

My name is Rachel Musheyev. I am a medical student at SUNY Downstate Medical Center, and some of the most meaningful parts of my education have come through Team-Based Learning (TBL). Like many students in medicine, I spend a great deal of time memorizing facts, reviewing mechanisms, and trying to connect classroom material to real patient care. What made TBL stand out to me was that it demanded much more than simple recall. It required preparation, teamwork, communication, judgment, humility, and the ability to make decisions under uncertainty. Those are the very skills that matter most in medicine and, in my view, the same skills that will remain essential in a future where artificial intelligence becomes more common in education and the workplace.

I was introduced to TBL in medical school through courses that used InteDashboard. The structure quickly became familiar: pre-work before class, an individual readiness assessment, a team readiness assessment, clarification with faculty, application exercises, and peer evaluation. That sequence is central to TBL because it moves students from passive preparation to active decision-making with others. Rather than simply asking, “Do you know the answer?”, TBL asks, “Can you defend your reasoning, listen to competing interpretations, and arrive at the best answer as a team?” That is a very different kind of learning, and it is one that mirrors real clinical work.

One of the biggest lessons TBL taught me is that knowledge alone is not enough. In medicine, the strongest student in the room is not always the one who memorized the most facts; often, it is the one who can communicate clearly, recognize uncertainty, keep a group focused, and help others reason through a difficult problem. AI can retrieve information quickly, summarize articles, and even suggest likely diagnoses, but it cannot fully replace the human process of building trust within a team, sensing when another person is confused or hesitant, and adjusting one’s communication to help the group move forward. Those interpersonal skills are not extras. They are part of safe and effective patient care.

TBL strengthened my teamwork skills in a way that traditional lectures never could. During individual readiness assessments, I had to commit to my own understanding. During team readiness assessments, I then had to explain why I chose an answer and listen carefully when others disagreed. Sometimes I realized I had misunderstood a concept; other times I had to persuade my team that a tempting answer was wrong. Those moments taught me how to disagree productively. Instead of treating disagreement as conflict, I began to see it as a tool for better reasoning. In a clinical setting, that matters enormously. Physicians constantly work with classmates, residents, nurses, pharmacists, and attendings who may see a problem from different angles. TBL trained me to treat those differences as assets rather than obstacles.

Leadership was another skill that developed naturally through TBL. I do not mean leadership only in the formal sense of being the loudest person or the designated spokesperson. TBL showed me that leadership can also mean keeping the discussion organized, inviting quieter teammates to speak, summarizing the group’s reasoning, or helping the team move from confusion to a decision. In some sessions, I led by speaking up early. In others, I led by stepping back and creating room for someone else who had a stronger grasp of the material. That kind of flexible leadership is especially important in an AI-enabled world, where human professionals will still need to interpret information, set priorities, and take responsibility for decisions that

affect other people. Employers continue to rank analytical thinking, resilience, flexibility, leadership, social influence, empathy, and lifelong learning among the most important capabilities in the coming years, even as AI-related skills rise in importance.

The clearest example of these “AI-proof” skills becoming real for me came during a cardiology-focused learning project centered on ECG interpretation. ECGs are a perfect example of material that can feel intimidating at first. Students often memorize isolated rules without developing a confident, repeatable process for reading the tracing in front of them. In our discussion, the challenge was not simply identifying a diagnosis; it was deciding how to reason through the ECG systematically and explain that process in a way that other students could actually use. Our team debated what beginners struggle with most: rate, rhythm, axis, intervals, or recognizing patterns such as ischemia and conduction abnormalities. Everyone had slightly different ideas because everyone had different strengths and blind spots.

What made that experience valuable was not that our team immediately agreed. We did not. At first, we were tempted to jump straight to pattern recognition because that feels efficient. However, as the discussion continued, it became clear that this approach could make students overly reliant on memorized appearances rather than careful interpretation. We eventually shifted toward a more stepwise method that emphasized consistency: first identify rhythm and rate, then examine intervals, then assess axis, and finally connect the tracing to the clinical picture. That shift only happened because we challenged one another’s assumptions. It required communication, patience, and judgment. AI could certainly generate a clean summary of ECG criteria, but the deeper educational task was deciding how learners build understanding together and how a team can create a framework that is both accurate and teachable.

That project also taught me adaptability. Some teammates wanted a highly technical resource; others argued that the tool needed to be beginner-friendly to be truly useful. We had to reconcile those goals. I learned that being “right” in a narrow sense is not always enough. In medicine, and especially in education, information must also be usable. That means considering audience, context, and the emotional reality of learning difficult material. A first-year or second-year student staring at an ECG for the first time does not only need correct information; they need clarity, structure, and confidence-building guidance. That is where empathy enters the learning process. TBL helped me understand that effective collaboration is not only cognitive. It is relational.

InteDashboard played an important role in that growth. One reason TBL worked so well in my courses was that the platform supported accountability without interrupting collaboration. InteDashboard is designed to manage the major parts of the TBL process, including IRATs, TRATs, application exercises, peer evaluation, automated grading, and real-time performance data. In practice, that meant our team had structure. We were expected to prepare before class, commit to answers individually, and then justify our reasoning together. Because the platform provided immediate feedback and visible consequences for preparation, it reduced the temptation to coast. It also made team discussions more focused because we could quickly identify where our misunderstandings were and address them in real time.

That mattered to me as a student because one of the hardest parts of group work is accountability. In ordinary group assignments, there can be a tendency for one or two people to carry the rest.

TBL, especially when supported by InteDashboard, felt different. The combination of individual preparation, team discussion, and peer evaluation created a learning environment in which each person's contribution mattered. The technology did not replace human interaction; it improved it. It gave the team a framework within which better discussion could happen. That is exactly how I think technology should function in education and in healthcare: not as a substitute for human judgment, but as a support that makes human judgment sharper, fairer, and more effective.

Another reason TBL feels especially relevant today is that medicine is already becoming an AI-enabled profession. Students and physicians are increasingly surrounded by tools that can summarize notes, suggest differentials, interpret patterns, and automate routine tasks. Those advances are useful, and I do not see them as threats in themselves. However, they make human skills more important, not less important. When information becomes easier to generate, the value of discernment increases. Someone still has to decide whether a suggestion makes sense for a particular patient, whether a plan is ethical, whether a teammate's concern deserves more attention, and how to communicate a difficult decision compassionately. TBL trained me in precisely those areas.

For example, in future clinical practice, I may work on a team caring for a patient whose presentation is ambiguous. An AI tool might organize lab results or propose likely explanations, but it cannot fully carry out the human work of medicine. It cannot sit with a frightened patient and explain uncertainty with empathy. It cannot repair trust after a misunderstanding between team members. It cannot fully appreciate the subtle interpersonal dynamics that affect whether a team functions well under pressure. It cannot take moral ownership of a decision in the way a clinician must. TBL prepared me for those realities by repeatedly placing me in situations where technical knowledge had to be combined with communication, professionalism, and collaborative judgment.

These skills also matter beyond direct patient care. In any AI-enabled workplace, professionals will still need to work with diverse teams, present ideas clearly, handle disagreement, and adapt when new technology changes workflows. TBL gave me repeated practice with all of those tasks. It taught me how to prepare independently but perform collaboratively. It taught me how to defend an idea without becoming rigid. It taught me that good decision-making often depends on hearing a perspective I did not initially consider. Most importantly, it taught me that strong teams are built not only on intelligence, but on accountability, trust, and mutual respect.

My biggest takeaway from TBL is that it has helped me grow into a more thoughtful and more human learner. It sharpened my critical thinking, but it also made me more aware of how others think. It improved my communication, but it also made me a better listener. It gave me opportunities to lead, but it also taught me humility. In a world where AI will continue to expand, I believe those are the qualities that will matter most. Facts can be retrieved. Patterns can be recognized. Drafts can be generated. But judgment, empathy, teamwork, and moral responsibility still belong to people.

For that reason, I do not see TBL as simply a classroom format. I see it as preparation for the kind of professional I want to become. It showed me that the most durable skills are not just about knowing more, but about working better with others in complex, high-stakes situations. As AI becomes more common in medicine and in the broader workplace, those human capacities

will not become obsolete. They will become even more valuable. TBL helped me build them, and I expect them to shape the way I learn, collaborate, and care for others for the rest of my career.

Honor Code Statement

“I certify that this essay is my original work and accurately reflects my personal experiences with Team-Based Learning. I have used AI only for editing, organization, and language refinement, and I have disclosed that assistance here. I understand that failure to comply may result in disqualification from the competition.”

References

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