

3<sup>rd</sup> International Conference on

# Evolving Trends In Medical Education

5th & 6th November 2016. Dali, Yunnan, P.R. China

Abstracts











#### **Foreword**

It gives us immense pleasure to place before you this journal of abstracts of the 3<sup>rd</sup> edition of "Evolving Trends in Medical Education".

The 2<sup>nd</sup> international conference on ETME, conducted in 2015 has set a high standard in understanding the requirements and the academic agenda for the International MBBS program. Need of a curriculum redesign in context of the recent advances in the medical field has been the pivotal outcome of the conference.

Medicine and education are both noble professions and this conference aims to bring about a synthesis of the two in the context of the classroom teaching focusing on didactic teaching learning methodology. The conference was envisaged with the objective of analyzing the advantages and shortcomings in the teaching of medicine as we practice it today.

With more and more students opting to study medicine in China, utmost care must be taken to ensure that the syllabus is updated to the latest, technologically friendly and at the same time also conforms to the standards of medical education as is practiced worldwide.

It is from this standpoint that a modest attempt shall be made by the stakeholders particularly the teachers & academicians to identify actionable areas and find pragmatic solutions to the difficulties that are faced when dealing with a multicultural mix of learners.

The challenge is therefore not only to teach but to engage and inspire.

The articles contained herein for the ETME 2016 are contributed by doctors and academicians from various nationalities.

We thank them wholeheartedly for entrusting us with their valuable work and hope that the reader find the contents thought provoking and stimulating.

In the coming years, we have a vision to see that ETME becomes a mature publication documenting rigorous research in medical education and your support and participation is acknowledged and appreciated.

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The Editorial Team







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Topic : Pedagogy (code – MTC 01 )

Sub Topic : Problem Based Learning (PBL) - An Effective Approach to Improve

**Learning Outcomes in Medical Teaching** 

#### **Background:**

The amount of information is growing exponentially and no one person can keep up. The amount of information given to a medical student is humongous. After their graduation, students are expected to manage & treat patients with appropriate, relevant & effective treatment. It is the job of medical faculty to make sure that students gain not just knowledge about medical subjects but also ability to deal with different clinical scenarios or problems after they are familiar with basic medical sciences.

Problem-based learning (PBL) is an approach that challenges students to learn through engagement in a real problem. It is a format that simultaneously develops both problem-solving strategies and disciplinary knowledge bases and skills by placing students in the active role of problem-solvers confronted with an ill-structured situation that simulates the kind of problems they are likely to face as future Doctors in any hospitals.

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Different modalities of problem based learning includes

- Student-centred
- Problem-based
- Integrated
- Community-based
- Elective
- Systematic

To implement PBL in teaching curriculum, it is necessary for all the faculty have a clear understanding of a PBL, steps involved, writing of PBL scenarios, advantages / disadvantages & assessment.

Keywords: PBL, problem based learning, pragmatism

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Sub Topic : Team-based learning, a learning strategy for clinical reasoning, in

students with curriculum based learning tutorial experiences

Clinical reasoning serves as a crucial skill for all physicians regardless of their area of expertise. Helping trainees develop effective and appropriate clinical reasoning abilities is a central aim of medical education. Problem finding and solving are skills required for clinical reasoning; however, students who underwent problem-based learning (PBL) still have difficulty in acquiring clinical reasoning skills.

Team-based learning (TBL) in medical education has emerged over the past few years as an instructional strategy to enhance active learning and critical thinking.

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Team based learning is an active learning and small group instructional strategy that provides students with opportunities to apply conceptual knowledge through a sequence of activities that includes individual work, teamwork, and immediate feedback. The concept is that sequential activities allow participants to scaffold their learning while tackling problems similar to real practice.

TBL is highly learner-centered (yet has critical faculty input) and uses grading, peer evaluation and immediate feedback to ensure individual and team accountability to promote learning and, unlike other group-based instructional approaches, one content expert instructor can instruct 20 or more teams.

**OBJECTIVE**: The aim of this article is to discuss the extent, design, and practice of TBL programs within medical schools and its results in acquiring clinical reasoning.

**METHODOLOGIES**: Comprehensive literature review was done and articles were assessed according to the seven core TBL design elements (team formation, readiness assurance, immediate feedback, sequencing of in-class problem solving, the four S's[significant problem, same problem, specific choice, and simultaneous reporting], incentive structure, and peer review)

**RESULTS:** TBL is a relatively new pedagogy in medical education. As a learning tool, it enables a large group of students to take part in small-group learning experiences without a large number of faculty. There are significant variability across

the articles in terms of the application of the seven core design elements and the depth with which they were described. The majority of the articles, however, reported that TBL provided a positive learning experience for students.

**CONCLUSION:** TBL is an instructional strategy that is an excellent fit with medical education. It is active learning, learner- centered, holds students accountable for their preparation for class and in-class engagement, and requires them to apply knowledge to solve authentic problems. For any future physician, there are few more important competencies to master than learning how to work collaboratively with others –something that TBL requires. It is a versatile strategy, well suited for large classes (>100 students) or small classes (<25 students), and only needs one instructor.

**KEY WORDS**: clinical reasoning; medical education; medical students; team-based learning







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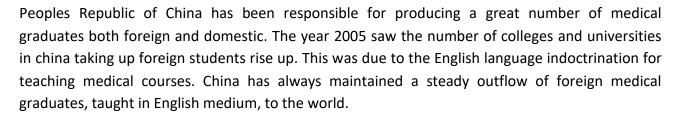
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Sub Topic : Impact on students' performance through placement of an Academic Coordinator: A Statistical analysis on pedagogy focusing on the fact that "Assessment drives

learning: an unavoidable truth"



Dali University started its English medium medical graduate program MBBS in 2005. In the year 2015 Dali University started a new Bilingual Clinical medicine program which runs alongside the existing MBBS program. Within the strict norms and regulations set forward by Ministry of Education Dali University employs regular domestic and a few foreign expert teachers to maintain its standards for, English and bilingual medium, medical education. Dali University like any other elite educational institutes regularly raises its standards and formulates new education platforms. The norms are reformed, planned and put into action through scientific experimentation and statistical data collection with subsequent analysis. The Academic coordinator was introduced in the past year as an experimental program to view the student response in boosting the academic performance. The academic coordinator would be charged with taking revision classes, extra classes, regular assessments and FMGE based training.

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Often the literature declares that clinical medical education adheres to a master-apprenticeship system of learning and the fundamental condition for such teaching is that an expert is teaching a novice. Consequently, in such a system of knowledge acquisition, the medical teachers play a crucial role as a teacher. According to Lauvås and Handal the master-apprenticeship model focuses the students' ability to handle clinical praxis in accordance with what the clinical teachers believe is correct and what tradition allows. However most of these methods cater to the individual students' needs and not a group or whole batch in effect. During any supervised clinical training, medical students are expected to develop their professional competence and attitudes. The present study investigates how placing an academic coordinator improves the student performance and in turn boosts the university medical education system. One conclusion to be drawn from the literature is that clinical teaching must be seen as a complex learning situation influenced by the learning content, the setting up protocol and interactions of the students. In order to increase the knowledge concerning medical teaching, the aim of the present study is to explore and suggest a standard pedagogical approach taken by academic coordinator for English/Bilingual medium medical students in a foreign country. Dali University has devised a statistical data analysis approach to study the effects of academic coordinator introduction and placement on South Asian students of Clinical medicine degree courses. The main objective of this study was to find out an effective pedagogical strategy for pre clinical subjects taught to undergraduate students. Moreover this strategy should not only cater to the individual needs of student but also propel the whole batch of students towards academic improvement and facilitating their learning skills.

**Key words:** FMGE: Foreign medical graduate examination







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Topic : Syllabus and content analysis (code – MTC 02)

Sub Topic :The use of specially designed tasks to enhance student interest in the

cadaver dissection laboratory

#### INTRODUCTION:

Cadaver dissection has been used as the main method of teaching human anatomy for the last five centuries and it has been an integral part of medical education and the basis of anatomy for first M.B.B.S. students. Unfortunately, students sometimes regard the process of dissection as uninteresting or stressful. To make laboratory time more interesting and to encourage discussion and collaborative learning among medical students, specially designed tasks should be given to students to enhance the interest towards the cadaveric dissection.

#### **OBJECTIVES:**

To describe importance of cadaveric dissection and making the students more interest towards dissection through specially designed tasks.

#### **MEASURES:**

This paper highlights about the

- a) Importance of cadaveric dissection towards learning human anatomy,
- b) Why some students do not show interest towards cadaveric dissection?
- c) Motivation and making students more interest towards the cadaveric dissection





#### **METHODOLOGIES:**

This article was prepared using most reporting conventions described in the literature data base from <u>US National Library of Medicine</u>, Research Gate, Pub med, Pub facts, Springer link,

#### FINDINGS:

Some of the undergraduate medical students do not show any interest towards the cadaveric dissection which is a prerequisite to learn human anatomy.

#### **IMPLICATIONS:**

Motivation and special designed tasks should be given to the students to show interest towards the cadaveric dissection which help the students to build discipline independent skills which are essential requirements of modern health care setup

#### **CONCLUSION:**

The use of specially designed tasks to the students in the cadaver dissection laboratory may encourage discussion and collaborative learning and may generate interest in laboratory work.

**KEYWORDS: Cadaveric dissection, specially designed tasks.** 







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A cadaver is also called corpse when intended for dissection, in medical literary it refers to a deceased body. Cadaveric dissection is an integral and honoured part of medical education and the basis of anatomy for medicine students. Currently the students failed to elicit much theological interests in the laboratory sessions. To make laboratory time more interesting and to encourage discussion and collaborative learning among medical students, specially designed tasks were assigned to students throughout dissection.

Cadaveric dissection being the paradigm of anatomy teaching remains as an essential technique to teach three-dimensional concepts. The dissection hall is an ideal place to introduce concepts of humanistic care as it evokes the students' memories, speculations, and fears about serious illness in themselves, their families, and loved ones. The attitude of the faculty is to monitor how the students respond as they undertake the task of dissection and provide a model of their responses to the hopes and fears of their patients and to their own reactions to the dying. This approach will lay a foundation for their clinical training to implement and practice humanistic values by inculcating more interest in their relative fields of research or medicine.







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Sub Topic : Information and communication technologies in higher education:

evidence-based practices in medical education.

Information and Communications Technology (ICT) is general term indicating communication device or application, encompassing: computer and network hardware and software, television, cellular phones, internet and their application like videoconferencing and distance learning. ICT has become an integral part of modern society especially so in teaching and learning. ICT has brought about profound changes in health profession in delivering health care and medical education. ICT is increasingly used in medical education; images or videos increase comprehension and retention, simplify complex topics. Internet and others software has made it possible to deliver online interactive tutorial, online distance education. ICT in higher education leads to improved student learning and better teaching methods.

However, ICT is expensive and its setting up requires expertise and experience. Teachers and students also need training and experience to utilize ICT effectively and efficiently. In addition, choosing the right ICT tool among the many education technology solutions may cause confusion. We have evaluated the existing literature for evidence regarding various ICT tools used in ME and also discussed our experience in use and application of various ICT tools.

Delivering lecture using PowerPoint presentation. Evaluation of the same by students has rated blackboard as better especially ppt is not prepared well and delivered by just reading it out. Effectiveness of ppt depends on lecturer and his delivery.

<u>Devitt and Palmer</u> et al (1999) evaluated the place of computer-aided learning in a basic science course in the undergraduate medical curriculum at the University of Adelaide. They found that





students who had access to the material in the problem-based and free text response styles did no better in the post-study test than the controls, whilst the group who had studied the didactically presented computer material performed significantly better than the other three groups. They concluded that if computer materials are to be provided as a learning resource for the basic medical sciences, provision must be made for the style of teaching of the course and the style of learning of the students attending that course.

Ozuah et al (2010) studied the impact of CD-ROM based faculty training and found that it was effective in imparting knowledge as evidenced by in significant improvements in behaviours associated with effective clinical teaching.

**Our experience:** At Vydehi institute of medical sciences and research centre, we have used various ICT tools to enhance student learning

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摘要:学习动机与学习目标是影响学习效果的两个重要因素,而这两个重要因素分别与我们的班级管理和课程设置有着密不可分的关系。双语班就是通过有效的班级管理与贴合目标循序渐进的课程设计,为大理大学MBBS项目2015级的新生提供了双重保障,从而实现了在短时期内,双语班HSK四级考试高通过率的目标。

**关键词**:学习动机学习目标双语班

**Abstract**: Learning motivation and learning goal are two important factors that affect the learning effect, and these two important factors have a close relationship with our class management, as well as curriculum. Bilingual class provided double security for MBBS project 2015 batch freshmen of Dali University by effective class management and curriculum design, and in a short time, to achieve the goal of high pass rate about HSK level four.

Key words: Learning Motivation, Learning Goal, Bilingual Class







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Topic : Innovations in teaching, learning & use of technology (code –MTC 03)

Sub Topic: : Utilization of vacation period meaningfully for enhancement of learning

#### **Objective:**

Medical education is one of the toughest subjects for students. The study period is long, vast depth of knowledge; tedious hours of study and at the end, there will be lot more to know. In medical schooling, especially in undergraduate, there are a few months of vacation. Students can utilize this time to fulfill there hobbies and still enhance their learning. The objective of this article is to analyze such aspects of vacation and useful learning.

#### Methodology:

This article is prepared using published data, reports, published books, and open source on internet. The author also expressed his personal experiences gained through his teachers and students during his career.

#### Findings:

The first step of meaningful vacation is planning.

The planning cane be one of the themes

- Volunteering in social works
- Travel
- Reading and writing (Different than related to curriculum)
- Earning money
- Fulfill personal hobbies (Body building, learning swimming)
- Personal development





 Vacation does not mean one should not involve in school (completion of task, clarifying the topic which was not understood properly)

Students can clarify their area of interest (in observership)

Can experience the use of their knowledge in real life situation

Vacation breaks stress cycle.

Performances increases after a good vaccation

One important aspect of vacation is most of the students do nothing in vacation and feel bored meaningless. If one can avoid this and do any of the above mentioned planning, the vacation becomes meaningful.

#### **Conclusion:**

Vacation can be very useful tool for enhancing learning. But it should be taken as enjoyable time, not as a burden to learn something







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Sub Topic : Strategies for Curriculum development – Clinical postings and bed side

teaching

Bedside teaching includes teaching done in the presence of the patient, regardless of the setting (e.g. ambulatory clinic, inpatient ward or conference room). The patient is at the center of clinical medicine. Bedside teaching has long been considered the most effective method to teach clinical skills and communication skills. Despite this belief, the frequency of bedside rounds is decreasing and it is believed that this is a major factor causing a sharp decline in trainees' clinical skills. Concern about trainees' clinical skills has led organizations such as the American Council for Graduate Medical Education (ACGME) and the WHO Advisory Committee on Medical training to recommend that training programs should increase the frequency of bedside teaching in their clinical curricula.

In order to effectively teach clinical skills a teacher must learn to involve patients in the educational process. Bedside teaching has been described as one of the ideal clinical teaching modalities, in which history taking and physical examination skills, together with professional attitude, can be combined to provide a holistic approach in the diagnostic process and in patient care. Students and residents are found to be motivated to engage in clinical reasoning and problem-solving if their role model provides adequate demonstration and guidance. Bedside





rounds are potentially more invigorating and interesting than one way lecture, although class-room has its own significance. If properly done, patients usually regard bedside teaching as enjoyable and not as a burden. Students, interns, residents and clinical teachers all generally appear to favor bedside teaching for the integration and learning of certain important clinical skills. From the literature, it follows that certain obstacles still remain, or even increase in the present day learning climate. Considering that bedside teaching is still valued by stakeholders of medical education, ways to overcome these obstacles should be found.

**Keywords:** Bedside teaching, Clinical skills, Medical education.







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Topic : Innovations in teaching, learning & use of technology (code –MTC 03)

Sub Topic : Academic Emergency Medicine Physicians' Knowledge of Mechanical

Ventilation.

#### Introduction:

In routine emergency room practice, patients with respiratory failure require immediate care in the form of endotracheal intubation. Post intubation, transfer of patient into the intensive care unit (ICU) or operating room is recommended. However, non-availability of ICU beds due to overcrowding leads to a delay in transfer and thus, ventilator management falls upon the emergency medicine (EM) physician. Besides, on-call EM physician holds the responsibility to troubleshoot or stabilize mechanically ventilated patients in the ICU during odd hours of work. This article emphasizes on the need of knowledge about common modes of ventilation and its applications in day to day practice by EM physician.

#### **Objectives:**

To discuss the common modes of mechanical ventilation. Strategy to prescribe mechanical ventilation in emergency department. Approach to mechanical ventilation in different patient groups.

#### Methodology:

Appropriate analysis from relevant sources including textbooks, publications and ongoing studies.

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#### **Findings:**

EM physicians being the first point of contact for critically ill patients needing ventilator support, the need for them to have reasonable knowledge regarding basic principles of ventilation and its practical application holds utmost importance. Ventilator management decisions can directly affect patient outcomes, especially in asthma, ARDS, and traumatic brain injury. Appropriate practice during these golden hours holds potential to shorten the duration of stay in ICU and patient mortality. Integration of teaching aspects of mechanical ventilation into basic medical undergraduate curriculum may have lasting effects on future performance of the EM physicians, encourage them to actively participate in decision making regarding mechanical ventilation management and can increase their confidence in caring for these critically ill patients.

Keywords: mechanical ventilation, emergency medicine physician,







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Topic : Licensing exams: Teaching learning approaches & differences (code

- MTC 04)

Sub Topic : Effective academic teaching and training programs for Licensing Exams -

Interactive, media rich, multidisciplinary case based learning.

**Objective:** Literature review on comparing the licensing based teaching with conventional teaching.

**Background:** Licensing-based teaching and learning is based on clinical cases. This teaching method is also called Case-based, Problem-based or Simulation-based teaching. Simulation is a generic term that refers to an artificial representation of a real world process to achieve educational goals through experimental learning. Simulation based medical education is defined as any educational activity that utilizes simulation aides to replicate the clinical scenarios.

Data Source: Pubmed literature search and the references cited in the retrieved articles.

**Data selection:** Studies and meta-analyses that compared the newer problem-based learning curriculum and the conventional lecture-based mode of teaching the undergraduate medical students. Areas of comparison included the academic process; program evaluation; academic achievement; graduates' performance, specialty choices, and practice characteristics; and the attitude of students and teachers towards the programs.





**Conclusion:** Case-based teaching encourages the application of basic science knowledge, linkage of knowledge between the basic and clinical sciences, deeper understanding of the content, development of clinical reasoning skills and development of social intelligence. Students of the problem-based learning curriculum find learning to be "more stimulating and more humane" and "engaging, difficult, and useful", whereas students of the conventional curriculum find learning to be "non-relevant, passive, and boring". Students who used the problem-based learning method show better interpersonal skills and psycho-social knowledge, as well as a better attitude towards patients.

**Key Words:** Case-based teaching, conventional teaching.







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Topic : Licensing exams: Teaching learning approaches & differences (code

- MTC 04)

Sub Topic :From chalkboard, slides, and paper to e-learning: How computing

technologies have transformed the overall medical education.

#### Introduction:

Medical science education and training vary considerably across the world. Various teaching methodologies have been utilized in medical education, which is an active area of educational research. Usage of computers in medical science education has given birth to e-learning.

#### **Objectives:**

To discuss the different modes of imparting medical education from chalk board to e-learning. Outlining the merits and demerits of the modalities involved in gradual but continuous evolution of medical education.

To discuss the emergence of e-learning, tools of e-learning, its merits and demerits.

To enumerate and discuss the tools available for enabling medical students for achieving success in licensing examinations.

Projection of probable future of e-learning and discuss possible novel and futuristic tools that could aid medical education as time progresses.

#### **Measures and Methodology:**

Review of literature including most relevant prior publications.





#### Findings:

Until the late-twentieth century, medical education was completely dependent on traditional teaching methodologies and teaching tools like printed textbooks, chalkboard and photographic projection-based classroom lectures. Medical education was not influenced by advanced computer based technologies then. As the computer technology evolved over the past three decades, it has slowly but steadily transformed the practices of medical education and research.

Medical education has shifted its focus from a teacher-centered model to a learner-centered one, offering stronger learning motivation and interactivity. The emergence of e-learning has a significant impact on the efficacy and performance of medical education.

E-learning is moving from textbooks in electronic format to a truly interactive medium that can be delivered to meet the educational needs of students. In the future, e-learning will reach great heights by combining technology with smarter ways of management. The ability to deliver learning programs to large groups, while also using personalized data-tracking, will customize learning right down to the individual's preferences, skills and learning style. Indeed the future of e-learning is bright!

**Keywords:** e-learning, medical education, technology.







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Topic: Licensing exams: Teaching learning approaches & differences, (CODE-MTC 04)

**Sub Topic:** Item Response Theory: <u>Trends in national licensing examinations in medicine.</u>

#### **INTRODUCTION:**

Overview of Item Response Theory - Item Response Theory is a measurement framework used in the design and analysis of educational and psychological assessments that measure mental traits. Item response theory, or IRT for short, is based on establishing a model that specifies the <u>probability</u> of observing each response option to an item as a function of the target trait being measured by the assessment, which is often a knowledge, skill, or ability (e.g. ability to solve MCQs).

In testing situations where items are scored as correct or incorrect, IRT specifies the probability of a correct response to an item as a function of ability.

#### **OBJECTIVES:**

- ii. To have an insight & understand the recent trends in national licensing examinations in medicine.
- iii. To establish a comparison between Classical Test Theory & Item Response Theory related to **FMGE or NEET-PG.**
- iv. To understand the reason behind IRT gaining popularity & being implemented more in licensing examinations across the globe.
- v. To understand the meaningfulness of implementation of IRT in Indian National Licensing examination context.





vi. To equip students of SaraswatiOnline academically strong enough so that they can mould their **learning methodology** in such a way so that they can cope up with the newer trends.

#### **MEASURES:**

- ii. Faculties across universities who are directly involved in teaching and making curriculum must adapt to this newer trends to contribute meaningfully.
- iii. This is high time that students are asked to follow the text books instead of the ppt. system that has become conventional in China MBBS Program.
- iv. Students must be guided repeatedly and their learning methodology should be focused in understanding the core basics of each of the 20 disciplines in MBBS curriculum.
- v. Mugging MCQs from the previous test papers should be considered as OBSOLETE.
- vi. The overall approach to the teaching learning methodology must be HOLISTIC.

#### **METHODOLOGIES:**

- Academicians and administrators must understand that the whole concept of this shifting trend in due to the National Licensing Examination being conducted in Online mode now (Refer to the CBT implementation in FMGE since 2014 June.)
- ii. The newer generation of faculties must adapt to this IRT as fast as possible in order to guide the students meaningfully.
- iii. The subject or the discipline stay no more relevant instead the focus point should be towards **Topics and Subtopics**.

#### **FINDINGS:**

- ii. The **Item Response Theory (IRT)**, also known as latent trait theory, strong true score theory, or modern mental test theory, is a paradigm for the design, analysis, and scoring of tests, questionnaires, and similar instruments measuring abilities, attitudes, or other variables which is being used in the field of Psychometrics since ages.
- iii. The IRT has been commonly used in the United States Medical Licensing Examination (USMLE), Graduate Record Examination (GRE) and Graduate Management Admission Test(GMAT) by virtue of all being high stakes test.
- iv. Over the years the number of takers in FMGE have increased exponentially, hence the implementation of IRT gradually became necessary.
- v. As per the recent advancements, if the FMGE gets merged with NEET-PG in Indian context in upcoming years, the assumption of implementation of IRT will definitely face reality.
- vi. IRT is a theory of testing based on the relationship between individuals' performances on a test item and the test takers' levels of performance on an overall measure of the ability that item was designed to measure.
- vii. IRT, unlike simpler alternatives for creating scales and evaluating questionnaire responses, does not assume that each item is equally difficult.
- viii. This distinguishes IRT from, for instance, the assumption in Likert scaling that "All items are





- assumed to be replications of each other or in other words items are considered to be parallel instruments".
- ix. By contrast, item response theory treats the difficulty of each item (the <u>ICCs</u>) as information to be incorporated in scaling items. (**ICC item characteristic curve**).
- x. Hence in IRT there is a core concept of **Discriminating or Differentiating Index (DI).**
- xi. The name item response theory is due to the **focus of the theory on the item**, as opposed to the test-level focus of classical test theory.
- xii. Thus IRT models the response of each examinee of a given ability to each item in the test.

  The term ITEM is generic and in Licensing Examinations context refers to MULTIPLE

  CHOICE QUESTIONS that have incorrect and correct responses.
- xiii. IRT is based on the idea that the <u>probability</u> of a correct response to an item is a mathematical function of person and item parameters. The person parameter is construed as a single latent trait or dimension. Examples include general intelligence or the strength of an attitude.
- xiv. Parameters on which items are characterized include their
  - **Difficulty** (known as "location" for their location on the difficulty range),
  - **Discrimination** (slope or correlation) representing how steeply the rate of success of individuals varies with their ability, and a
  - **Pseudo-guessing Parameter,** characterizing the (lower) <u>asymptote</u> at which even the least able persons will score due to guessing (for instance, 25% for pure chance on a multiple choice item with four possible responses).
- xv. Hence the ONLY purpose of IRT is to provide a framework for evaluating how well assessments function and how well individual items on assessments work.
- xvi. IRT is generally claimed as an improvement over <u>classical test theory</u> (CTT). For tasks that can be accomplished using CTT, IRT generally brings greater flexibility and provides more sophisticated information. Some applications, such as <u>computerized adaptive testing</u>, are enabled by IRT and cannot reasonably be performed using only classical test theory.
- xvii. Another advantage of IRT over CTT is that the more sophisticated information IRT provides allows a researcher to improve the <u>reliability</u> of an assessment.
- xviii. IRT makes stronger assumptions than CTT and in many cases provides correspondingly stronger findings; primarily, characterizations of error.
- xix. Implementation of IRT is to ensure comparability of scores of different forms of a reading **assessment** administered across successive years.
- xx. A related application of this advantage is computer adaptive testing, whereby each examinee is administered a set of items that is tailored to the examinee's level of ability, resulting in different examinees receiving different sets of item while maintaining comparability of the final test scores.
- xxi. Another advantage of IRT is its capability to specify <u>reliability</u> specific to each examinee. Whereas reliability in CTT is summarized by a single index that is applied equally to all examinees regardless of ability level, item response theory has the flexibility to estimate reliability uniquely for each examinee.





#### **IMPLICATIONS:**

- i. The major implication in the context of implementation of IRT in FMGE or NEET-PG is the need of change in the overall strategy while solving MCQs.
- ii. The common practice of answering all the MCQs asked in exam has to be discarded.
- iii. Although there is NO negative marking, still the MCQs of which answer is doubtful in examinee's mind is better to be left unanswered- The beauty of IRT.
- iv. The DI should be paid utmost attention.
- v. Examinee should be more cautious in NOT marking an easy answer wrong which everyone else have marked correctly rather than answering a tough MCQ correct which everyone else have failed to answer correctly.
- vi. Once the candidate in sanguine that the easy MCQs are answered correctly, then only focus should shift towards answering the touch ones however difficult to appreciate sometimes from students' perspective.
- vii. The TIE BRAKER criteria here in the IRT should be appreciated as the core concept of DI.
- viii. Text Books, reference Books should be considered as the Go To Missiles in a student's arsenal rather than didactic lectures and MCQ books.

#### **CONCLUSION:**

No matter how much the syllabus or curriculum changes, No matter how much methodology changes, No matter how much strategy changes, No matter how much the approach changes, No matter how much new things are incorporated, No matter what happens..........

THE HUMAN BODY HAS REMAINED THE SAME OVER CENTURIES. MAY THE DESERVING CANDIDATES SHINE BRIGHTLY.

#### **KEYWORDS:**

Item Response Theory, Probability, Reliability, Classical Test Theory, FMGE or NEET-PG, Learning methodology, Obsolete, Holistic, Topics and Subtopics, ICC - item characteristic curve, Discriminating or Differentiating Index (DI), Multiple Choice Questions, Computerized Adaptive Testing, Assessment, NO/NOT, Text Books, Reference Books, Human Body.

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# Evolving Trends In Medical Education

05th & 06th November 2016, Dali, Yunnan, PR China

#### **ABSTRACT-14**

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Topic : Presentation by Administrators

Subtopic : Unique aspects of dealing with international students

## "三位一体"的留学生管理模式初探——以大理大学为例

【摘要】近年来,随着我国"一带一路"倡议的提出及教育对外开放步伐的加快,来华留学生人数不断增多,极大地推动了我国国际教育事业的发展,同时也对高等院校的留学生教育管理工作提出了更高、更新的要求。大理大学的留学生教育近年来取得了很好的成绩,留学生人数及层次都有了很大提升,与此同时,留学生教育管理工作仍存在诸多问题,亟需在实践中找到行之有效的留学生教育管理模式。本文提出在大理大学建立"三位一体"(学校管理、社会管理、自我管理)的留学生管理模式,以提升留学生管理工作的水平和效率。

关键词: 学校管理社会管理自我管理留学生





## Preliminary Study on Trinity Mode of International Students Management -- Taking Dali University as example

Abstract: In recent years, along with putting forward of China's "the Belt & Road" initiate and the speeding up of educational opening to the outside world, the number of international students in China has been increasing continuously, which greatly promoted the development of China's international education, but also brought higher and newer requirement to the educational management of international students in Chinese higher education institutions. Dali University has achieved good results in overseas students' education in the past few years. The number as well as the quality of international students experienced a significant improvement. In the meanwhile, there are still some problems need to be solved in practice, and an effective education management mode need to be established. This article puts forward a trinity management mode in Dali University which include school management, social management and self-management in order to enhance the level and efficiency of international student management.

**Key words:** School Management, Social Management, Self-Management, International Students.





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