

'Being a Competent Medical Teacher'



BLDE Deemed to be University
Shri B. M. Patil Medical College Hospital
and Research Centre Vijayapura
Medical Education Unit

Editor

Dr Tejashwini Vallabha



mp mahi
Publication

mp mahi
Publication

Office No.1, Krishnasagar Society,
Nr. Shivsagar sharda Mandir Road,
Ahmedabad-380007

✉ mahibookpublication@gmail.com
☎ +(91) 798 422 6340
🌐 www.mahipublication.com



₹ 399/-



BLDE (Deemed to be University)
Shri B. M. Patil Medical College Hospital
and Research Centre Vijayapura
Medical Education Unit

**'Being a Competent
Medical Teacher'**

EDITOR

Dr Tejashwini Vallabha

mp mahi
Publication

ISBN: 978-81-949392-9-0

First Edition: 2020

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, resold, hired out, or otherwise circulated without the publisher's prior written consent in any form of binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser and without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying or recording) otherwise without the prior written permission of both the copyright owner and the above-mentioned publisher of this book.

PRICE ₹ 399/-

**PUBLISHER
MAHI PUBLICATION**

-  Office No.1, Krishnasagar Society, Nr. Shivsagar sharda Mandir Road, Ahmedabad-380007
-  mahibookpublication@gmail.com
-  +(91) 798 422 6340
-  www.mahipublication.com

Copyright © 2020\ MAHI PUBLICATION

CONTENTS

Sl. No.	TOPIC	Page No.
1	Systems approach to Medical Education	
2	Principles of Adult Learning and Learning Process	
3	Taxonomy of Learning and Educational objectives	
4	Good Teaching Practices	
5	Microteaching	
6	Teaching Learning Methodology- Small Group Teaching and Lecturing a Large Group	
7	Appropriate Use of Media	
8	Multiple Choice Questions	
9	Item Analysis	
10	Long Essay Question and Short Answer Question	
11	OSCE/OSPE	
12	Clinical / Bedside Teaching	
13	Practical examination, Long case & its improvement	
14	Importance and skills of giving effective Feedback	

3 TAXONOMY OF EDUCATIONAL OBJECTIVES

Dr. Shailaja Patil

Professor, Community Medicine, BLDE(DU), Shri B.M.Patil.Medical College, Hospital and Research Centre, Vijayapura

OBJECTIVES:

At the end of this session, the learner should be able to

- Define the terms cognitive, affective and psychomotor domains.
- Relate these terms to intellectual skills, communication skills and manipulative skills respectively.
- Formulate educational objectives belonging primarily to cognitive, affective and psychomotor domains.

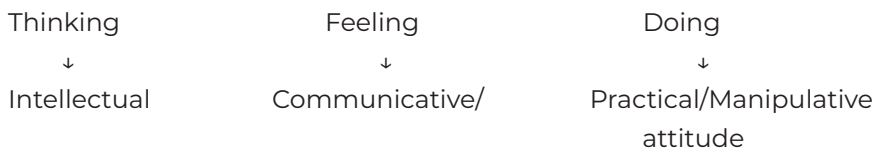
TAXONOMY OF DOMAINS

There was a time, when the teacher played a dominant role in teaching-learning processes. He garnered paramount importance and it was only he who decided 'what is to be taught?','how it is to be taught?' and 'how it is to be assessed?'. This 'Guru' played a pivotal role, although he always aimed at benefiting his students.

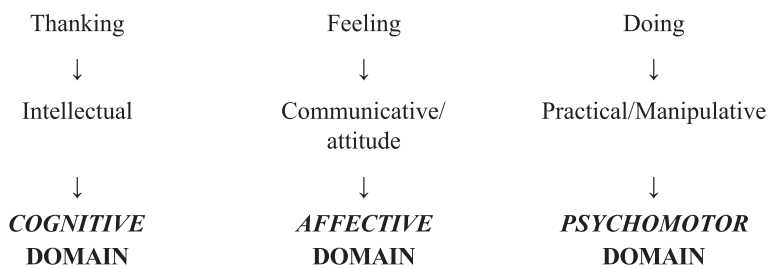
Gradually, but steadily it is being realised that it is the 'learner', who is more important. Therefore the teaching-learning methods and techniques are being altered, modified or adapted accordingly, so that the end result is appropriate 'learning'.

Learning – Learning is a process and not a product. It is a process which brings about a relatively permanent acquisition of KNOWLEDGE, SKILLS and ATTITUDES or a relatively permanent change in the BEHAVIOR of the learner. (which was not there before)

Behavior-It is how one thinks, feels & does.



So, to bring about this expected change in the behavior (i.e. learning) we need to classify the learning objectives into different groups called as “Domains”. This classification of domains is referred to as Taxonomy of domains.



What is 'Taxonomy'?

It is the classification of plants and animals into different classes, groups families & species keeping in mind their natural relationships, their similarities and differences. and considering their evolution into more differentiated, developed or evolved forms.

What is a 'Domain'?

It literally means “ an area under ones control”.

These 'domains' or 'areas under control' are not strictly cordoned off areas. All the three domains are very much a part of all the educational objectives. They are to be skillfully linked together and segregated skillfully as and when required, for effective teaching-learning activities.

'COGNITIVE DOMAIN'-

Domain of intellectual skills.

This domain is concerned with acquiring knowledge, recalling learnt knowledge, recognizing knowledge and using it (know how & when to use it) It deals with development of intellectual skills and abilities.

This domain has 6 levels—

1. Knowledge:
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

1. Knowledge-

It is the ability to recollect, recall, the appropriate matter that has been learnt.

- For ex- a) Define essential hypertension?
b) Name intravenous inducing agents?

Define, Recall, List out, Name, Recite

2. Comprehension -Understanding

To comprehend a data or information to gain its fullest meaning. It is the ability to understand a communication.

Ex-

- a) Given a set of blood pressure recordings the learner should be able to categorize into mild, moderate and severe hypertension.
- b) Understand pharmacodynamics & pharmacokinetics of intravenous inducing agents.

Explain, Narrate, Compare, Interpret, Rephrase, Translate

3) Application-

It is the ability to use facts, principles, theories, generalizations, & such data.

This requires knowledge & comprehension.

- Ex- a) Prescribe correct antihypertensives to a patient with hypertension.
b) Select appropriate intravenous inducing agent for a patient with PIH.

Prescribe, Select, Infer, Diagnose, Reject.

- 4. Analysis-** It is the ability to break down a problem or a data into component parts to recognize and interpret the findings. This requires knowledge, comprehension and application. Ex-a) Providing antihypertensive therapy, considering his personal, socio-economic & cultural factors. (which includes- life style, diet, exercise and drugs management)
- c) Administer an appropriate intravenous anaesthetic inducing agent in a patient with PIH considering her poor socio-economic background.
- 5. Synthesis** - It is the ability to assemble parts into a coherent whole. It requires knowledge, comprehension, application and analysis.
Ex To provide individualized, rational prescription for a patient with hypertension/PIH
- 6. Evaluation-** It is the ability of a learner to judge the utility, reliability and merit of the principles, procedures on the basis of established format/criteria.

It requires knowledge, comprehension, application, analysis and synthesis.

Ex- The learner would be able to outline the progress/outcome of a patient with hypertension/PIH.

It is to be noted that each preceding level is a pre-requisite to attaining the next level.

AFFECTIVE DOMAIN-

Concerned with emotions or affections. Deals with interpersonal relationships.

Concerned with values, Interests, attitudes, adjustments, understanding situations.

Levels-3

1. Receiving
2. Responding
3. Internalisation

- 1. Receiving-** It is the ability to come to know, to become aware of a

situation. Being willing to receive an idea/thought and give it some attention. Ex- Ability to show that he/she is aware of the anxiety of a patient who is waiting for an invasive procedure. To sympathise.

2. Responding- Having received the situation, it is the ability to talk to, to comfort, to reassure, to help.

Ex- To reassure patient waiting for the invasive procedure. To empathise.

3. Internalisation- It is the ability to receive and respond easily, sympathise and empathise so naturally that it forms an effortless process for every patient coming for the invasive procedure.

PSYCHOMOTOR DOMAIN –

Domain of practical skills.

It deals with acquisition of physical abilities, motor or muscular skills, manipulation or handling of instruments or objects- all requiring neuromuscular co-ordination. This domain involves perception and mind (cognition and affection)

Levels

- 1) Imitation
- 2) Practice under supervision/guidance.
- 3) Perform independently and skillfully.

1) Imitation

Includes, perception (i.e understanding the sensory input) and initiation of action. Ability to do as the instructor does. Ex- Perform basic CPBR on a manikin.

2) Practice under guidance/Supervision.

Ex- Perform CPBR in a hospital, under supervision and guidance.

3) Perform independently and skillfully.

Ex- With high degree of proficiency perform CPBR during an emergency.

Ability to perform under difficult situations, and ability to create something new are all high order performing skills, which require repeated exposures of the learner to such situations.

Purposes served by Taxonomy of Domains-

We often debate in our departments on what changes or modifications in the teaching-learning methods/techniques would make our students 'follow', 'understand' 'realise' or grasp easily. These terms appear similar, but aren't they different?

- 1.** Taxonomy of domain helps us to avoid this kind of confusion and will help us to discuss the instructional matter more precisely, avoiding such nebulous terms.
- 2.** It permits analysis of the learning process (i.e. teaching-learning and evaluation activities) and thereby helps the teacher in educational decision making.
- 3.** Further the awareness of different domains and hierarchal levels within each domain helps the teacher in formulating educational objective and plan instruction and assessment more scientifically.
- 4.** Effective communication is made possible