

How Team-Based Learning Equipped Me with AI-Proof Skills

Parham Ghasemi

Medical Student at Deakin University

7 May 2026

Word Count: 1918

Honor Code Statement

I certify that this essay is my original work and accurately reflects my personal experiences with Team-Based Learning. I have not used any AI tools when writing this essay, as I exercised my AI-proof skill! I understand that failure to comply may result in disqualification from the competition.

There is something that happens outside exam rooms at every university. Students spill out, pull out their phones, and immediately start comparing answers. *"What did you put for question x? Wait, seriously? I put y"* It happens whether or not the institution plans for it. Almost instinctive. A need to process together, cross-check, figure out not just whether you were right, but what the question was even asking. I've noticed it throughout years of university studies. What I had not expected was to encounter a learning format that harnesses that instinct, builds it into the structure, and turns it into something genuinely educational.

I'm Parham Ghasemi, a second-year medical student at Deakin University. My TBL experience has been embedded in our Public Health and Medicine theme, introduced by our theme coordinator at the very start of the first session last year. She didn't need to explain much; the InteDashboard platform is intuitive enough that the format speaks for itself. But what these sessions gave me over the past year has shifted how I think about collaborative learning, clinical preparation, and what it means to be ready for a career increasingly shaped by artificial intelligence.

The Part I Almost Missed

There was a particular TBL session in Public Health that I keep returning to. We were working on a proposal, one of those open-ended application exercises that come after the individual and group readiness tests. I read the prompt, formed a clear direction in my head, felt confident about where I was going. And then my team started discussing it, and a teammate pointed out a part of the prompt I had completely missed. It changed the entire framing of our response. If I had been working alone (which, in a traditional assessment format, I would have been), I would have submitted a well-structured answer to the wrong question. My blind spot would have gone undetected. And I'd have had no way of knowing it.

That moment stuck with me for reasons that go beyond the assignment. In medicine, blind spots don't stay academic for long. They become clinical errors. The difference between a safe clinician and a dangerous one is often not about individual knowledge. It is about the presence of other minds checking, questioning, and catching what you couldn't see. TBL rehearses that dynamic in a low-stakes environment, repeatedly, until collaborative scrutiny starts to feel natural before the stakes are real.

The iRAT-gRAT structure is specifically designed to surface the gap between individual preparation and collective reasoning, creating the productive tension where genuine learning occurs (1). I understood this in theory when the format was first introduced. I understood it differently in that session, sitting across from a teammate who had caught what I'd missed. What I took from it was not just a corrected answer. Something more durable: that confidence and accuracy are not the same thing, and that learning to check that gap habitually, while consequences are still low, is probably one of the more valuable habits a student clinician can build.

Skills That Don't Have a Shortcut

There's a tendency in discussions about AI and the future of work to frame human skills (communication, empathy, adaptability, critical thinking) as consolation prizes for what machines can't yet do. In medicine, that framing doesn't hold. These are not peripheral competencies. They are the clinical skill set.

Knowing how to have a conversation with a patient who is scared and processing difficult news, that is clinical work. Managing the interpersonal dynamics of a team disagreement under time pressure: clinical work. Recognising that your own reading of a situation might be incomplete and being secure enough to say so. One of the hardest and most important things a clinician can do. TBL develops all of these, but indirectly, which I think is why it works. You're not taught to "communicate better" in the abstract. You're placed in a situation that requires it, under gentle but real accountability, and you work it out.

After years of standard university assessments (including plenty of group assignments I genuinely dreaded, because most rewarded passengers as much as contributors), the TBL sessions in my Public Health theme became my favourite form of assessment. Because they didn't feel like assessments! They felt like thinking. The iRAT-gRAT structure makes individual accountability non-negotiable; you cannot coast on your group's understanding. And the collective phase produces something no individual effort could have reached alone. That combination is difficult to replicate in a traditional exam. It is essentially impossible to replicate with AI.

Two qualities in particular: sound judgment and leadership. Sound judgment (the ability to make a call when information is incomplete, when the situation is ambiguous, and when waiting is not an option) is rehearsed every time a TBL group has to commit to an answer under time pressure without full certainty. That feeling of *"we don't have everything but we have to decide"* is one of the most clinically realistic things I've encountered in a classroom. Leadership, meanwhile, doesn't always look like being the loudest voice. In our group sessions, it often looked like structuring what had already been said, synthesising competing ideas, and helping the team find its direction. That kind of leadership, facilitative rather than directive, is precisely what clinical teams need. And it's a role I found myself taking on naturally across these sessions, since the format very comfortably created space for it.

What InteDashboard Actually Made Possible

A lot of what makes TBL effective comes down to feedback density and InteDashboard is what makes that density achievable. The hallway debrief I described at the start (that instinctive post-exam comparison students seek out whether or not the institution designs for it) now happens inside the session, with educational structure built in. The group readiness assurance test turns *"what did you put for that one?"* from corridor noise into real-time collaborative reasoning. That shift matters so much more than it sounds.

There is also something important about the individual readiness assurance test that precedes it. Going to a session knowing you will be tested individually first changes the preparation mindset entirely. You come in having done the reading, because the cost of not doing it is visible and immediate. That kind of accountability, built into the format rather than policed externally, is one of the more effective things I have experienced in a learning environment.

Beyond the structure, InteDashboard creates a kind of visibility into collective understanding that individual assessment simply cannot provide. When multiple groups within a cohort converge on the same incorrect answer, that is meaningful signal, for students and for educators, about where understanding breaks down. It produces a more honest picture of what a class actually knows, and points educators toward where teaching needs to go next. This is especially relevant in medicine, where collective gaps in knowledge about a clinical

concept can have the same pattern as individual ones, and are far better addressed when made visible.

The peer evaluation component is something I want to name specifically. At the end of each TBL, teammates assess each other using a structured rubric. The feedback I received across our sessions included specific observations: contributing useful resources, helping structure the group's responses under time pressure, generating ideas that moved the discussion forward. What that feedback tells me is something a grade alone cannot: how I function within a team, and where my contributions actually land. That is a genuinely different kind of accountability than individual performance pressure. Figure 1 below shows the evaluation output from one of our sessions.

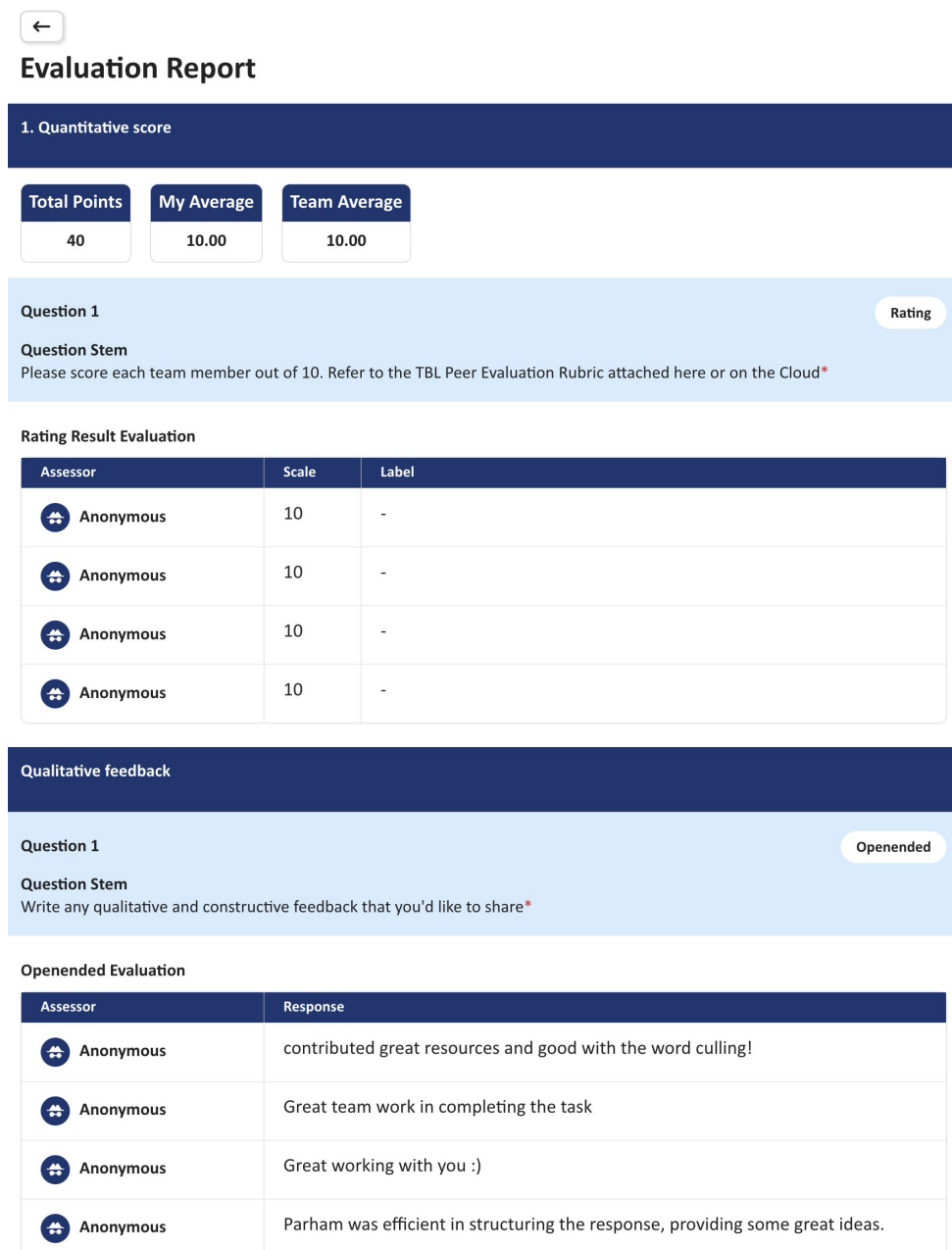


Figure 1. Peer evaluation results from InteDashboard, showing quantitative scores and qualitative feedback from teammates.

The Clinical Future I'm Preparing For

The healthcare environment I am training to enter will be AI-integrated in ways that are still emerging. Diagnostic algorithms, imaging analysis, risk stratification, documentation and note-taking automation: AI already handles tasks it handles well, and will handle more. I don't think the right response to that is resistance. I think AI integration raises the stakes on everything it cannot do.

The clinical situations that will demand these skills are not hypothetical. A hospital ward brings together doctors from different specialties, nurses, pharmacists, social workers, each trained differently, each seeing the patient through a different lens. Presenting a clinical assessment clearly enough to shift that room's thinking is a skill. Making an ethical call about a patient's care when the evidence is ambiguous and the family's values complicate the picture: that requires sound judgment and genuine empathy, not pattern-matching. And when two senior clinicians disagree and a junior has to navigate that tension without destabilising the team, that is a real leadership moment. None of these are rare in medicine. TBL gave me structured rehearsals of all of them, in the form of public health proposals rather than ward rounds, but with recognisably the same underlying demands: synthesise quickly, communicate clearly, navigate disagreement, make a call.

What AI will not do is sit with a patient who is frightened and help them process a diagnosis they weren't expecting. It will not manage the relational complexity of a multidisciplinary team under pressure, or notice that a colleague is struggling and quietly step in. Complex problem-solving, critical thinking, and collaborative reasoning remain among the most resilient human competencies in an AI-integrated economy (2). In medical education specifically, TBL has been associated with meaningful improvements in clinical reasoning and professional skill development (3), exactly the capacities that remain irreducibly human in a clinical context.

What I'd add from experience is that TBL trains something harder to name: a kind of epistemic humility. The learned willingness to hold your own interpretation lightly enough to let a teammate's perspective genuinely change it. In a hospital team, that translates directly. A junior doctor who can say *"I might be missing something here, what do you see?"* is a safer practitioner than one who can't, regardless of technical knowledge. TBL gave me enough repetitions of that dynamic that it has started to feel natural. That is not a small thing.

What I'm Taking Forward

I came into medical school comfortable working independently and wary of group work, not because I don't value collaboration, but because most collaborative assessment formats I'd encountered didn't actually assess it. They distributed a task across people and added social friction. TBL was different. It genuinely required the group, made individual contributions visible and accountable, and produced something collectively that no individual could have built alone.

That experience shifted something. Not just in how I approach assessment, but in how I think about clinical practice. The most effective clinicians, in everything I have encountered so far, are the ones who are genuinely collaborative. Who check themselves, use their teams, stay curious about what they might have missed. TBL has been the most practical preparation I've had for becoming that kind of clinician.

AI will keep improving at the tasks it already handles well. The question for my generation of doctors is not whether to work alongside it, but what distinctly human value we bring to the partnership. I think that value is relational, contextual, and not replicable: the capacity to reason with other people under uncertainty, adapt when our assumptions are wrong, make sound judgments when the evidence is imperfect, and stay present in the parts of healthcare that data alone cannot navigate. TBL gave me a structured space to practice being that kind of thinker. And honestly, it's the first time in years of university that I've genuinely looked forward to an assessment.

References (Vancouver)

1. Parmelee D, Michaelsen LK, Cook S, Hudes PD. Team-based learning: a practical guide: AMEE guide no. 65. *Medical teacher*. 2012 May;34(5):e275-87.
2. Leopold T, Di Battista A, Jativa X, Sharma S, Li R, Grayling S. Future of jobs report 2025 [Internet]. Geneva: World Economic Forum; 2025. Available from: <https://www.weforum.org/publications/the-future-of-jobs-report-2025>
3. Burgess AW, McGregor DM, Mellis CM. Applying established guidelines to team-based learning programs in medical schools: a systematic review. *Academic medicine*. 2014 Apr;89(4):678-88.