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## BULLETIN

Theme of this Issue						
Electives in Graduate Medical Education						
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## **Electives in Graduate Medical Education**

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### **Abstract**

Modern curricula have both compulsory portions and electives or portions chosen by students. Electives have been a part of graduate and postgraduate general higher education. Electives are included in various standards for graduate medical education and are also included in proposed Medical Council of India Regulations on Graduate Medical Education-2012. This article also briefly describes how to introduce electives in MBBS curriculum with an example of an elective in Urology.

### **Key Words**

Electives, Graduate Medical Education, Medical Council of India, MBBS Curriculum.

### **What are Electives?**

The word elective means "chosen by the student rather than compulsory" when it is used in relation to a course of study.<sup>1</sup> In traditional curricula all curricular portions are to be studied by all students. Thus traditional curricula have only compulsory portions. Modern curricula have both compulsory portions and electives or portions chosen by students. In general education, electives have been part of graduate and postgraduate education. Central Board of Secondary Education (CBSE) have introduced electives in higher secondary education.<sup>2</sup> In medical education, Harden et al in 1984 described the SPICES model of curriculum planning consisting of six educational strategies.<sup>3</sup> The letter "E" of the acronym SPICES denotes substitution of uniform curriculum by "Elective Driven" curriculum. Compulsory portion of the curriculum is also called core curriculum.<sup>4</sup> Electives are also known by the names of options,<sup>4</sup> special study modules<sup>4</sup> and student selected components.<sup>5</sup>

### **Why are Electives Educationally Essential?**

As students differ in aptitudes and interest, it is considered educationally essential to give them freedom to choose some areas which interest them for study in depth. When students study areas of their own interest they will be intrinsically motivated and this elicitation of intrinsic motivation is also considered desirable.

### **Electives in Assessment Criteria for Accreditation of Health Science Institutions by National Assessment and Accreditation Council**

National Assessment and Accreditation Council assessment of Health Science Institutions for accreditation comprises seven criteria.<sup>6</sup> Criterion I (Curricular Aspects) includes academic flexibility as a key aspect. Academic flexibility means "choice offered in the curriculum in terms of programme, curricular

transactions and time-frame options."<sup>6</sup> Assessment for academic flexibility includes the presence of elective options in the curriculum.

### **Electives in World Federation for Medical Education (WFME) Global Standards for Quality Improvement in Basic Medical Education**

World Federation for Medical Education (WFME) global standards for quality improvement in basic medical education includes 9 Areas and 36 Sub-Areas.<sup>7</sup> Each Sub-Area has a basic standard and a quality development standard. The basic standard of Sub-Area 2.6. Curriculum Structure, Composition and Duration under Area 2. Educational Programme states that "The medical school must describe the content, extent and sequencing of courses and other curricular elements, including the balance between the core and optional content."<sup>7</sup> The related annotation states that: "Core and optional content refers to a curriculum model with a combination of compulsory elements and electives or special options. The ratio between the two components can vary."<sup>7</sup>

### **Electives in Standards of Tomorrow's Doctors (2009) of General Medical Council, UK, for Undergraduate Medical Education**

Standards for Curriculum Design and Structure of Tomorrow's Doctors (2009) of General Medical Council, UK, for Undergraduate Medical Education state that a minimum of 10% of curricular time must be allowed for student choice for studying an area of interest.<sup>5</sup> The assessment of student selected components must be integrated with overall assessment of students.

### **Electives in Standards for Accreditation of Medical Education Programs Leading to the MD Degree of Liaison Committee on Medical Education (USA and Canada)**

Standards for Accreditation of Medical Education Programs leading to the MD degree of Liaison Committee on Medical Education (USA and Canada) state that elective opportunities must be included in medical education programs to deepen their understanding of medical specialities and to pursue individual academic interests.<sup>8</sup>

### **Electives in Proposed Medical Council of India (MCI) Regulations on Graduate Medical Education 2012**

Eight weeks are assigned for electives after the completion of MBBS Phase III Part 1 Examinations and before the beginning of MBBS Phase III Part 2 course.<sup>9</sup> The first elective block of 4 weeks will be done in a preclinical or paraclinical laboratory or under a researcher in an ongoing research project.<sup>9</sup> The second elective block of 4 weeks will be done in a speciality or super speciality clinical setting including ICUs, blood bank and casualty or as a supervised learning experience in a rural or urban health centre.<sup>9</sup> The number and nature of electives, supervisors and number of students in each elective will be decided by individual medical colleges depending on available resources. Each student will maintain a learning

logbook for elective blocks. Submission of logbook and 75% attendance in elective blocks are required for eligibility to appear in final MBBS examination.<sup>9</sup>

### How to Introduce Electives in MBBS Curriculum?

Once decision is made to have electives in the MBBS curriculum, a series of consensus development meetings of Heads of Departments participating in MBBS curriculum or their representatives are required to decide on the list of electives to be made available for MBBS students. After the list of electives is decided, each elective can be developed into a module comprising learning objectives, teaching-learning methods and assessment methods. All information about electives should be made available to MBBS students to enable them to make an informed choice.

### An Example of an Elective in Urology

Name of Elective: Benign Prostatic Hyperplasia

Duration of Elective: Four weeks

#### Learning Objectives

1. Define benign prostatic hyperplasia.
2. Describe etiopathogenesis of benign prostatic hyperplasia.
3. Describe clinical features and investigations in benign prostatic hyperplasia.
4. Discuss medical treatment of benign prostatic hyperplasia.
5. Discuss surgical treatment of benign prostatic hyperplasia.

#### Teaching-Learning Methods

1. Four weeks' posting in Urology (OPD, Ward, Minor OT and Major OT)
2. Clinical study of at least five patients with benign prostatic hyperplasia
3. Presentation of at least four lectures pertaining to learning objectives in Departmental meetings
4. Presentation of at least four cases of benign prostatic hyperplasia in Departmental meetings
5. Maintenance of logbook

#### Assessment

1. Assessment of lecture presentations
2. Assessment of case presentations
3. Assessment of logbook
4. Theory/clinical assessment

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### Gagne's Nine Instructional Events for Effective Teaching

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#### Abstract

The actions of both teachers and learners during the teaching session are referred as instructional events. Planning the teaching session by incorporating appropriate instructional events is very vital for making the teaching sessions successful. Selection of appropriate events and planning them in the right format and in the right sequence makes a lesson plan more successful. Robert Gagne proposed a series of events which follow a systematic instructional design process of behaviorist approach to learning. This article outlines the Gagne's nine events of instruction to help the readers implement the events in their classroom instruction for effective teaching.

#### Key Words

Gagne's Instructional Events, Medical teachers.

#### Introduction

Robert Gagne is best known for his learning outcomes, learning conditions and his nine events of instruction. Gagne's theories have been applied to the design of instruction in several domains beyond the

educational realm, such as the military, Instructional Systems Development, flying, troubleshooting, leadership, medical care, & engineering.<sup>1,2,3</sup> In his view, effective instruction must reach beyond traditional learning theories (behaviorism, cognitivism, and constructivism) and provide support to transition from simple to complex skills, thus using a hierarchical model for learning. Gagne developed ideas known as Conditions of Learning, whereby he claimed that there are several different types or levels of learning. He assumed that each different types of learning requires different types of instruction. Robert Gagne proposed a series of events which follow a systematic instructional design process that share the behaviorist approach to learning, with a focus on the outcomes or behaviors of instruction or training.<sup>4</sup> This article outlines the Gagne's nine events of instruction to help the readers implement the events in their classroom instruction.

## **Nine events of Instructions**

### **1. Gaining attention**

Giving learner a stimulus to ensure the learners are ready to learn and participate in activities. This can be done by starting the class with a quiz, statistics, question, famous quote, or multimedia presentation that is pertinent to the teaching content.

### **2. Informing the learner of the objective**

Inform students of the objectives or outcomes to help them understand what they are to learn during the course. The objectives can be decided by negotiating with the learners. Objectives must be provided before beginning the instruction.

### **3. Stimulating recall of prior learning**

This refers to recall of existing relevant knowledge. This helps the learners make sense of new information by relating it to something they already know or something they have already experienced. This can be done by asking questions about previous experiences and about their understanding of previous concepts. This will help them connect the topic of the day to prior relevant knowledge and to provide a framework for learning and transfer.

### **4. Presenting the stimulus**

Use different strategies to present content to make the instruction more effective. Organize and chunk content in a meaningful way. Provide explanations after demonstrations. These can be done through demonstration (eg. How to examine a patient), present vocabulary, provide examples, present multiple versions of the same content, e.g., video, lecture, podcast, group work, etc.

### **5. Providing guidance for learning**

Provide guidance on how to learn the content or advise students of strategies to aid them in learning content and of resources available. This will help the learners organize the contents and enhance understanding. Chunking, metaphors, mnemonics, rehearsal, and/or encoding, concept mapping, role playing, visualizing, using examples and non-

examples, case studies will help students organize the presented content.

### **6. Eliciting performance**

Activate learners to respond and demonstrate their learning. This will help them internalize new skills and knowledge and to confirm correct understanding of these concepts. This will also provide learners opportunity to practice what they have learnt. Learners performance can be elicited by asking deep-learning questions, making reference to what students already know or having students collaborate with their peers and helping students integrate new knowledge by providing content in a context-rich way by using real-world examples.

### **7. Providing Feedback**

Offer immediate feedback on learner's performance to assess and facilitate learning or for reinforcement. Feedback can be confirmatory, remedial, informative and analytical.

### **8. Assessing performance**

This is to check the progress in learning as per the announced objectives. Using pretest for endpoint knowledge or skills, post-test to check for mastery of content or skills, embedding questions throughout instruction through oral questioning and/or quizzes will help the teachers evaluate the effectiveness of the instructional events and to see if the expected learning outcomes have been achieved based on the previously stated objectives.

### **9. Enhancing retention and transfer to job**

This is to put the learner in a transfer situation by involving them in a similar situation or providing them a similar case which will help them develop expertise in the concerned area. Methods such as paraphrasing the content, generating examples, creating concept maps or outlines, discussing similar symptoms of diseases, etc. All these will help in providing diverse practice to generalize the capability.

## **Conclusion**

Gagne's theories provide a great deal of valuable information to teachers. Gagne's nine step model will help medical teachers to structure their lesson plans in a holistic view which will ensure a systematic and effective learning. We need to keep in mind that the exact form of these events is not something that can be specified in general for all lessons, but rather must be decided for each learning objective.<sup>4</sup>

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## **Attitude of undergraduate medical students towards powerpoint, overhead projector and chalkboard teaching. Does it matter?**

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### **Abstract**

Obtaining knowledge of the learner and his/her preference is a vastly underutilized approach to improve classroom instruction. The purpose of this study was to assess the attitude of undergraduate medical students towards powerpoint, overhead projector and chalkboard teaching and to compare the perceived efficacy of each of the three teaching aids used during lectures. This cross sectional descriptive study was carried out in a medical college in Puducherry during January – February 2012. A self administered questionnaire in English was given to all undergraduate medical students. The perceived efficacy of the different teaching methods was assessed using using 5 point Likert scale, while their preference and views on the use of these tools was collected using open ended questions. Response rate in this study was 98.3% (361/367). Combination of powerpoint and blackboard was the preferred method of teaching in 85% of the subjects, while powerpoint alone was preferred in 9%. Powerpoint method was preferred for the information content, visual enhancement, organised nature and overall delivery of the topics. Blackboard was perceived as a better tool for making the lectures understandable, for a better grasp and retention, resulting in better impact. Transparencies were considered 'outdated, unclear, unattractive, boring and not useful' by majority of the students, and illustrations and graphics are preferred for better retention. Less than 2% of students suggested that 'transparencies may be used to summarise important points or to break the monotony of powerpoints in all sessions'. Though powerpoint method was found suitable for the visual content and presentation style, students preferred a combination of powerpoint and blackboard for lecture delivery, while use of transparencies was not a preferred method. These findings suggest need for changes in the current practise to facilitate overall improvement of teaching learning experience.

### **Key Words**

UG Medical Students, Powerpoint, Overhead Projector, Chalkboard.

### **Introduction**

Lectures have been the most common form of teaching and learning.<sup>1</sup> Teaching learning media are the means of communicating educational information. Chalkboard (CB), overhead projector (OHP) and teaching through Microsoft PowerPoint (PPT) are the

three commonly used teaching learning media in lectures. A chalkboard is uniquely effective as a medium of classroom instruction and has been used commonly in lectures, while the use of transparencies with an OHP has also been popular.<sup>2</sup> Recently the use of electronic presentations has become common and PPT is now the most popular package used out of all electronic presentations.<sup>3</sup> Each of these media has their own benefits and limitations. Over the last decade teachers seem to increasingly prefer PPT to the other media.

Obtaining knowledge of the learner and his/her preference is a vastly underutilized approach to improve classroom instruction.<sup>4</sup> Few studies have been conducted to assess the effectiveness of lectures using PPT or other such media in comparison to lectures using CB, or the use of OHP with varying results. Hence this study was proposed to assess the attitude of undergraduate medical students towards PPT, overhead projector and chalkboard teaching and to compare the perceived efficacy of each of the three teaching aids used during lectures.

### **Methods**

This cross sectional descriptive study was carried out in JIPMER, Puducherry. A self administered questionnaire in English was given to all undergraduate medical students who consented to participate in the study. The perceived efficacy of three different teaching methods namely PPT, OHP and CB teaching was assessed using a 5-point Likert scale, i.e., 5 (agree strongly), 4 (agree), 3 (no opinion), 2 (disagree) and 1 (disagree strongly). For each of the three methods, the students were asked to rank the following parameters on a five-point scale:

1. Lecture contents were informative
2. Lectures were clear and understandable
3. Lectures were well organized
4. Helped grasp concepts better
5. Lecture aroused interest in the topic
6. Lecture visually enhanced & better perceived
7. Increased impact of the lecture delivered
8. Helped retain concepts longer
9. Improved overall delivery of the topic
10. Helped maintain concentration throughout lecture
11. Better for self study later on
12. Lectures were overloaded with information

Preferences and views on the use of these tools were collected using open ended questions. The overall students preference towards the different lecture delivery methods was calculated. Data was analysed using SPSS version 16.  $P < 0.05$  was considered as statistically significant.

### **Results**

Response rate in this study was 98.3% (361/367). Age of the responders ranged from 18-25 years, 76.2% were in the age group of 20-25 years and 23.8% were less than 20 years of age. Among the respondents, 50.4% were males and 49.6% were

females. The number of lectures attended in a day was 2 to 3 per day on average by the majority of responders (82%). Students were equally distributed amongst the different years of study.

Combination of PPT and CB was the preferred method of teaching in 85% of the subjects, while PPT alone was preferred in 9%. CB alone was preferred in 3.9% and a combination of all three media was preferred in 2.8% of respondents.

PPT method was felt superior for the information content, visual enhancement, organised nature and overall delivery of the topics. Blackboard was perceived as a better tool for making the lectures understandable, for a better grasp and retention, resulting in better impact. Both these tools were rated as interesting by similar proportion of the subjects.

Transparencies were considered 'outdated, unclear, unattractive, boring and not useful' by majority of the students, and illustrations and graphics are preferred for better retention. Less than 2% of students suggested that 'transparencies may be used to summarise important points or to break the monotony of PPTs in all sessions'.

## Discussion

Over the last two decades teachers seem to increasingly prefer the use of PPT when compared to other methods to deliver lectures. But what do the students really want? Various studies have been conducted to assess the effectiveness of lectures using PPT or other such media in comparison to lectures using chalkboard, or the use of OHP, but with varying results. This study has shown that majority (85%) of the students preferred a combination of PPT and CB followed by PPT or CB used in isolation. They felt that the theoretical aspect of a topic could be discussed on CB and pictures / videos relating to the lecture topic could be shown on PPT. According to one study, traditional classes with CB presentation were the most favoured by students from biomedicine and medicine courses<sup>5</sup> while another study observed that most students preferred PPT presentations over traditional presentations (eg, chalk and talk).<sup>6</sup>

In this study, students perceived CB as a better tool for making the lectures understandable, interesting, enabling better grasp and retention, resulting in better impact. A chalkboard is uniquely effective as a medium of classroom instruction and has been used commonly in lectures, while the use of transparencies with an OHP is also popular.<sup>2</sup> During a lecture, both the visual and auditory senses are used to absorb information and here assistance in the form of a visual aid is useful.<sup>7</sup>

In this study, students perceived PPT method as superior for the information content, visual enhancement, interesting flow, organised nature and overall delivery of the topics. One study showed that majority of the medical students preferred PPT presentations because of better quality of texts and diagrams, graphs, animations and videos. It was considered ideal for fast revision and quick overview of the subject.<sup>8</sup>

Recently the use of electronic presentations has become common and Microsoft PPT is now the most popular package used out of all electronic presentations.<sup>3</sup> However, educationists are divided on the superiority of PPT with respect to the traditional chalk and talk method.<sup>9</sup> Though students in today's world are broadly influenced by technology, they are cautious about the overuse or misuse of it. One study noted that students preferred PPT over the use of OHP, but that in some instances the content of the PPT presentation distracted students.<sup>10</sup> It is stated that the student becomes a passive observer rather than an active participant in PPT teaching<sup>11</sup> and it reduces the interactive discussion between the teacher and the students. In a survey among students it was found that they disliked both OHP and PPT slides for the monotony of the classes and the lack of interest it generates among both the students and teachers. The tendency to go fast is common because of the ease of delivery of the material.<sup>13</sup> In one study students opined that a judicious use of animations and sufficient time to take down notes.<sup>8</sup>

Joint way of teaching with CB and PPT with animations was considered the ideal way to teach.<sup>12</sup> A CB may be more student centered while PPT more teacher-centred.<sup>13</sup> Use of exciting and innovative animation based learning using PPT and board teaching can be used together to bring about maximum pedagogical benefits to the students.<sup>13</sup>

In this study, transparencies were considered 'outdated, unclear, unattractive, boring and not useful' by majority of the students, and illustrations and graphics are preferred for better retention. Less than 2% of students suggested that 'transparencies may be used to summarise important points or to break the monotony of PPT in all sessions. This issue has been addressed by a few studies. OHP expands the potential of blackboard teaching by enabling combinations of text, tables and diagrams.<sup>4</sup>

Students learn best when they are engaged by material that is presented in variety of ways and formats.<sup>14</sup> Insight into the specific preference of individual classes would help instructors tailor their presentation for each individual class.<sup>4</sup> Findings of this study can facilitate appropriate utilisation of teaching learning media for quality learning experience. Faculty should take advantage of this knowledge so as to maintain interest and enthusiasm among the students.

## Conclusion

Though PPT method was found suitable for the visual content and presentation style, students preferred a combination of PPT and CB for lecture delivery, while use of transparencies through OHP was not a preferred method. These findings suggest need for changes in the current practice to facilitate overall improvement of teaching learning experience.

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### **Training PSM Students in Clinico Social Case Discussion through Semi Structured Small Group Technique**

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#### **Abstract**

The difference between Clinico-social and Medico-social disciplines is that the Medico-social discipline envisages treating the patients on one-to-one basis in a clinical setting while the Clinico-social discipline

envisages preventing the diseases from occurring in a community and keeping the entire community healthy. The Community Medicine Professionals should establish community contact, interpersonal interaction, elicit the probable causes, and have hands-on observation of the physical environment. The objective of this paper is to record the outcomes of Small Group Teaching Methodology in training the undergraduate medical students in clinico-social case taking and discussion alongside the field visits. 120 students who are in the seventh semester were taken up for the study and the observations made are taken up for analysis. It was found that this student centered technique facilitated better understanding of the concept among the medical students.

#### **Key Words**

Clinico-social case discussion, Small group teaching, P&SM students.

#### **Introduction**

The Government of India as well as the state governments do realize community medicine's role in maintaining the community health and welfare; but implementation of it to ensure its proper reach to meet the public health delivery needs to be improved by making proper channels to ensure community contact, interpersonal interaction, proper machinery to elicit probable causes/reasons for the onslaught of diseases and hands-on observation of the physical environment that is not conducive to public health delivery systems.

It is observed that the students' performance in regard to understanding of the Clinico-social and Medico-social topics in the university examinations is far from satisfactory, most of the times. This is the conclusion I had arrived at after collecting the data (observed and chronicled) of the final practical examinations from various medical colleges of Andhra Pradesh and Karnataka from 2007 to 2011 (10 colleges x 100+ students over a period of five years). In this exercise, it was noticed that the undergraduates could establish the web of causation, apply the desired levels of prevention, and discuss the problems with reference to the related community with community medicine perspective. They also could develop management strategy applying the primary health care principles and relevant national health programs.

#### **Methods**

About 120 seventh semester students taking the final university examinations in February 2012 were observed, employing Small Group Technique (SGT) Methodology, for training in Clinico-social case taking and discussion alongside the field visits. They were organized into groups of 25-30 each and four such batches were studied for 4 weeks. They were thoroughly briefed about clinico-social case taking methodology and its importance. They were sufficiently oriented on standard documentation formats and the absolute essentiality of their submission on the set dates.

Each group was sub-divided, consisting of 5-6 members each, and made to sit in circles. A team

leader and a co-team leader were identified to oversee the behavior of each group and ensure that the objectives of the 8 Clinico-social Case Studies (CSCs) and 10 field visits were satisfactorily met.

This process was done from October 2011 till January 2012, during the PSM morning postings from 9.00am to 12.00noon throughout their seventh semester postings – 4 weeks x 6 days x 3 hours = 72 contact hours per individual: four such batches ending January 2012.

Postgraduates were nominated to monitor, one for each group. They were allowed to bring reference material and textbooks. Highly intense brainstorming with active involvement was arranged.

The group members could review each other's work and the groups could also review other group's work, make comments and sign with date for authentication. The postgraduates also reviewed and finally, the work was submitted to the overseeing facilitator (ie the author).

### Results and Discussion

1. Performance of 120 students was closely monitored and objectively assessed by peers, Postgraduates and finally by the Facilitator.
2. A well documented feedback from the 24 groups was obtained and submitted to the facilitator.
3. The work by the 120 students was submitted in the form of Records.
4. All the 120 students were actively involved. Supervision Reports of 24 group leaders, 24 co-group leaders, Postgraduates were submitted in the prescribed formats.
5. Their conception and perception of community medicine was documented and found to be satisfactory conforming to the expectations.
6. The performance was 'excellent' for 6 (5%) students, 'very good' for 78 (65%) students, 'good' for 24 (20%) students and 'must improve' for 12 (10%) students.

### Conclusion

The objective of active learning through student-centered method was found to have produced expected results. It infused confidence in the students, invoked the spirit of cooperation amongst themselves and the importance of involvement and implementation of the public-health programs enunciated for the good of the mankind. All the participants have unanimously expressed the imperativeness of making the Community Medicine as an imperative medicine of public importance.

This may be recommended to be emulated for all the upcoming batches by the faculty across the board for ensuring the health needs of the community to be better understood—a desired curriculum implementation approach! The record is a portfolio; concept map is a part of each case and the field visits that they had, accounting for 18 concept maps in each record, SGD, review, peer review, active learning,

documentation – systematizing documentation concept, i.e. the 'Record'—that would serve as a ready reckoner for providing ethical and compassionate health care.

### Suggested Readings

1. Kumar S, Zayapragassarazan Z. Portfolio: A Newer Method of Assessment. NTTC Bulletin 2011, 18(1): 2-3.
2. Outcome Project of Accreditation Council for Graduate Medical Education (ACGME), USA, (Accessed September 27, 2010 at <http://www.acgme.org>).
3. Smith SR, Dollase RH, Boss JA. Assessing students' performance in a competency- based curriculum. *Academic Medicine* 2003; 78: 97-107.
4. Norcini JJ, McKinley DW. Assessment methods in medical education. *Teaching and Teacher Education* 2007; 23: 239-250.

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### Views of Medical Teachers towards Problems in UG Medical Curriculum - The Outcomes of a Buzz Session

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### Abstract

Buzz sessions are recognized as an effective means of small group instruction in developing and expressing imaginative ideas, opinions and stimulate thinking among learners. In the present article the report of the view points of the participants on the challenges in UG Medical Education elicited by buzz groups during the session on Curriculum Planning and Development in a 10 days' workshop on Educational Science for Teachers of Health Professionals. The facilitators and observers found that the participants were able to bring out valuable points as their views regarding current problems in UG Medical Education in India. This session also helped the facilitator to warm up the groups to a new topic and address the topic from a new perspective by allowing all participants to give their input.

### Key Words

Buzz Session, UG Medical Education, Curriculum

### Introduction

The NTTC, JIPMER organizes the National Course on Educational Science for Teachers of Health Professional since 1976 and the 66<sup>th</sup> National course was held during 7<sup>th</sup> February to 16<sup>th</sup> February 2013. 25 faculty members from different states of India



participated in the national course. The course comprises interactive sessions on educational objectives, teaching-learning methods, assessment and curriculum. A multi-disciplinary team of 11 faculty members trained in educational technology from JIPMER, Puducherry conducted these sessions. An attempt was made to study whether buzz sessions could serve as an active learning method to bring out optimum learning outcomes. For this purpose, the perception of the participant medical teachers of medical colleges in India with regard to the problems in undergraduate medical curriculum in India was chosen as a topic for discussion in the buzz session during the introductory session on curriculum.

### Method

There were two sessions on Curriculum in Medical Education. During the first introductory session on curriculum a buzz session was held. For this buzz session the participants were grouped into four groups. Group I, Group II and Group III consisted of 6 members each and Group IV consisted of 7 members. The groups were made in such a way that each group consisted of faculty members from pre-clinical, para-clinical and clinical subjects. The second author served as the facilitator and the first and third authors served as observers of the buzz session. A 10 minutes buzz among the group members was announced by the facilitator to buzz about the emerging challenges in current MBBS curriculum and how to encounter those challenges. At the end of 10 minutes a plenary was conducted in which a representative from each group presented the views of their group members to the larger group. The views of the four groups were recorded by the observers and collated manually for interpretations.

### Results

#### Participants' Characteristics

- Group Age: 29-56 years
- Departments: Anatomy (1), Biochemistry (1), Cardiology (1), ENT (1), Forensic Medicine (2), Medicine (1), Microbiology (2), Nuclear Medicine (1), Obstetrics & Gynaecology (1), Oral Medicine and Radiology (1), Orthopaedic Surgery (1) Paediatrics (1), Pathology (1), Pharmacology (1), Physiology (2), Pedodontics & Preventive Dentistry (1), Preventive and Social Medicine (3), Surgery (2), Venereology (1)
- Designations: Professors (5), Additional Professors (1), Associate Professor (7), Assistant Professor (9), Lecturer (1), Tutor (1), Reader (1).
- Private Colleges (15), Government Colleges (10)

#### Views of Group I

The present MBBS curriculum and the teaching learning methods followed are more information oriented and teacher-centered.

The core curriculum is not suitable for preparing the UG students for PG entrance examination.

It does not meet the societal needs.

There are no adequate community based activities.

Non-scholastic abilities are not fostered.

#### Views of Group II

More medical colleges without adequate facilities

Hands on training not adequate.

Experiential learning is lacking.

Lack of technological inputs from teachers for teaching, learning and assessment.

Lack of collaboration with other medical colleges.

#### Views of Group III

Interaction between students and teachers are limited.

No electives in UG medical education.

Students are not involved in curriculum planning.

Students should also be given proper work experience by involving them in treatment planning. This can be done by making them serve as student-doctors.

Less importance for research and fake research

#### Views of Group IV

Present UG Curriculum is not on par with growing health care needs of the nation and not up to the level of ongoing trends in medical education.

The teacher-student ratio is not adequate.

It is not competency based.

Substandard teachers

Assessment system is outdated and poor.

### Discussion and Conclusion

A buzz session consists in dividing an audience into small groups to discuss an issue or carry out a task. The groups will work simultaneously in the same room (the word buzz comes from the resulting noise). In the present study the buzz session consisted of dividing the participants into small groups to discuss problems in UG medical curriculum. The task was brief and relatively simple. The buzz session helped the facilitator to warm up the groups to a new topic, solve problems, address a topic from a new perspective, share ideas, gather questions, generate ideas, generate lists, gather feedback and allow all participants to give their inputs. Thus the buzz session brought out optimum outcomes with respect to the topic chosen for discussion and created a safer learning environment than in a larger group. The views of the groups helped the participants to understand the concept of curriculum and curriculum planning.

#### Suggested Readings

1. Dan Boudreau How do I use Buzz groups in training?.  
<http://thetrainingworld.com/articles/buzz.htm>
2. Selecting appropriate teaching/learning methods.  
<http://www2.rgu.ac.uk/celt/pgcertlit/selecting/select18.htm>
3. Handbook Practical Tool. <http://www.cemcq.qc.ca/en/documents/VM-039.pdf>

### Educational Projects Initiated during 66<sup>th</sup> National Course

The 66<sup>th</sup> National Course was held at JIPMER from 07.02.2013 to 16.02.2013. The following project proposals presented by the participants were approved. We wish them speedy execution of the project proposals and look forward to receiving the final reports.

Sl. No.	Submitted by	College	Title
1.	Dr. Pandurang M. Narhare, Associate Professor of Physiology	Chalmeda Anand Rao Institute of Medical Sciences, Bommakal, Karimnagar-505 001, Andhra Pradesh.	Video Demonstration in Teaching Physiology - As a Supplementary Tool
2.	Dr. S. Laxmi Narayana, Assistant Professor of Biochemistry	Gandhi Medical College, Musheerabad, Secunderabad-500 003, Andhra Pradesh.	Facilitating Learning among the 1 <sup>st</sup> MBBS low achievers in the subject of Biochemistry
3.	Dr. N. Venkat Narsimha Reddy, Associate Professor of General Surgery	Gandhi Medical College, Musheerabad, Secunderabad-500 003, Andhra Pradesh.	Outcome of e-learning in a clinical context
4.	Dr. Yalamanchili Padmsri, Associate Professor of Community Medicine	Kurnool Medical College, Kurnool-518002, Andhra Pradesh.	To develop and evaluate communication skills among medical students
5.	Dr. Arepalli Sreedevi, Professor of Community Medicine	Kurnool Medical College, Kurnool-518002, Andhra Pradesh.	Identifying problems and laying strategies to solve these problems among first MBBS students who are residing in women's hostel in Govt. Medical College, Andhra Pradesh.
6.	Dr. Rajashekar R.K, Professor & HoD of Physiology	Belgaum Institute of Medical Sciences, Belgaum, Karnataka.	Introducing a supplementary educational tool for understanding physiology for 1 <sup>st</sup> MBBS students in a Government Medical College.
7.	Dr. Vinay Kulkarni, Tutor, Dept. of Anatomy	Sri Devaraj URS Medical College, Post Box No.7, Tamaka, Kolar-563 101, Karnataka.	Effective utilisation of anatomy atlas before taking up of routine dissections
8.	Dr. Pragati V Chavan, Associate Professor of Community Medicine	SS Institute of Medical Sciences & Research Centre (SSIMS&RI), NH4, Bypass road, Davangere-5, Karnataka.	A comparative study of formative and summative assessment by content evaluation of Community Medicine question papers from the year 2008-2012.
9.	Dr. Rajan Payyappilly, Professor of Microbiology	ACME, Pariyaram Medical College P.O., Pariyaram, Kannur-670 503, Kerala.	Post test evaluation of Multiple Choice Questions asked for Microbiology Internal Assessment exams conducted for formative assessment of 2 <sup>nd</sup> professional MBBS & BDS students, during the last 3 years.
10.	Dr. Ram Kumar K.R., Professor of Pathology	DM Wayanad Institute of Medical Sciences (DM-WIMS), Naseera Nagar, Meppadi (P.O.), Wayanad-673 577, Kerala.	To provide quality knowledge in haematology to under graduate students in haematology during second MBBS.
11.	Dr. Hanumantha, Assistant Professor of Forensic Medicine	DM Wayanad Institute of Medical Sciences (DM-WIMS), Naseera Nagar, Meppadi (P.O.), Wayanad-673 577, Kerala.	Evaluation of University Examination Question Papers of Forensic Medicine.
12.	Dr. Latha Nirmal, Senior Lecturer in Dentistry, Dept. of Pedodontics and Preventive Dentistry	Sri Ramachandra Medical College & Research Institute, Porur, Chennai-600116, Tamil Nadu.	Use of puzzles and crosswords as an active teaching and learning method for dental undergraduates
13.	Dr. K. Anbarasi, Reader, Dept. of Oral Medicine & Radiology	Sri Ramachandra Medical College & Research Institute, Porur, Chennai-600116, Tamil Nadu.	Students and Teachers perspective on Effective Dental Teaching
14.	Dr. Shaikh Afzal Rubby, Associate Professor of General Surgery	PSG Institute of Medical Sciences & Research, Post Box No. 1674, Peelamedu, Coimbatore-641004, Tamil Nadu.	Extra classes & small group teaching for slow learner to facilitate their learning process.
15.	Dr. Anila A Mathews, Associate Professor of Microbiology	PSG Institute of Medical Sciences & Research, Post Box No. 1674, Peelamedu, Coimbatore-641004.	Role of case based learning in Microbiology

16.	Dr. S.D. Fernandes, Associate Professor of Venereology	SRM Medical College & Hospital & R. I., Potheri, Kattankulathur, Kanchipuram – 603203, Tamil Nadu.	Efficacy of 'think, pair, share' learning strategy in clinical case discussion in Ops.
17.	Dr. Nivedita Mondal, Assistant Professor of Pediatrics	Sri Venkateshwaraa Medical College Hospital & Research Centre, 13-A, Pondy-Villupuram Main Road, Ariyur, Puducherry-605 102.	Problem solving ability in fourth year MBBS students following individual learning and group learning - a comparative study
18.	Dr. C. Sreenivas, Assistant Professor of ENT	Sri Venkateshwaraa Medical College Hospital & Research Centre, 13-A, Pondy-Villupuram Main Road, Ariyur, Puducherry-605 102.	Evaluating OSCE in formative assessment in Otorhinolaryngology in Undergraduate learning in a private medical college
19.	Dr. Prasanand S, Assistant Professor of Pharmacology	Vinayaka Mission's Medical College & Hospital, Keezhakasakudy Medu, Karaikal-606 609.	Group based discussion for learning common drug interactions among 2 <sup>nd</sup> Year MBBS students.
20.	Dr. Ajith Ananthakrishna Pillai, Assistant Professor of Cardiology	JIPMER, Puducherry-605 006.	Effect of Group-Based Interactive learning sessions versus didactic teaching on Electrocardiogram (ECG) interpretation skills for Final Year MBBS students.
21.	Dr. Sanjay Sukumar, Assistant Professor of Forensic Medicine & Toxicology	JIPMER, Puducherry-605 006.	Introduction of OSPE's (Objective Structured Practical Examination) to the conventional method of practical examination in Forensic Medicine at JIPMER.
22.	Dr. Deepanjali S, Assistant Professor of Medicine	JIPMER, Puducherry-605 006.	Effectiveness of objective structured history taking as a teaching tool for third semester MBBS students
23.	Dr. Nandini Pandit, Additional Professor of Nuclear Medicine	JIPMER, Puducherry-605 006.	Awareness of the Hazards and Radiation protection aspect of open radioactive - Sources among MBBS graduates.
24.	Dr. Anish Keepanasseril, Assistant Professor of Obstetrics & Gynaecology	JIPMER, Puducherry-605 006.	Perceptions of Medical students of the factors influencing their academic performance in high and low performing students: A qualitative study
25.	Dr. Deep Sharma, Assistant Professor of Orthopaedics	JIPMER, Puducherry-605 006.	Organised Region-wise Group Initiative (ORGI) – An Active teaching learning method in Out Patient Clinics

## **ANNOUNCEMENTS**

### **For Kind Attention of PAST PARTICIPANTS of National Courses**

All medical teachers and allied health professional teachers who have attended the National Course on Educational Science for Teachers of Health Professionals of National Teacher Training Centre, JIPMER, Puducherry are requested to send the following updated information to **nttc.jipmer@gmail.com** to enable us to send the Bulletin of NTTC and facilitate future communication.

1. Name, designation and full postal address
2. E-mail address

### **Medical Education – Principles and Practice**

Medical Education – Principles and Practice – a reference book published by JIPMER NTTC Alumni Association and popular among the Medical Teachers is available for sale. Interested medical teachers and institutions may send a crossed DD for Rs.325/- (including postal charges) in favour of Alumni Association of NTTC, JIPMER, payable at SBI, Puducherry, towards the cost of a single book to Secretary, JIPMER NTTC Alumni Association, C/o. Dept. of Medical Education, JIPMER, Puducherry-605 006.

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