ASSESSMENT PROGRAMME FOR TRAINING IN HOMOEOPATHY

Prof.(Dr) Niranjan Mohanty,Bhubaneswar
www.thehomoeopathy.com

(Abstract)

Introduction: Present day is the age of innovation and specialization. And with this fast moving techno-age, the Homoeopathic educational system seems to go nowhere although we are aware about the progressive minds of 21st century. Homoeopathic education is full of innumerable pages of obsolete, outdated theory with no innovation. There is lack of sufficient practical and clinical work in every Homoeopathic institution. The students and teachers are eagerly awaiting for new textbooks but no new text books. Moreover no importance is given to co-curricular activities. After completing the course many are practicing allopathic and few are doing other jobs rather than Homoeopathic profession. Many are leading a measurable life due to failure in giving relief to the patients through homoeopathy. This also increases frustrations and suicide among the students. Beyond that there are several problems like lack of infrastructure (both physical and human), very less transparency in teaching and learning in one hand and proper assessment programme in other hand and there is serious decline in the quality of teaching. Because of all these reasons the interest and enthusiasm is destroyed at Homoeopathic colleges. Look around in colleges students are just interested in passing/scoring! There is no stimulus to their innovation or imagination and clinical eyes. On the whole approximately billion worth system is designed to produce and manufacture donkeys. Some say we produce thousands of Homoeopathic doctors / medical professionals and all these are the by-product of a system flowing down to the drain. It is high time, Homoeopathic educationists start moving with the times.

Background: In this paper discussion has unfurled on following areas: What is Homoeopathic training? What is assessment? A taxonomy approaches to assessment, types of assessment, measurement for assessment for quality, assessment for learning, as learning, of learning, evaluation, diagnostic assessment, principle of assessment for learning, benefits of assessment, needs assessment for Homoeopathic training.

Suggestions: For Homoeopathic training assessment, it has been suggested to explore the entire field of study through (a)organizational analysis (b)task analysis (c)individual analysis.

Conclusion: Designing a training and development programme, the sequence of steps that can be grouped into five phases: needs assessment, instructional objectives, design, implementation and evaluation. However it is to be kept in mind that changing with time and

technology is restructuring which is an academic perestroika absent of such will hamper any system. Basis of restructuring is level of knowledge. Knowledge is knowing about, not knowing one cannot have full knowledge. Model of knowledge is model of expanding universe of area known divided by area unknown, remain constant. If something is solved then go ahead with unsolved area.

Keywords: Needs assessment, Diagnostic assessment, Learning assessment, Design, Instructional objectives, Implementation, Evaluation.

Introduction

21st century is the century of knowledge. Knowledge driven global economy is the trend of this century. Homoeopathic education is full of innumerable pages of obsolete, outdated theory with no innovation. There is lack of sufficient practical and clinical work in every Homoeopathic institution. The students and teachers are eagerly awaiting for new textbooks but no new text books. Moreover no importance is given to co-curricular activities. After completing the course many are practicing allopathic and few are doing other jobs rather than Homoeopathic profession. Many are leading a measurable life due to failure in giving relief to the patients in concern therapy. This also increases frustrations and suicide among this students.

Beyond that there are several problems like lack of infrastructure (both physical and human), very less transparency in teaching and learning in one hand and proper assessment programme in other hand and there is serious decline in the quality of teaching. Because of all these reasons the interest and enthusiasm is destroyed at Homoeopathic colleges. Look around in colleges students are just interested in passing/scoring! There is no stimulus to their innovation or imagination and clinical eyes. On the whole approximately billion worth system is designed to produce and manufacture donkeys. Some say we produce thousands of Homoeopathic doctors / medical professionals and all these are the by-product of a system flowing down to the drain.

It is high time, Homoeopathic educationists start moving with the times. They need to realize that can no longer continue to burden the youth with unimaginable pressure and simultaneously provide miniscule encouragement to purse their creativity obtaining clinical acumen to treat their patients. An entirely new approach has to be adopted which will focus upon innovation and practical aspects with more clinical orientation. And the sooner this reform is brought. The better it is for us. The drawbacks of examination system should be addressed with proper assessment of training programme, that is by keeping space with the

research outcome of the assessment programme in education in general and homoeopathy in specific.

WHAT IS HOMOEOPATHIC TRAINING?

Homoeopathic training is one which is meant to produce physician, teachers, researchers, & able to guide manufacturing of medicines and specific goals of training is to improve Homoeopathic physician's capability, capacity ,productivity and performance. Training should form the core apprenticeships and provides the backbones of Homoeopathic colleges and students.

What is assessment ?

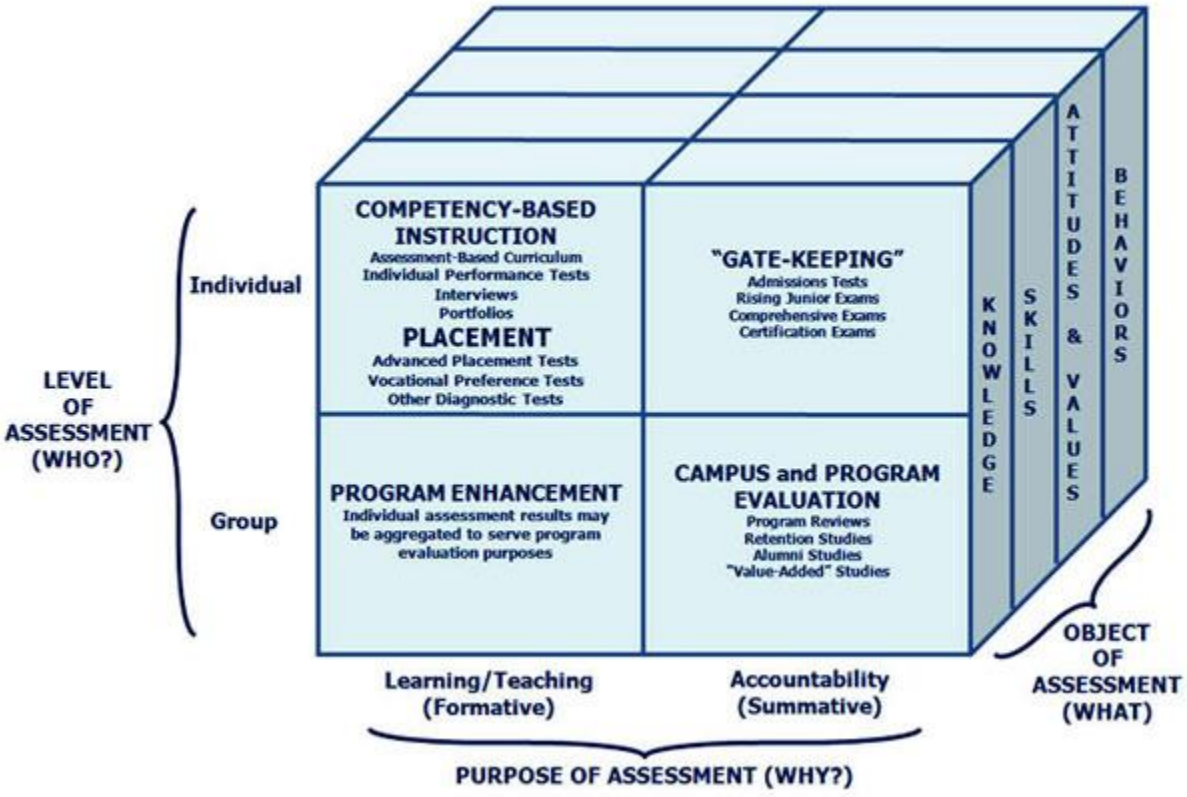
- Dictionary meaning of assessment is to evaluate something or someone:

- Assessment involves the use of empirical data on student learning to refine programs and improve student learning. [1]
- Assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning.[2]
- Assessment is the systematic basis for making inferences about the learning and development of students. It is the process of defining, selecting, designing, collecting, analyzing, interpreting, and using information to increase students' learning and development.[3]
- Assessment is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development. [4]

- **Educational assessment** is the process of documenting, usually in measurable terms, knowledge, skill, attitudes, and beliefs. Assessment can focus on the individual learner, the learning community (class, workshop, or other organized group of learners), the institution, or the educational system as a whole (also known as granularity).[5]

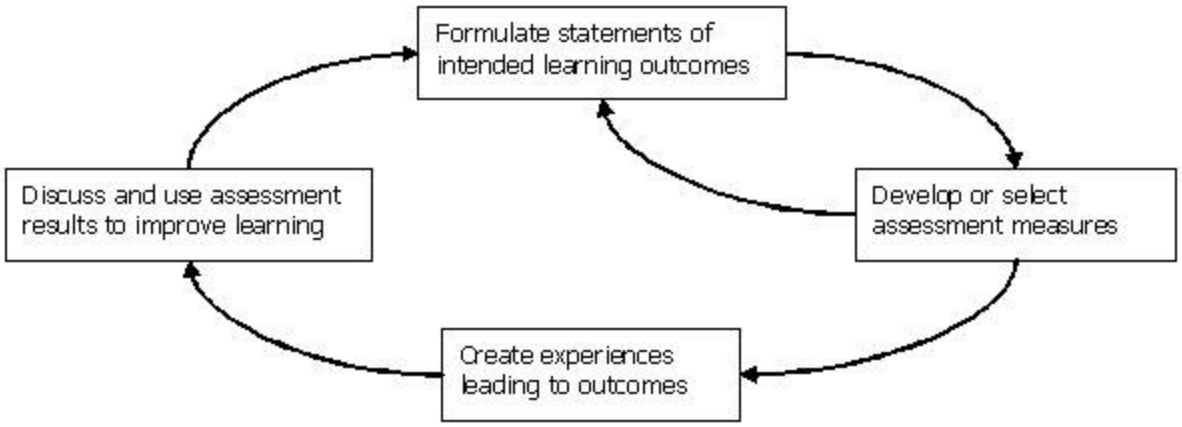
All the above definitions are also meant for assessment for Homoeopathic training too.

A taxonomy of approaches to assessment[6]



Fundamental components of assessment

Four fundamental elements of learner-centered assessment:



- *Formulating Statements of Intended Learning Outcomes* – statements describing intentions about what students should know, understand, and be able to do with their knowledge when they graduate.
- *Developing or Selecting Assessment Measures* – designing or selecting data gathering measures to assess whether or not our intended learning outcomes have been achieved. Includes
    - *Direct* assessments – projects, products, papers/theses, exhibitions, performances, case studies, clinical evaluations, portfolios, interviews, and oral exams – which ask students to demonstrate what they know or can do with their knowledge.
    - *Indirect* assessments – self-report measures such as surveys – in which respondents share their perceptions about what graduates know or can do with their knowledge.
- *Creating Experiences Leading to Outcomes* – ensuring that students have experiences both in and outside their courses that help them achieve the intended learning outcomes.
- *Discussing and Using Assessment Results to Improve Teaching and Learning* – using the results to improve individual student performance.[7]

Types of assessment:

The term *assessment* is generally used to refer to all activities teachers use to help students learn and to gauge student progress.[8]Though the notion of assessment is generally more complicated than the following categories suggest, assessment is often divided for the sake of convenience using the following distinctions:

1. initial, formative, and summative
2. objective and subjective
3. referencing (criterion-referenced, norm-referenced, and ipsative)
4. informal and formal.

Initial, formative and summative

Assessment is often divided into initial, formative, and summative categories for the purpose of considering different objectives for assessment practices.

- Initial assessment - Also referred to as pre-assessment or diagnostic assessment, initial assessments are conducted prior to instruction or intervention to establish a baseline from which individual student growth can be measured.

This type of an assessment is used to know what the student's skill level is about the subject. It helps the teacher to explain the material more efficiently. These assessments are not graded.[9]

Formative assessment - Formative assessment is generally carried out throughout a course or project. Formative assessment, also referred to as "educative assessment," is used to aid learning. In an educational setting, formative assessment might be a teacher (or peer) or the learner, providing feedback on a student's work and would not necessarily be used for grading purposes. Formative assessments can take the form of diagnostic, standardized tests, quizzes, library session, magazine/journal unfurl ,research unfurl, group discussion, panel discussion, assignments, oral question, or draft work etc. Formative assessments are carried out concurrently with instructions. The result may count. The formative assessments aim to see if the students understand the instruction before doing a summative assessment. [9]

Summative assessment - Summative assessment is generally carried out at the end of a course or project. In an educational setting, summative assessments are typically used to assign students a course grade. Summative assessments are evaluative. The summative assessments are made to summarize what the students have learned, to know if they understand well. This type of assessment is graded and often counts, it can be in form of tests, final exams, projects, etc. These assessments are important because they decide if the student passed or fails the class. If teachers only do summative assessments, the learners will know how well they acquired too late. [9]

Objective and subjective

Assessment (either summative or formative) is often categorized as either objective or subjective. Objective assessment is a form of questioning which has a single correct answer. Subjective assessment is a form of questioning which may have more than one correct answer (or more than one way of expressing the correct answer). There are various types of objective and subjective questions. Objective question types include true/false answers, multiple choice, multiple-response and matching questions. Subjective questions include extended-response questions and essays. Objective assessment is well suited to the increasingly popular computerized or online assessment format.

Some have argued that the distinction between objective and subjective assessments is neither useful nor accurate because, in reality, there is no such thing as "objective" assessment. In fact, all assessments are created with inherent biases built into decisions about relevant subject matter and content, as well as cultural (class, ethnic, and gender) biases.[10]

Basis of comparison

Test results can be compared against an established criterion, or against the performance of other students, or against previous performance:

Criterion-referenced assessment, typically using a criterion-referenced test, as the name implies, occurs when candidates are measured against defined (and objective) criteria. Criterion-referenced assessment is often, but not always, used to establish a person's competence (whether s/he can do something). The best known example of criterion-referenced assessment is the driving test, when learner drivers are measured against a range of explicit criteria (such as "Not endangering other road users").

Norm-referenced assessment (colloquially known as "grading on the curve"), typically using a norm-referenced test, is not measured against defined criteria. This type of assessment is relative to the student body undertaking the assessment. It is effectively a way of comparing students. The IQ test is the best known example of norm-referenced assessment. Many entrance tests (to prestigious schools or universities) are norm-referenced, permitting a fixed proportion of students to pass ("passing" in this context means being accepted into the school or university rather than an explicit level of ability). This means that standards may vary from year to year, depending on the quality of the cohort; criterion-referenced assessment does not vary from year to year (unless the criteria change).[11]

Ipsative assessment is the present performance against the prior performance of the person being assessed.

Assessing the present performance against the prior performance of the person being assessed.

Informal and formal

Assessment can be either *formal* or *informal*. Formal assessment usually implies a written document, such as a test, quiz, or paper. A formal assessment is given a numerical score or grade based on student performance, whereas an informal assessment does not contribute to a student's final grade such as this copy and pasted discussion question. An informal assessment usually occurs in a more casual manner and may include observation, inventories, checklists, rating scales, rubrics, performance and portfolio assessments, participation, peer and self-evaluation, and discussion.[12]

Internal and external

Internal assessment is set and marked by the college (i.e. teachers). Students get the mark and feedback regarding the assessment. External assessment is set by the governing body, and is marked by non-biased personnel. Some external assessments give much more limited feedback in their marking. However, in tests such as Australia's NAPLAN, the criterion addressed by students is given detailed feedback in order for their teachers to address and compare the student's learning achievements and also to plan for the future.

stanfards of Quality

In general, high-quality assessments are considered those with a high level of reliability and validity. Approaches to reliability and validity vary, however.

Reliability

Reliability relates to the consistency of an assessment. A reliable assessment is one that consistently achieves the same results with the same (or similar) cohort of students. Various factors affect reliability—including ambiguous questions, too many options within a question paper, vague marking instructions and poorly trained markers. Traditionally, the reliability of an assessment is based on the following:

1. Temporal stability: Performance on a test is comparable on two or more separate occasions.
2. Form equivalence: Performance among examinees is equivalent on different forms of a test based on the same content.
3. Internal consistency: Responses on a test are consistent across questions. For example: In a survey that asks respondents to rate attitudes toward technology, consistency would be expected in responses to the following questions:
    - "I feel very negative about computers in general."
    - "I enjoy using computers." [13]

The reliability of a measurement x can also be defined quantitatively as: $R_{\mathrm{x}} = V_{\mathrm{t}}/V_{\mathrm{x}}$ where R_{x} is the reliability in the observed (test) score, x; V_{t} and V_{x} are the

variability in 'true' (i.e., candidate's innate performance) and measured test scores respectively. R_x can range from 0 (completely unreliable), to 1 (completely reliable). A reliability of 1 is rarely achieved, and a value of 0.8 is generally considered reliable. [14]

Validity

A valid assessment is one that measures what it is intended to measure. For example, it would not be valid to assess driving skills through a written test alone. A more valid way of assessing driving skills would be through a combination of tests that help determine what a driver knows, such as through a written test of driving knowledge, and what a driver is able to do, such as through a performance assessment of actual driving. Teachers frequently complain that some examinations do not properly assess the syllabus upon which the examination is based; they are, effectively, questioning the validity of the exam.

Validity of an assessment is generally gauged through examination of evidence in the following categories:

1. Content – Does the content of the test measure stated objectives?
2. Criterion – Do scores correlate to an outside reference? (ex: Do high scores on a 4th grade reading test accurately predict reading skill in future grades?)
3. Construct – Does the assessment correspond to other significant variables? (ex: Do ESL students consistently perform differently on a writing exam than native English speakers?) [15]
4. Face – Does the item or theory make sense, and is it seemingly correct to the expert reader?[16]

A good assessment has both validity and reliability, plus the other quality attributes noted above for a specific context and purpose. In practice, an assessment is rarely totally valid or totally reliable. A ruler which is marked wrongly will always give the same (wrong) measurements. It is very reliable, but not very valid. Asking random individuals to tell the time without looking at a clock or watch is sometimes used as an example of an assessment which is valid, but not reliable. The answers will vary between individuals, but the average answer is probably close to the actual time. In many fields, such as medical research, educational testing, and psychology, there will often be a trade-off between reliability and validity. A history test written for high validity will have many essay and fill-in-the-blank questions. It will be a good measure of mastery of the subject, but difficult to score completely accurately. A history test written for high reliability will be entirely multiple choice. It isn't as good at measuring knowledge of history, but can easily be scored with great precision. We may generalize from this. The more reliable our estimate is of what we purport to measure, the less certain we are that we are actually measuring that aspect of attainment.

It is well to distinguish between "subject-matter" validity and "predictive" validity. The former, used widely in education, predicts the score a student would get on a similar test but with different questions. The latter, used widely in the workplace, predicts performance. Thus, a subject-matter-valid test of knowledge of driving rules is appropriate while a predictively valid test would assess whether the potential driver could follow those rules.

ASSESSMENT FOR LEARNING

In classrooms where **assessment for learning** is practised, students are encouraged to be more active in their learning and associated assessment. The ultimate purpose of assessment for learning is to create self-regulated learners who can leave college able and confident to continue learning throughout their lives.

Students are guided on what they are expected to learn and what quality work looks like. The teacher will work with the student to understand and identify any gaps or misconceptions (initial/diagnostic assessment). As the unit progresses, the teacher and student work together to assess the student's knowledge, what she or he needs to learn to improve and extend this knowledge, and how the student can best get to that point (formative assessment). Assessment for learning occurs at all stages of the learning process.

The term 'assessment' refers to all those activities undertaken by teachers, and by their students in assessing themselves, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged.

1.Assessment for learning

- comprises two phases—initial or diagnostic assessment and formative assessment
- assessment can be based on a variety of information sources (e.g., portfolios, works in progress, teacher observation, conversation)
- verbal or written feedback to the student is primarily descriptive and emphasizes strengths, identifies challenges, and points to next steps
- as teachers check on understanding they adjust their instruction to keep students on track
- no grades or scores are given - record-keeping is primarily anecdotal and descriptive
- occurs throughout the learning process, from the outset of the course of study to the time of summative assessment

2.Assessment as learning

- begins as students become aware of the goals of instruction and the criteria for performance
- involves goal-setting, monitoring progress, and reflecting on results

- implies student ownership and responsibility for moving his or her thinking forward (metacognition)
- occurs throughout the learning process

3.Assessment of learning

- assessment that is accompanied by a number or letter grade (summative)
- compares one student's achievement with standards
- results can be communicated to the student and parents
- occurs at the end of the learning unit

Evaluation

- judgment made on the basis of a student's performance

PRINCIPLE OF ASSESSMENT FOR LEARNING

Among the most comprehensive listing of principles of assessment for learning are those written by the QCA (Qualifications and Curriculum Authority). The authority i.e C.C.H. is responsible for national curriculum, assessment, and examinations. Their principal focus is on crucial aspects of assessment for learning, including how such assessment should be seen as central to classroom practice, and that all teachers should regard assessment for learning as a key professional skill.

Principles of assessment for learning should be given importance such as:

- 1. The provision of effective feedback to students.
- 2. The active involvement of students in their own learning.
- 3. Adjusting teaching to take account of the results of assessment.
- 4. Recognition of the profound influence assessment has on the motivation and self-esteem of pupils, both of which are critical influences on learning.
- 5. The need for students to be able to assess themselves and understand how to improve.[17]

BENEFITS OF ASSESSMENT

Using classroom assessment to improve student learning is not a new idea. More than 30 years ago, Benjamin Bloom showed how to conduct this process in practical and highly effective ways when he described the practice of mastery learning (Bloom, 1968, 1971). But since that time, the emphasis on assessments as tools for accountability has diverted attention from this more important and fundamental purpose.
Assessments can be a vital component in our efforts to improve education. But as long as we use them only as a means to rank college and students, we will miss their most powerful benefits. We must focus instead on helping teachers change the way they use assessment

results, improve the quality of their classroom assessments, and align their assessments with valued learning goals and state or district standards. When teachers' classroom assessments become an integral part of the instructional process and a central ingredient in their efforts to help students learn, the benefits of assessment for both students and teachers will be boundless.[18] [19]

NEEDS ASSESSMENT FOR HOMOEOPATHIC TRAINING

A **needs assessment** is a systematic process for determining and addressing needs, or "gaps" between current conditions and desired conditions or "wants". This is to improve current performance or to correct a deficiency.[20]

A needs assessment is a part of planning processes, often used for improvement in individuals, education/training, organizations, or communities. It can refine and improve a product such as a goal so it can applied for Homoeopathic training too.[21]

Needs assessments can help to improve the quality of policy or program decisions—thus leading to improvements in performance and the accomplishment of desired results. The results of a needs assessment will guide subsequent decisions—including the design, implementation and evaluation of projects and programs that will lead to achieving desired results.[22]

Hence Homoeopathic training needs assessment is a critical activity for training & its developmental function of both undergraduate & postgraduate programmes.

Designing a training and development program involves a sequence of steps that can be grouped into five phases: needs assessment, instructional objectives, design, implementation and evaluation. To be effective and efficient, all training programs must start with a needs assessment. Long before any actual training occurs, the training manager must determine the who, what, when, where, why and how of training. To do this, the training manager must analyze as much information as possible about the following:

- Organization and its goals and objectives.
- Jobs and related tasks that need to be learned.
- Competencies and skills those are needed to perform the job.
- Individuals who are to be trained.

Suggestions:

Homoeopathic training assessments can be analysed at three levels such as a)organizational analysis, b)task analysis and c) individual analysis.

a)Organizational analysis looks at the effectiveness of the organization and determines where training is needed and under what conditions it will be conducted.

The organizational analysis should identify: -
• Environmental impacts (new laws/regulation of C.C.H.).
•Maintain medical educators & learners standard (selection process of students & teachers to institutions must be in fair manner. i.e. to maintain highest standard to produce quality doctors,good researchers,efficient teachers and doctor having ability to guide manufacturing.
• State of the economy and the impact on operating cost.It has high impact on functioning of the institutions.Hence recurring/nonrecurring expenditure both will speak about it how much is spent in physical and human infrastructure i.e. in classrooms, laboratories, hospitals,salary component of teaching and non-teaching etc.
• Changing work force demographics and the need to address cultural or language barriers.
• Changing technology and automation.
• Maintaining for international quality culture.
• Political trends such as sexual harassment , workplace violence,teachers and students unrest etc.
• Organizational goals (how effective is the organization in meetings its goals), resources available (money, facilities; materials on hand and current available expertise within the organization) which can be studied from the performance of teachers and students such as:
a)Teachers- Research publication in peer review journals/How many patients are treated at OPD and IPD along with their % of cure/improve/participation in National & International seminar as resource person /his co-curricular activities and % of student passed in University and how many have secured honor's mark.
Student-Attendance in class,practical and clinical assessment results both formative,summative,objective,subjective etc./co-curricular activities performance and project work.
• Climate and support for training (top management support, employee willingness to participate, responsibility for outcomes). It can be assessed whether the M S R of CCH is in the individual deptt. & hospital or not?Whether the persons are operating them properly or not at classroom,hospital, laboratory. outcome is assessed from university results,Hospitals (OPD/IPD) patients,Laboratory work.
b)Task analysis provides data about a job or a group of jobs and the knowledge, skills, attitudes and abilities needed to achieve optimum performance.
There are a variety of sources for collecting data for a task analysis:
• Job description-- A narrative statement of the major activities involved in performing the job and the conditions under which these activities are performed. If an accurate job description is not available or is out of date, one should be prepared using job analysis techniques. This must include on following aspects such as : Teaching,hospital(IPD/OPD),research & co-curricular activity involvement.
• KSA analysis-- A more detailed list of specified tasks for each job including Knowledge, Skills, Attitudes and Abilities required of incumbents and students.

- **Knowledge, Skills, and Abilities** (KSAs) - The attributes required to perform a job and are generally demonstrated through qualifying service, education, or training.

- **Knowledge** - Is a body of information applied directly to the performance of a function.
- **Skill** - Is an observable competence to perform a learned psychomotor act.
- **Ability** - Is competence to perform an observable behavior or a behavior that results in an observable product.

• **Performance standards**-- Objectives of the tasks of the job and the standards by which they will be judged. This is needed to identify performance discrepancies.

Performance standards provide the employee with specific performance expectations for each major duty. They are the observable behaviors and actions which explain how the job is to be done, plus the results that are expected for satisfactory job performance. The purpose of performance standards is to communicate expectations. Keep in mind that good performance typically involves more than technical expertise.

Performance standards are:

- Based on the position, not the individual
- Observable, specific indicators of success
- Meaningful, reasonable and attainable
- Used to describe a "fully satisfactory" performance once an employee is trained
- Expressed in terms of quantity, quality, timeliness, cost, or outcomes

• **Observe the job/sample the work.**

• **Perform the job.**

- **Job inventory questionnaire**-- Evaluate tasks in terms of importance and time spent preparing the lecture.
- **Review literature about the job**-- Research the "best practices" from other institutions, review professional journals.How many literature scanned for preparing study material.
- **Ask questions about the job**-- Of the incumbents, of the supervisor, of upper management.
- **Analysis of operating problems**—Method of presentation with or without (audiovisual) for classroom lecture,Live case presentation or not in clinical class with demonstration of the experiment followed by experimentation by students or not etc. [23]

c)Individual analysis analyzes how well the individual employee is doing the job and determines which employees need training and what kind.

Sources of information available for a individual analysis include:

- Performance evaluation -- Identifies weaknesses and areas of improvement.
- Performance problems -- Productivity, absenteeism or tardiness, accidents, grievances, waste, product quality, down time, repairs, equipment utilization, customer complaints.

- Observation -- Observe both behavior and the results of the behavior.

- Work samples -- Observe products generated.
- Interviews -- Talk to manager, supervisor and employee. Ask employee about what he/she believes he/she needs to learn.
- Questionnaires -- Written form of the interview, tests, must measure job-related qualities such as job knowledge and skills.
- Attitude surveys -- Measures morale, motivation, satisfaction.
- Checklists or training progress charts -- Up-to-date listing of current skills.

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