# The potential of team-based learning (TBL) for interprofessional education (IPE)

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# Key questions

What's TBL as a method?
Why is TBL potentially useful for IPE?
Where can interested colleagues find resources?

## TBL as a specific example of the flipped classroom

What's flipped learning? Why is it useful for healthcare workforce education?

## Team-based learning – a primer

What is TBL?

## Why consider TBL for inter-professional learning?

What features of TBL make it valuable for IPE? Why is IPE important?

## Student reactions, practical experience

Reflections

## TBL research & resources

Where to get more information

# The flipped classroom

## WHAT IS FLIPPED LEARNING/THE FLIPPED CLASSROOM?


The Flipped Learning Network (2014) definition: “Flipped learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter” https://flippedlearning.org/

## WHY IS FLIPPED LEARNING USEFUL FOR HEALTHCARE PROFESSIONAL EDUCATION?

From Eric Mazur (peer instruction), to Larry Michaelsen (TBL), flipping is not new.

Evidence it can deepen learning, increase engagement, and (depending on structure) may provide more opportunities for application of knowledge to problems, and developing team-work skills. Although you can flip without individuals working together, most methods involve peer discussions or “application of knowledge” group activities

Applying knowledge to unique cases/problems, and team-work, are *key expectations* for healthcare students

# Team-based learning (TBL) – a primer

## WHAT IS TBL?

### SPECIFIC STRUCTURED FORM OF FLIPPED CLASSROOM

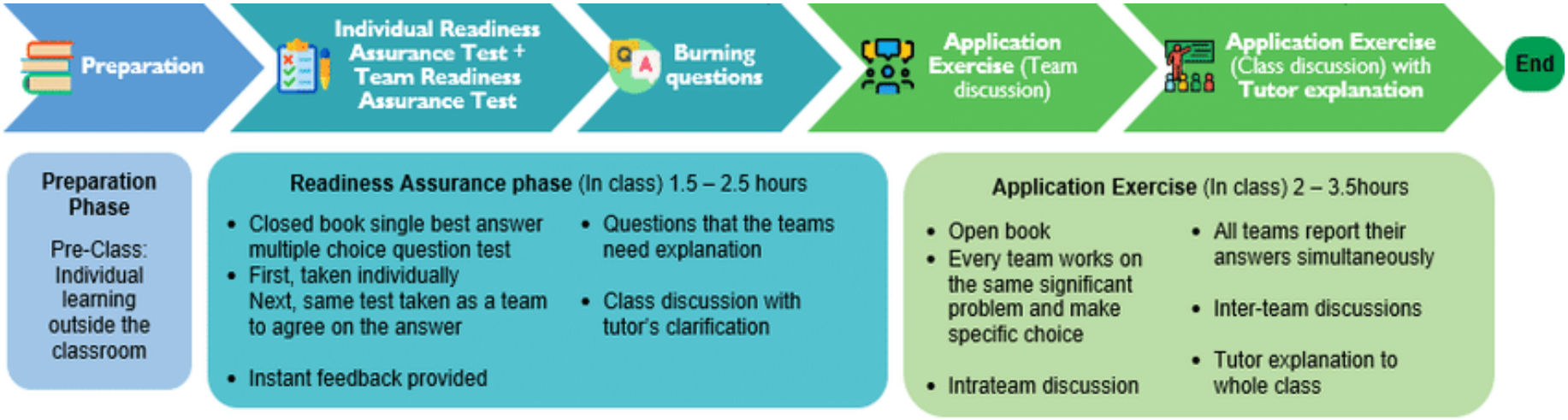



*Figure from* Andrew, Seet & Peng, Emmanuel & Rajalingam, Preman. (2020). Effect of Seating Arrangement on Class Engagement in Team-based Learning: A Quasi- Experimental Study. 10.1101/2020.10.25.20218313.

Step 1: pre-class individual learning *out* of class – reading pack, video, textbook, VLE

Step 2: Class "readiness assurance" – tests that are taken individually and then again as a team, with any clarification from the lecturer/tutor following that class discussion. Needs to be summative. Drives the pre-class preparation and bonds the team. Develops understanding of information.

Step 3: Class "application exercises" – sessions where every team work on the same authentic, significant problem, and are driven to make a specific choice. All teams report answers. Inter-team debate on rights/wrongs/pros/cons of choices, with tutor facilitation.

# Why use TBL for IPE?

## WHAT IS USEFUL ABOUT TBL FOR INTER-PROFESSIONAL EDUCATION?

**IPE**

Shown to impact communication and teamwork skills for the workplace, so has become common in healthcare workforce training to build in IPE - despite the practical challenges for Universities.

WHO - IPE and collaborative practice mitigate challenges faced by health systems around the world.

**TBL** has gained popularity in healthcare education (invented for business courses but widely applicable).

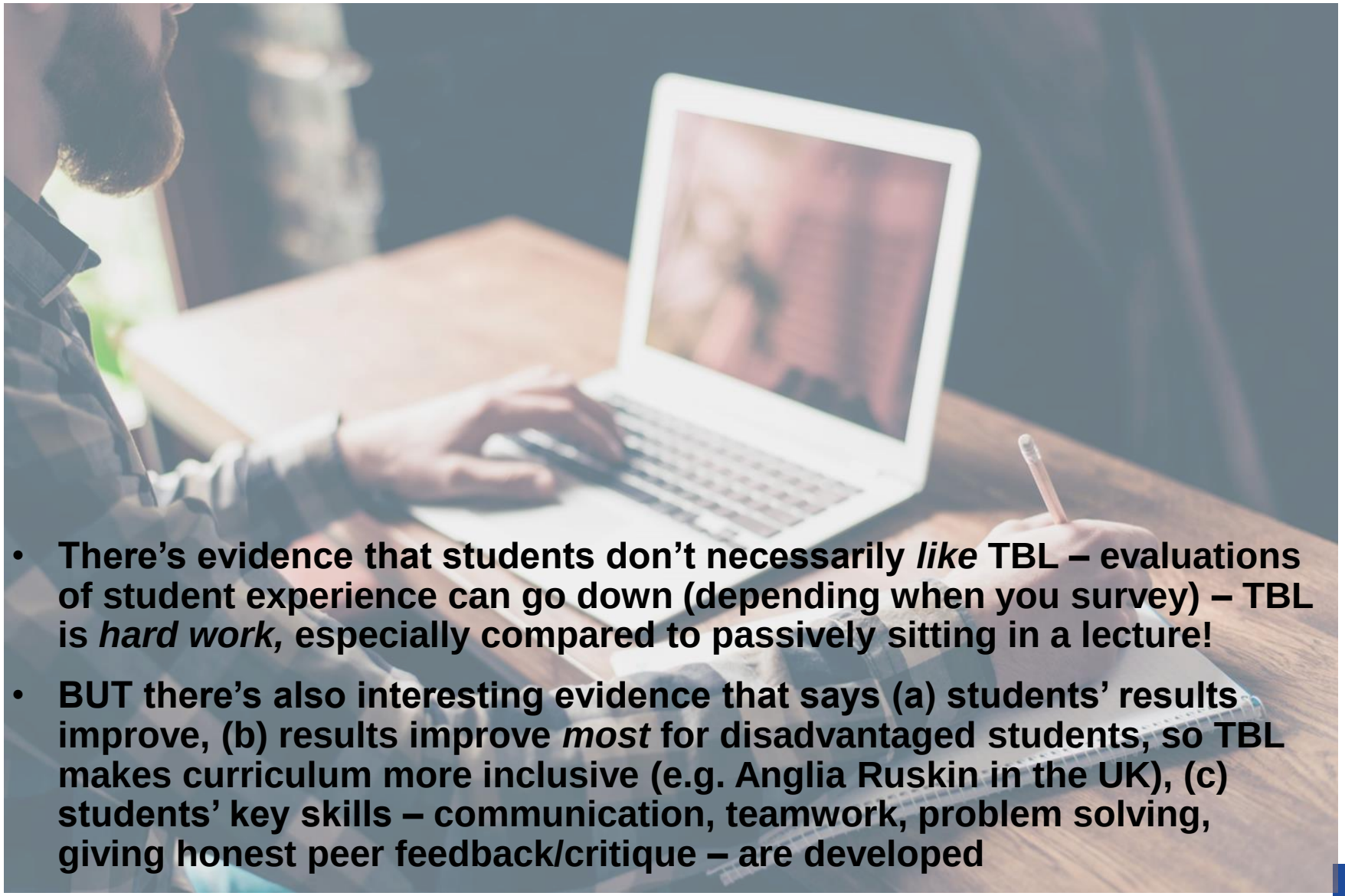
TBL role models teamwork, diverse teams demonstrably solve problems better in TBL classrooms, and having to discuss your rationale for your solution with fellow students (and academic facilitators) builds communication skills.

There aren't a huge number of publications on TBL *and* IPE

- personal experience of TBL;
- literature studies such as https://rdcu.be/dfwo8 (medical and physiotherapy students, studying backpain together);
- healthcare education colleagues on www.teambasedlearning.org

# Student experience & reactions to TBL

## INTERESTING EXAMPLES AND DATA ARE AVAILABLE… BUT MORE TO DO - EVALUATION IS CRITICAL



- **There's evidence that students don't necessarily *like* TBL – evaluations of student experience can go down (depending when you survey) – TBL is *hard work,* especially compared to passively sitting in a lecture!**
- **BUT there's also interesting evidence that says (a) students' results improve, (b) results improve *most* for disadvantaged students, so TBL makes curriculum more inclusive (e.g. Anglia Ruskin in the UK), (c) students' key skills – communication, teamwork, problem solving, giving honest peer feedback/critique – are developed**

# TBL resources

Finding out more…

## TBL METHODS & COMMUNITY OF PRACTICE

The “Team-Based Learning Collaborative” is an international organisation:

www.teambasedlearning.org

European TBL community network, as well as US and Asia-Pacific networks all start at this site.

Has a great short video to explain the TBL method in more depth, and runs a regular conference where TBLC practitioners get together.

Has a list of recent publications on the site - with more available to members; some members even share their course materials with colleagues.

Also lists trainers across the world, mentors who have trained in TBL and have a 2 year portfolio of courses to get accredited – as an excellent group of mentors/trainers

Work your way down “Getting Started with TBL” page with the videos and readings and you’ll be an expert in no time: https://teambasedlearning.site-ym.com/page/started

# In conclusion…

## IF I WERE DESIGNING HEALTHCARE EDUCATION FOR MULTIPLE DISCIPLINES…

**FOCUS ON TBL AS A METHOD; BUILD IN SOME CROSS-CUTTING TBL 'UNITS'**

- Many reasons why TBL is a good method for your course – be that physiotherapy, pharmacy, physician associate, nursing, medicine, healthcare assistant.
  - All professional students need to be able to communicate, work with others, problem solve, give appropriate (sometimes challenging) critique, contribute to a team.
  - Additionally, course design enforces instructors/lecturers/academics to act as mentors and facilitators, role modelling professional debate with student teams.
  - Real world, authentic, significant problems (basis for classroom activities), often means case studies and other complex problems – so TBL classroom also role models discussions where there is no clear 'right' answer – another essential skill for healthcare professionals.
- For inter-professional education sessions, there is opportunity to take the 'teams' working on a course in physiotherapy or radiography or nursing, and combine those teams with trainees from other courses, to mimic the multi-disciplinary healthcare team, on topics where that is appropriate.
  - Ideally, all students would be TBL-experienced, because otherwise managing expectations of what activities look like and level of preparedness etc will be difficult
  - Course design allows both separate programs to take marks into their own course, while encouraging collaborative problem solving across disciplines
  - Because students from different courses/programmes of study are working together, they will understand the different focus, background, and expertise that other professional trainees are bringing to the activity and will be better prepared for the modern healthcare workforce after graduation

## IT'S NOT ALL ROSES…

**THINGS TO BE AWARE OF, IF MOVING TO TBL FOR HEALTHCARE EDUCATION & IPE**

Requires a significant shift in instructor's behaviour and philosophy so need to convince a majority of people in teams who will be designing learning

Needs training and patience – not being the expert, resisting giving the answers, facilitating discussion…

Needs some major redesign, so don't rush it!

Students won't love it – at first – it's hard work, but pays off later, when they realise they understand their subjects at revision time before exams!

Peer evaluation is hated… initially, but a good skill

Need to explain rationale for the approach to students, and explain why certain things happen (e.g. instructor allocated teams, not student selected)

May need work on your student systems (multiple low-weighted summative assessments are *essential*)

BUT:

On the plus side, the problems you've had with group work are all gone! This is group work that works. Method removes all the usual issues – students complaining about free loading group members, fair marking etc.

# THANK YOU

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