

# Introducing Team-Based Learning (TBL) at Faculty of Medicine, University 'Goce Delcev' (UGD), Stip, Macedonia

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# **Background**

Medical education in Macedonia is conducted in large by utilizing classical methods of teaching at medical schools. The state-funded Faculty of Medicine at the University 'Goce Delcev', Stip is the newest medical school in the country and is making serious efforts to implement modern technologies and teaching methods in its curriculum. In an effort to improve student participation in class and to help them develop team working skills, TBL sessions were introduced to second year medical students for Fundamentals of Immunology and Clinical Immunology courses.



### **Summary of work**

- Two 60 minutes TBL sessions per course
- Independent study for the TBL (material provided)
- Sessions were NOT OBLIGATORY (reward points given)
- Conducted by using audience response system in collaboration with the e-learning center and in its facilities
- Groups of 5-6 students
- Individual Readiness Assurance Test (IRAT) administered first consisting of 5 MCQ
- ❖ followed by Group Readiness Assurance test (GRAT)
- The application exercise consisted of clinical case scenarios followed by MCQ questions.
- An anonymous survey consisting of 6 questions conducted to evaluate student satisfaction with the TBL
- Effectiveness of this method of teaching in comparison with classical lecturing is being currently assessed.

### **Conclusions**

- ♣ntroduction of TBL sessions was very well received by the students.
- TBL method can be adjusted to 60 minutes sessions
- TBL can and should be introduced even in academic settings with classical medical curriculum and limited resources
- TBL sessions can be optional as they attract student attention and participation regardless
- Assessment of the effectiveness of this method of teaching in comparison to classical lectures is in progress

### References:

Haidet P, O'Malley KJ, Richards B: An initial experience with "team learning" in medical education. Acad Med 2002, 77:40-44. Searle NS, Haidet P, Kelly PA, Schneider VF, Seidel CL, Richards BF: Team learning in medical education: initial experiences at te institutions. Acad Med 2003, 78:555-58.

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## **Summary of results**

- Administered to 555 participants irrespective of the session, course or individual.
- Attendance increased over the course of two years to reach 97.9% in year 2011/2012 (see table).
- High student satisfaction (96.5%).
- About 50% of the students struggled with team work and answered the MCQs better when working on their own. Clinical cases were found not to be too difficult (72.5%) and 95% of the respondents expressed a desire to have more clinical cases included during lectures (for full results of the survey see figure below)
- Preliminary results of effectiveness on mid-level students (excluding top students and those that failed the year) indicate that this method is superior to classical lectures.

### Fundamentals of Immunology course

	Attended	Did not attend
Session 1 (2010/2011)	68 (53.5%)	58 (45.7%)
Session 2 (2010/2011)	113 (88.98%)	14 (11%)
Session 1 (2011/2012)	139 (97.9%)	3 (2.1%)
Session 2 (2011/2012)	139 (97.9%)	3 (2.1%)

### **Clinical Immunology course**

	Attended	Did not attend
Session 1 (2010/2011)	51 (89.5%)	6 (10.5%)
Session 2 (2010/2011)	45 (78.9%)	12 (21.05%)

**Table 1.** Attendance at TBL sessions. The numbers presented in this table do not include students that dropped out of Medical school.

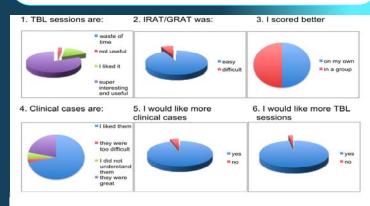


Figure 1. Results of the anonymous survey about students satisfaction with TBL sessions