shown in Figure 1, (Berenson, 2017). Teaching Squares are unique in that they offer the opportunity for classroom visits by peers that are free from peer evaluation (Friedman et al., 2022).

Figure 1. The guiding principles of Teaching Squares (Berenson, 2017).

Confidential reciprocity	Mutual respect
• Everyone observes and is observed. • All experience the role of teacher and learner in a confidential environment.	• Respect for instructors, students and contextual differences.
Appreciation	Self-referential reflection
• Aim to identify and build on effective practices and environments for learning.	• Report what was learned to improve our OWN teaching rather than a square's partner.

Teaching Squares offer opportunities for participants to be self-learners in their own classes and assume a dual role of being the observer and the observed (Friedman et al., 2022; Harmon et al., 2024). Having appreciation and identification of a conductive environment for reflections and conversations about teaching, means an approach is undertaken that begins in the spirit of appreciation of the work of their colleagues (Friedman et al., 2022). As Brown et al. (2024) observed in their work on Teaching Squares, experiences around participation was described as being "*a privilege to be in someone else's class and …*

engaged with them in this process. Not only did you see their teaching style, but we had the opportunity to chat".

Feeling safe while undertaking a Teaching Square highlights the importance of creating a safe and non-judgmental environment for professional growth and collaborative learning. This sense of safety encourages educators to explore their teaching practices, seek feedback, improve practice and foster a culture of collaboration and teaching excellence.

Prepare for observations

In order to capitalise on the micro-observations in the teaching space, it is important to also gain a sense of the macro level in advance. This includes broadly understanding the course being observed, what degree it forms part of, and any cohort specifics that are important for observation. This means a bigger picture viewpoint is required before undertaking observations. It is recommended that to have a more meaningful observation experience, a pre-observation meeting is held to share information about the course, as well as the goals of each individual in the square. Information about the course may take the form of course outlines, learning objectives, relevant assignments etc. (Berenson, 2017).

The following prompts may be used for guidance (Atkins et al., 2018), they are suggestions only, as the observation experience is intended to provide individuals with data to subsequently reflect upon in terms of their own teaching, rather than provide input or feedback to colleagues about their teaching (Berenson, 2017).

- What was the most surprising thing you learned by participating in the Teaching Squares program?
- What three words best describe your learning experience in the Teaching Squares program?
- How would you describe your feelings/reactions to your experience of participating in the Teaching Squares program?
- What is one thing you learned by participating in the Teaching Squares program that will impact your teaching practice?
- How will you use what you learned in the Teaching Squares program?

By both asking these types of questions and documenting the responses, this can also serve another purpose. Namely, this can provide a valuable artefact for inclusion in a teaching portfolio (Atkins et al., 2018), useful for future reflections or to assist in developing a teaching philosophy statement.

How to do a Teaching Square

To start with, setting up a Teaching Square requires that all participants are clear of the goal. That is, being part of a Teaching Square is all about having an opportunity to observe, be observed, and facilitate discussion in order to reflect on their own teaching methodology and practices (Atkins et al., 2018; Brown et al., 2024 ; Friedman et al., 2022). Then, arrange to have a small group of four, ideally from different disciplines, who meet to complete a pre-observation meeting. During this time, they will arrange the times they will observe (either synchronously or asynchronously) each of the other members of the square for a minimum of an hour. All observations should be conducted over a short period of time (Atkins et al.,

2018). The final step is to have a de-brief, where the members of the square meet to discuss what they learned about their own practice, anything they are willing to share from their reflections about what they will implement or change in their own teaching, and how they found the experience overall. This final meeting is very important, as this provides the opportunity for the Teaching Square to connect over a shared experience, further fostering collegiality and interdisciplinarity.

Why small groups over a short period of time?

This is a pragmatic strategy. Mainly because teaching schedules can change between semesters or terms and this allows management of the opportunities for others to visit classes (Atkins et al., 2018; Brown et al., 2024). As Teaching Squares have the intention for those who are participating to have an opportunity to reflect on their own practice and pedagogical style, having Teaching Squares over a short period means they themselves are able to reflect and devise new strategies that can be implemented in a timely manner as well (Atkins et al., 2018; Brown et al., 2024).

During the Teaching Square observation

Consider the follow points (Berenson, 2017),

- How long should I stay?
- What is my role when I visit?
- How do I record my observations?
- How will I be introduced to the students in the classroom?

Handy hints:

- Conducting your observations over a 2-week period (while hectic) is recommended to keep the process manageable and actionable.

- Ideally you all attend the same observation, if this isn't possible then no worries – do what works!

How will it work?

Figure 2. The steps involved in developing a Teaching Square

Step 1: start *(1 hour)*	Square introductions	• Meet your Teaching Square • Discuss expectations/hopes • Create schedule/ provide context
Step 2: Teaching Square *(up to 1 hour per observation)*	Attend three classes	• Visit one class for each member (we suggest no more than an hour- the time allocation can be a negotiation) • Record observations • Reflect on your own teaching through the lens of observation
Step 3: after Teaching Square *(1 hour)*	Final meeting	• Meet up (maybe over a coffee) and discuss your experience of having undertaken observations. • Share what you may implement from your reflections

Developing a Teaching Square schedule

Consider using a table to document and arrange when you will conduct your observations.

Figure 3. Teaching Squares schedule

Name/ email	When I'm visiting (day/time/campus location- room number/zoom link)	When I'm being visited (day/time/campus location- room number/zoom link)

Have a plan

Having a plan means you will get the most out of your experience. Set some expectations

and document what your own personal goals are for undertaking a Teaching Square.

Figure 4. Setting expectations: What do we hope to gain from this experience?

What are my goals? What do I hope to gain from the 'square'?	
Partner #1 Name & goals:	
Partner #2 Name & goals:	
Partner #3 Name & goals:	

Some people may find it helpful to organise their observation notes by dividing them into descriptions and reflections, this way notes can be made during the observation and then reflections undertaken after the event.

Aspects to consider when thinking about undertaking observations.

- What specific lens do I want to focus my observations on? eg course design, motivation, assessment, teaching strategies, class climate etc.
- Do I need to provide any info ahead of time? Context/Curriculum info/ a bit of detail is good, but not too much.
- Tell your students what is happening, and that your collegues are coming to observe and not judge, they are watching you and not the students, and they will not contribute to the class.
- Remember that the observer will be **watching you in reference to *themselves***. So please teach as you would normally teach.

Choose a focus

The following provide some potential ideas for focus of your observation (Berenson, 2017). These are suggestions and examples only. If you can think of your own pedagogical challenge for this, that would be great.

Engagement

- When were students the most engaged? When did they seem least engaged?
- How do I know the students are engaged?
- What is specifically going on when engagement is happening?
  - What are the students doing?

- o   What is the instructor doing?
- How is the class organised and paced?
  - o   How does this affect student engagement?

- What are the patterns of conversation? Who holds the 'conversational ball?'?
  - o   Is it student to student, student to instructor, is it the same students again and again?
- How does the instructor use verbal and non-verbal communication?

Content

- What do the students already know about the content of today's class?
- Are the students curious about the content?
  - o   How has the content been made relevant to the students?
  - o   How is this done explicitly?
  - o   How is it done implicitly?
- How do the students know what is important in today's class?
  - o   What activities or practices do the teacher, or students undertake to make matters most evident?
- What happens to help students learnt the material?
  - o   What are the various approaches used to convey the content?
- Did the students get it?
  - o   How do I know?
  - o   How do the students know?
  - o   How does the instructor know?

Diversity

- How would diversity be described in this classroom- what are the visible classroom demographics?

- How are differences in learners accommodated?
  - What are the activities or approaches applied here that might help different learners?
- Is there anything about the content of today's class that reflects a diversity of perspectives?
- What are the different approaches that are used to make the classroom an inclusive place?
  - How are different students encouraged to participate?
- What else is noteworthy in terms of diversity and inclusion in this setting?

Instructional strategies

- What are the different instructional strategies used in this class (presentation/lecture, discussion etc)?
- Do some strategies seem to work better for the students than others? Why is this the case? What seems to be the difference here?
- How does the teacher use classroom media (digital technologies, slides, video, music etc) and/or space?
- Are there any seemingly unexpected moments in the class? How are they handled?
- Are questions used as a teaching strategy? If so, what kinds of questions does the teacher ask, and when? How are the students involved in asking and answering questions? How is the instructor involved in asking and answering questions?
- Are small groups used in the class? If so- when, and how are they implemented? What impact do they appear to have on student learning?
- Which instructional strategies seem more engaging for the students? Which strategies allow them to participate in higher order thinking (such as self-reflection, application, and critical thinking)?

Classroom climate

- What was the mood before class? During class? After class?

- How is the classroom arranged physically and how does this influence teaching and learning?

- What kind of rapport exists between teacher and student(s) or among students?

- What kinds of things does the instructor do to address the environment in this class?

- What are the students doing to contribute to the classroom environment?

Things to think about as an observer

- Is there a specific lens through which I want to focus my observations? e.g. Course Design/ Motivation / Assessment/ Teaching strategies/ Class climate.

- Think about some aspects of your teaching which you would like to improve or refine (you may like to refer to your goal). How do your colleagues approach this?

- What differences do you notice in their approach to teaching? Is there anything that would suit your style?

- How do students respond?

- You can also observe the learning, not just the teaching!

You may wish to use a template like the one below to take notes while you are observing each session: (There are templates for each observation on the following pages).

Teaching Square tools for use

Figure 5. Observational diary

Observation:		
Time	Description of what's happening	Personal reflections

Figure 6. Post observation summary tool

| Immediately following the visit: |
| --- |
| **Examples of good teaching and learning practice I've seen in this session:** |
| **What I have learned from observing this session:** |
| **Things I might try as a result of observing this session:** |
| **Follow up reflections after my own teaching:** |
| **Things I have tried since observing the session:** |
| **What worked well (including student responses):** |
| **What I might do differently:** |

Gibbs' Reflective Cycle

Was developed by Graham Gibbs in 1988 to give structure to learning from experiences. It offers a framework for examining experiences, and given its cyclical nature lends itself particularly well to repeated experiences, allowing you to learn and plan from things that either went well or didn't go well. It covers 6 stages:

Figure 7. Gibbs' reflective cycle

Description of the experience	
Feelings and thoughts about the experience	
Evaluation of the experience, both good and bad	
Analysis to make sense of the situation	
Conclusion about what you learned and what you could have done differently	
Action plan for how you would deal with similar situations in the future, or general changes you might find appropriate	

Rolfe's reflective model

The simplicity of this model is both a great strength and a possible limitation. It is very easy to remember and can be applied to any field or experience. However, there is a possibility that by just answering the three main questions, the reflection does not achieve a meaningful and critical depth.
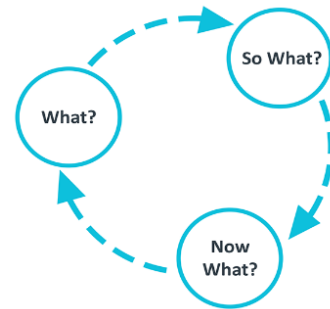
To ensure that you have depth and breadth it can be helpful to work through the question prompts outlined below for each stage. You don't have to answer all of them, but they can guide you to what sort of things make sense to include in each stage. You might have other questions that work better for you.

Figure 8. Rolfe's reflective model

What? The experience of the situation	So what? The implications of the situation	Now what? The action plan
Helpful questions to answer could be: • … is the context? • … is the problem/situation/difficulty/reason for being stuck/reason for success? • … was I/we/others trying to achieve? • … was the outcome of the situation? • … was my role in the situation? • … was the role of other people in the situation (if others were involved)? • … feelings did the situation evoke in me? And in others (to the extent you know)? • … were the consequences for me? And for others? • … was good/bad about the experience?	You might want to supplement your own knowledge and thoughts with other people's ideas, references, and theories. This can be to show what helped shape your thoughts and further explore them. This comes down to how much you are looking to formalise your reflections. This can especially be important if the reflection is assessed. Helpful questions could be: So what… • … does this tell me/teach me/imply about the situation/my attitude/my practice/the problem? • … was going through my mind in the situation? • … did I base my decisions/actions on? • … other information/theories/models/literature can I use to help understand the situation? • … could I have done differently to get a more desirable outcome? • … is my new understanding of the situation? • … does this experience tell me about the way I work?	Ensure that you are concrete in your action plan and not only saying generic comments such as 'I will do things differently/better'. The more concrete you can be regarding what you want to do, how you will do it, and how you will remind yourself, the easier and more likely it will be to implement. Helpful questions could be: Now what… • … do I need to do in the future to do better/fix a similar situation/stop being stuck? • … might be the consequences of this new action? • … considerations do I need about me/others/the situation to make sure this plan is successful? • … do I need to do to ensure that I will follow my plan?

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