



HAND WRITTEN ASSIGNMENTS; USE IN LEARNING OF PHYSIOLOGY

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ABSTRACT... Medical educationists tend to explore short comings of teaching methodologies with the aim to modify and bring improvement for learning of the students. Structured assignments were introduced on account of unsatisfactory performance of students in short essay questions of respiratory, cardio-vascular module. The pass percentage of students enhanced from 35.5 to 69 percent as a result of this intervention.

Key words: Learning, Assesment, Meta cognition, Medical Curriculum

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INTRODUCTION

Learning is an intricate phenomenon that involves complex mental activities such as retention of knowledge, ability to solve problems, critical thinking and evaluation of the concepts.¹ Paradigm shift in medical education has led to innovations in both teaching and assessment methodologies for the last two decades. Teaching of Physiology is the fundamental component of undergraduate medical curriculum. Students have documented difficulties faced to understand the basic conceptual understanding of physiology which can be enhanced by a number of measures.^{2,3} At the same time faculty has recommended to help students by dealing with the sources of difficulty.⁴

Assessment of students is a process that reflects their educational performance with respect to what has been taught and reproduced during the examinations.⁵ It is the most critical aspect of teaching and learning process which aims to collect, interpret and analyze students' performance.⁶ Summative assessments is associated with standardized tests that is meant to grade the performance of students.⁷ In Bahria university Medical & Dental College (BUMDC) summative assessment is applied at the end of module examinations with multiple-choice questions, short essay questions (SAQ), with the same weight age as per table of specification.

In a study done by author, an unsatisfactory

performance in SAQ (Batch 2009) of Respiratory /Cardio vascular Module was observed.¹ It was taken as a challenge and a proposal was made to introduce structured hand written assignments (SA) for the next year batch (Batch 2010) for the same module. The objective of our study was to improve writing skills, which may help in improvement of assessment results. In order to achieve this, a schedule of topics for SA was made with a total of eight SA for the aforementioned module. Each topic was displayed at the weekend with all the instructions as given in appendix. All the assignments were graded as average, good, very good and excellent on a scale from 6 to 10 and returned to students after being marked by the senior lecturers with uniform key. The result of this formative assessment although displayed on notice board was not included in internal evaluation. SA in the true sense thus represented formative assessment, scores of which inform students as well as teachers about the learning process.⁸ The SAQ module examination paper given to batch 2009 was repeated to Batch 2010 with an improvement from 35.5% to 69% of passing students.

The integrated modular system at BUMDC has always aimed to explore the strength and weakness of curriculum design and all teaching methodologies, may this be interactive lectures, small group discussions, clinically oriented problem solving tutorials,

lab courses and problem based learning. The evaluation has helped in correction of mistakes, modifications, improvements and at the same time metacognitive learning of all those who aim to bring a revolution in teaching methodologies.⁹ This study is continuation of the non-ending efforts of Department of Physiology to identify the strength and weaknesses of teaching methodologies with an aim to look forward for their improvement. Our job as teachers is to help students to learn physiology, which can be made possible by understanding the shortcomings and stepping forward to help in their learning as much as possible.

APPENDIX

Respiratory physiology Assignment

- Submission should be hand written on the following questions:

Mention difference in ventilation perfusion ratio in upper, middle and lower lobes of lungs in a normal healthy adult in resting condition.

Format


- Name
- Roll number
- Question
- Brief answer with headings, diagrams if required.
- Page limit: 1-2, A 4 size sheets and stapled
- Last date of submission: 20th April 2010 till 12 noon
- Submit to: Tutor In charge

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AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Dr. Rehana Rehman	Conceived the idea, conducted the survey and wrote the manuscript	
2	Dr. Rabiya Rehan	Conducted the survey and wrote the manuscript	