Implementing team-based learning to improve student engagement in anatomy

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Team-based learning

Team-Based Learning Instructional Activity Sequence  
(Repeated for each major instructional unit, i.e., 5-7 per course)

Preparation (pre-class)  
1. Individual Study  
2. Readiness Assurance  
3. Diagnosis-Feedback  
4. Team Test  
5. Instructor Feedback  
6. Application Oriented Activities  
7. Application of Course Concepts  
8. 1-4 hours of class time

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Which of the following is primarily responsible for the range of motion between adjacent vertebrae?

A. Ligaments that reinforce the capsules of the zygapophyseal joints  
B. Anterior and posterior longitudinal ligaments  
C. Orientation and shape of their articular facets  
D. Interspinous and intertransverse ligaments  
E. Orientation of spinous processes of the vertebrae

Your friend suffered paralysis of right brachialis muscle. He is right-handed. From the options below, select the ONE activity that your friend will struggle with the most:

A. Playing violin  
B. Arm wrestling with his right arm  
C. Tackling in rugby league football  
D. Playing volleyball  
E. Backstroke swimming
Application assignment:

Often can have multiple possible solutions; must be relevant and challenging

Team must work together on the solution; maximise discussion time

Choice could involve MCQ or selection of the best solution

Reporting is a start of the discussion rather than the end of it

UNSW – Anatomy – limbs team assignment

UNSW – Limbs anatomy - feedback

2017 (before TBL)
“I dislike the teamwork.”
“Don’t like the group assignment a bit of a waste of time.”

2018 (after TBL)
“The group learning quizzes every week were really good ... and I liked the two assignments too! Justifying helps to work out what you actually know and what you’re still unsure of”
“The best thing about the course was the groupwork. It really helped me to learn to talk to others and hear what they knew about the content ... have thoroughly enjoyed this course this semester.”
“TBL helped us to apply our knowledge to real life situations and practice our group work skills and develop our understanding”