



**DATTA MEGHE INSTITUTE OF MEDICAL SCIENCES**  
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Conferred 'A' grade Status by HRD Ministry, Govt. of India  
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### **SDG 5 - Clause - 5.6.7 Track women's graduation rate**

#### **Policy for Remedial & Slow Learners Policy**

As indicated in SDG 5 - Clause 5.3.1, right from the prospective student till graduation, continuous monitoring and support are extended in various ways to ensure that every woman candidate qualifies and passes the program within the stipulated time. These are ensured through the following measures focusing specifically on female students who are not performing up to the expected level of academic progression. This lack of academic progression has been identified with benchmarking monitored on a continuous basis through robust Students' support System which are in place.

**Mentorship:** Every Student is attached with dedicated Faculty for the purpose of Mentoring in all respects related to right from their Admission to Exit from the Institution

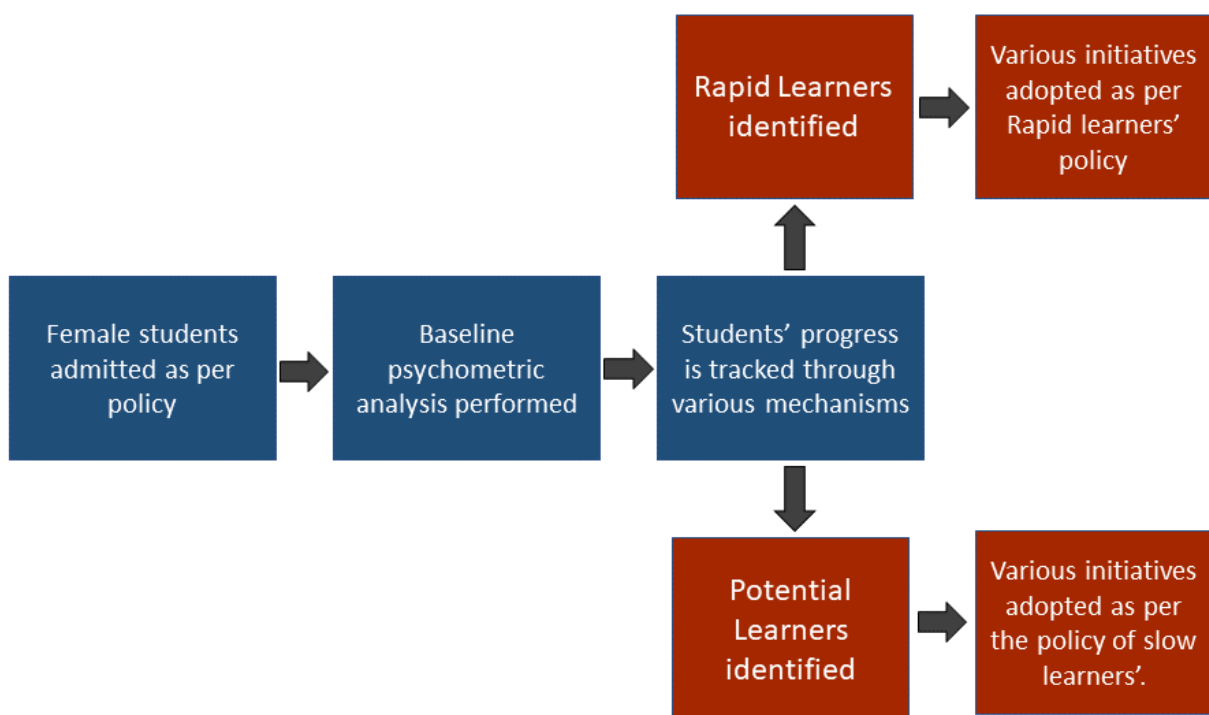
**Preceptorship:** The concept of Preceptorship, in Medical and Allied Sciences is related to the support of activities related to Academics which include Tutorship, Guidance and Counselling on their performance. Such initiatives are very popular, especially among women Candidates.

**Counselling:** Special Counselling Cell is available which is headed by a Professional Counsellor who deals with all aspects of Students Counselling requirements, which is based on a Buddy approach basis and thus, the students personal and professional needs are taken care, with a motive to have their any grievances related to the Campus, Studies.

It is the endeavour of DMIMS(DU) that every student who enters the university for any program, especially girls, not just progresses but also to excels in his/her field of study resulting in logical graduation within the stipulated timeframe.

In this regard, a well laid down system and structure is in place as indicated below:

## System – Monitoring the progress of Girl Students



### Policy for slow learners-Potential learners

#### Introduction

A “**slow learner**” is not a diagnostic category, it is a term people use to describe a student who has the ability to learn necessary academic skills, but at rate and depth below average same age peers. ... Reasoning skills are typically delayed, which makes new concepts difficult to learn.

By and large, learners differ from one another physically, intellectually, scholastically, emotionally and culturally. Slow learners are those who are low in achieving academic skills and often ignored by others.

Slow learners are those students who are very poor in meeting minimum academic requirements in comparison with normal students. They not only lag behind other students in academics but in areas of social, emotional and psychological well-being. These students

do not get sufficient attention in the mainstream education. They usually fail repeatedly in examinations and finally become school drop outs.

The early identification of students who are at risk for educational failure is an important process that deserves much attention and research.

Further, slow learners are not eligible for special education as given for mentally retarded children because their intelligence levels are too high. If we leave these slow learners without proper care, they are likely to lose interest in their studies and become dropouts. Further, as they do not get any special attention or support, they are likely to get dejected totally in their studies and end up in anti-social activities such as illicit drug users, violent offenders, alcohol abusers, unemployed and underemployed (Beebe and Frank Berger et. al 2004).

Among the various factors, the following are some of the prime inhibiting factors attributed widely to the poor performance of slow learners; such as low self-esteem, lack of goal setting and problem-solving skills, poor memorizing abilities, lack of achievement motivation, emotional disturbances, poor peer relationship, lack of parental support etc.

By increasing instructional efficiency, teachers can bridge the academic skills gap between children with borderline intelligence and students of average ability. Borderline intellectual functioning contributes negatively in the slow learners life as they lack concentration, have poor memory, imagination, and foresight; an inability to express ideas clearly through the medium of language (Bhatt, 2009). Better instructional strategies, improved curricula and new methods of teaching can help low achievers perform well in science (Bindu, 2006). Regardless of their limitations, slow learners do learn. They can make progress in the classroom if the teaching and materials used are at their appropriate level of learning. Slow learners and their difficulties are not new to teachers; teachers require more techniques and ideas to truly meet slow learner needs.

### **Rechristening of slow learner**

At DMIMS (DU) to practice uniformity amongst undergraduate learner, the terms slow learner has been rechristened to **Potential learner**. If we support slow learners on emotional and academic ground through the structured mechanism they are able to overcome the academic gap. Thus, the slow achievers are labeled as potential learners

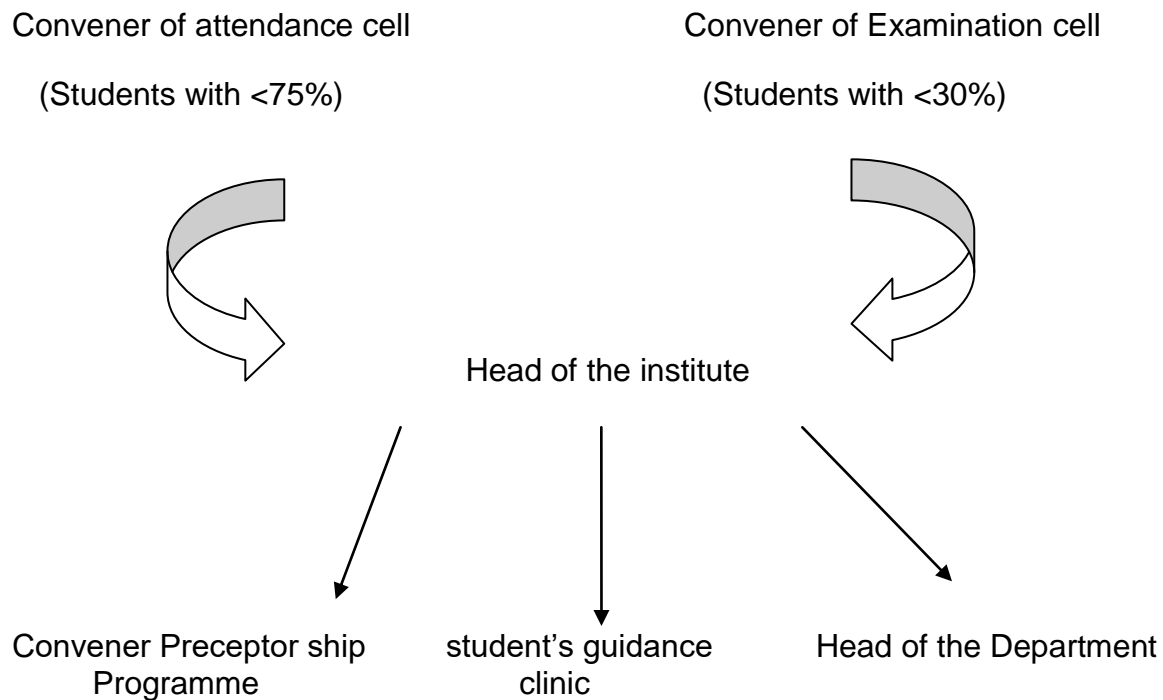
### **Modalities for identifying Potential Learners**

➤ Attendance cell:

Attendance cell maintains the record of attendance of students. At the end of each month, the students with low attendance are referred to concerned head of the Institute

➤ Examination cell: At the end of each part completion examination student with score <30% are referred to concerned head of the institute

### Referral mechanism



### Training Modalities

#### A) Counseling:

##### 1. Student's guidance clinic

Potential learners are referred by the Head of the department to student guidance clinic.

In charge of student guidance clinic takes the counseling sessions for them

##### 2. Preceptor ship programme

Counseling is done to all referred Potential learners by the respective preceptors in regards to their curricular and co - curricular problems.

#### B) Teaching learning activates

### 1. Remedial teaching:

Head of the department conduct remedial classes for providing them the necessary help and guidance to overcome their problems, after identifying their areas of difficulty. It is important to improve the learning skill or rectify a particular problem area in a student. The classes are planned parallel to regular teaching programme

### 2. Capsulated:

Capsulated teaching will be conducted by the respective department. Reiterative programme comprising of tutorials for covering system wise must know area of the each topic. It will be implemented when 75% of syllabus for that phase is covered. It will start from lowest to highest difficulty level in must know area of curriculum of subject

### Expected outcome:

Counseling and teaching learning modalities will as an effective tools to improve the overall performance and attendance of potential learners .

### Indicator for outcome analysis:

1. Academic performance of students in examination
2. Improvement in attendance

### Implementation plan

Sr no	Activity	Person responsible	timeline
1	Identification of potential learner	Convener attendance cell Convener Examination cell	At the end of PCT
2	Communication to concerned HOI	Convener attendance cell Convener Examination cell	At the end of PCT
3	Referral to concerned units	HOI	Within one week
4	Counseling session	Convener student guidance cell	Throughout the academic year
5	Conduction of capsulated teaching programme	Concerned HOD	Till preliminary exam
6	Conduction of remedial teaching programme	Concerned HOD	Till preliminary exam
7	Assessment	Convener Examination cell	As per schedule

## REMEDIAL TEACHING POLICY

- a) PreparationPhase
- b) Implementation Phaseand
- c) EvaluationPhase

### Preparation phase:

1. **Identification of the topics for remedial teaching:** After identification of the participants, the students were asked to select topics for preparation and teaching of selected remedial modules.

This was done by Focused group discussion of the students. Total five groups of the students were created for focused group discussion. The students were instructed to select at least 10 topics only from Must know area. The common topics selected by all the students after focused group discussions were analyzed and only four topics were selected for preparation of remedial teaching modules. The selection of four modules was with the consensus of all the participants.

2. **Preparation of Remedial Modules:** The preparation of remedial modules for four topics selected by the students was carried out.

The preparation of the modules was on power point presentation. Each power point presentation of remedial teaching module consisted of purpose statement, SLO, Content, Summary and Bibliography. The relevant diagrams were included whenever necessary.

3. **Validation of the Modules:** The four modules created for remedial teaching were validated for content by two senior faculties from department of Medicine. The suggestions given by both the faculties were appropriately included. Validation of the format of the remedial modules was done by the faculty from Department of Teaching and learning of School for Health Professionals Education & Research.

## **Intervention Phase:**

- 1. Pre test:** The pre test of all the participants was taken before the intervention.  
The pre test included solving of one theory paper in medicine on the topics selected by the students for remedial teaching. The duration of theory paper was 2 hours 30 minutes. The theory paper consisted of 60 marks and included 14 MCQs of one mark each, 5 out of 6 BAQs of 2 marks each, 4 out of 5 SAQ of 5 marks each, and 2 out of 3 LAQs of 8 marks each) . In MCQs, BAQs, SAQs, and LAQs, 80% questions were of level I and 20% questions were of level II. The mean pre test score of all the participants was calculated.
- 2. Interactive Lecture:** The participants were taken on the interactive lectures on the topics selected for 50 minutes. Each interactive lecture consisted of teaching of the students on the power point presentation. One to two questions were asked to the students at the end of every 15 minutes on the part covered and the difficulty on any of the point was solved. Periodic summary of the lecture every 15 minutes was done. The lecture was continued only after all the students were satisfied with their problems in the part of the lecture. At the end of 50 minutes the topic taught was revised and the students were permitted to ask any difficulty on the topic covered.
- 3. Guidelines on Theory question paper writing:** At the end of remedial teaching on all the selected topics, two lectures were taken on theory question paper writing. The difficulties of the students were solved. Guidelines on prioritizing solving of type of questions were discussed. Any difficulty of the students was solved immediately.
- 4. Guidelines on time management:** After issuing guidelines on theory paper writing, two lectures were taken for time management while solving the theory paper. The

difficulties of the students were solved. Time to be allotted for writing LAQ, SAQ, BAQ was discussed at length.

5. **Post test:** The post test of the students was taken at the end of remedial modular teaching. The mean post test score of all the participants was calculated.

### **Evaluation phase:**

- i. **Pre and post-test analysis of and calculation of learning gains:**

Pre test was taken at the start of the introduction of teaching learning activity of remedial modules.

The syllabus for this pre test was based on the contents of 04 remedial modules.

The answer books of these pre test papers were evaluated by two valuers from department of Medicine.

If the difference in the marks allotted was more than 10% the answer sheets were evaluated by third valuer and the sum of best of the three was taken as baseline score of pre test for every student.

The evaluation was done against the model answers supplied to the valuers.

Post test was taken after all 04 remedial modules were taught to the students.

Same question paper that was used for pre test was also used for post test evaluation. The mean difference in the scores of pretest and post test was calculated.

The assessment was done by calculating Absolute learning gain, relative learning gain and calculation of g factor.

- a) **The absolute learning gain:** It was calculated using the formula;



%Post-test score – %Pre-test score. The difference in the value of more than 30% was considered as significant.

b) **The relative learning gain:** It was calculated using the formula;  $\% \text{Post-test score} - \% \text{Pre-test score} / \% \text{Pre-test score}$ . This is an open scale and higher the gain more is the learning gain.

c) **Effectiveness of intervention:** This was evaluated by class average normalized gain(g).

$g = (\% \text{Post-test score} - \% \text{Pre-test score}) / (100 - \% \text{Pre-test score})$  <sup>(9)</sup>. Class average normalized gain (g) of 0.3 i.e. 30% was considered as significant <sup>10)</sup>.

## ii. **Feedback for evaluation of Remedial Modular Teaching:**

a) The feedback for evaluation of remedial Modular teaching was carried out using close ended and open ended questions. Five point Likert's scale was used for close ended questions to assess quantitative evaluation. The scale included 6 close ended questions assessed on five point scale and two open ended questions.

b) The evaluation of likert scale for each parameter was done by calculating rating average for each parameter.

c) The rating average was calculated by using the following formula; the sum of the weights / sum of the number of responses. Wherein; Weight is the weight created for that column in likert scale. For example weight is 1 for first column, 2 for second column, and 3 for third column likewise and the number of responses is the actual number of participants who responded to the particular point.

The values that fall to the right of Neutral are taken as closer to agree rating. The rating average more than or equal to 3 was considered as

significant.

- d) The qualitative analysis of feedback of evaluation for remedial modular teaching was done by using two open ended questions in the program assessment sheets and was analyzed depending upon the types of answers obtained and their percentage. The evaluation of remedial modules by feedback analysis sheet included clearing the doubts on the topics, better understanding of the topics by 1:1 interaction, understanding place & level of understanding, confidence building, supporting conventional teaching by remedial teaching, use of remedial teaching for NK & DK areas. (Annexure 1).

**Indicators:**

- **Rating Average (RA)** = The sum of the weights/sum of number of responses on 5 point likert"s scale. (RA > 3 issignificant)
- **ALG** = % post test score - % pre test score (values more than 35 % is significant)
- **RLG** = (% post test score - % pre test score) / % pre test score (Values >50% significant)
- **g factor**= (% post test)-(%pre test)/100- (% pretest). (> 0.3 (30%) is significant)

**Statistical Analysis:** Statistical analysis was done using Microsoft Excel and SPSS as statistical software.

**Capsulated Teaching as an effective tool for improving academic outcome in undergraduate medical education**

**Introduction:**

Learning is a complicated phenomenon as it involves complex mental activities such as critical thinking and ability to solve problems. The goal for the learning methodology personnel is to provide the developers with the best learning tools available, so that they in turn can have thorough understanding, knowledge and relevant skills for their career.<sup>1</sup>

Medical Council of India, under “Regulations on Medical Education, 1997”, stated of a scope for trying innovative approaches. Capsulated Teaching programme is one such measure that can be adopted at the Datta Meghe Institute of Medical Sciences to increase the performance of students. Capsulation in this programme as it is referred to in dictionary<sup>2</sup>, is an enclosure of condensed revision and higher level of learning outcomes expected from students along with facilitation for tracks like Personal and Professional development (PPD), Advanced Academic Success (AAS), participation in Voluntary and Community Opportunities and Internationalization.

In the present scenario, ‘Capsulated teaching’ loosely represents only a tool to revisit and reconsider the technically difficult topics and provide condensed revision for the subjects in undergraduate medical curriculum prior to exams, but also used as a mechanism to create one to one interaction between teacher and students. The present concept paper targets to revisit and uplift the concept of capsulated teaching and make it a real condensed student’s outcome oriented teaching programme.

### **Rationale:**

Capsulated teaching programme shall facilitate students to step on and step up and maximize their potential to become the best that they can be alongside their degree qualification. Keeping in tune with the Core education, students will tailor their own journeys through the scheme during their studies and will access any available opportunity provided by the scheme, through attendance at courses, seminars, events and workshops, involvement in researches and producing scholarships in their name.

### **Need Analysis:**

Education system has become very mechanical in terms of providing teaching opportunities only targeting the assessment and students take medical graduation as only tenure to attain academic gains by clearing the exams coming in the way. Present study aims to identify the

role of Capsulated Teaching Programme as an effective tool not only to improve students' performance in examinations but also to become a competent medical graduate.

**Aim:**

The study aims to identify Capsulated Teaching as an effective tool for under-graduate medical students

**Objectives:**

1. To formulate and implement an effective Capsulated Teaching programme for under-graduate medical students
2. To prove the role Capsulated Teaching as an effective tool for improving overall performance of a student

**Method:**

The capsulated teaching programme shall be a condensed facilitatory support for students catering to five components as –

Components of Capsulated Teaching Programme –

<b>Sr. No.</b>	<b>Beneficiary</b>	<b>Strategy</b>
1	Potential Learners	'Reiterative programme comprising of tutorials for covering system-wise must-know area of each topic. It will be implemented when 75% of syllabus for that phase is covered. It will start from lowest to highest difficulty level in must know area of curriculum of the subject.
2	Rapid Learners	The programme targeting rapid learners will provide tutorials covering system-wise 'desirable to know' and 'nice to know' area of each topic. It will be implemented when 75% of syllabus for that phase is covered. It will start from highest to lowest difficulty level in must know area of curriculum of the subject.

The overall programme targeting rapid learner and potential learner students will provide consolidation and improvisation of students' understanding and performance in examination.

**Expected Outcome:**

Capsulated Teaching programme will work as an effective tool to improve the overall performance of beneficiary under-graduate medical students

## Indicators for outcome analysis:

1. Academic performance of students in examinations

## References

1. *Best Evidence Medical Education (BEME). Report of Meeting: 3-5 December 1999.* London, UK. *Med Teach* 2000; 22: 242-5.
2. Cited online. [URL <https://www.dictionaty.com/browse/capsulation>]

## Implementation plan

Sr no	Activity	Person responsible	timeline
1	Identification of potential learners and rapid learners as per guidelines	Convener attendant cell and Convener exam cell	At the end of PCT
2	Referral to concerned units	HOI	Within one week
3	Identification of topics to be covered according to category of learner	Concerned HOD	Within one week
4	Preparation of time schedule for capsulated teaching program	Concerned HOD	After completion of 75% syllabus
5	Conduction of classes as per schedule	Senior faculty members of the department	After completion of 75% syllabus
6	Assessment	Convener examination cell	As per examination schedule

## Initiatives for Rapid Learners

Sr.No	Track	Scope	Ground level facilities	Targeted initiatives at institutional level
1	Personal and Professional development (PPD),	Develop skills and competencies that enhance their abilities • Domains of research, • Participation in professional organization,	<ul style="list-style-type: none"><li>• STS projects</li><li>• Basic skill lab</li><li>• CAP lab</li><li>• Capsulated teaching</li></ul>	<ul style="list-style-type: none"><li>• Provide guidance for STS projects</li><li>• Regular posting and training in basic skill &amp; CAP lab</li><li>• Proper planning and implementation of capsulated teaching</li></ul>

		<ul style="list-style-type: none"> <li>• Skill based training,</li> <li>• Professional development</li> </ul>		
2	Advanced Academic Success (AAS),	Support, motivate and facilitate the students for education and leaders of tomorrow's workplace and society	<ul style="list-style-type: none"> <li>• Financial support for research projects</li> <li>• YUGA scheme</li> </ul>	<ul style="list-style-type: none"> <li>• Provide guidance for STS projects</li> <li>• Provide opportunities for YUGA scheme</li> </ul>
3	Voluntary and Community Opportunities and	Provide Opportunities to understand and develop qualities of teamwork, communication and good organizational skills.	<ul style="list-style-type: none"> <li>• Posting in the communities</li> <li>• Compulsory project during internship</li> <li>• Member of organizing team for Scientific events</li> <li>• Deputation as volunteers in the various academic events at University level.</li> </ul>	<ul style="list-style-type: none"> <li>• Planning of posting in the communities and projects</li> <li>•</li> </ul>
4	Internationalization	Provide opportunities to attend and present their research work	<ul style="list-style-type: none"> <li>• Student exchange program</li> <li>• Financial support for attending and participating in National and International events.</li> </ul>	<ul style="list-style-type: none"> <li>• MOUs to be planned with National and International Universities</li> <li>• Annual budget for financial support should be sanctioned for promoting the participation in National and International events</li> </ul>



**Registrar**  
**DMIMS(DU)**