Staff Development Center
Wayamba University of Sri Lanka

Learner-Centered Teaching Methodology & Technoloy To Assess Students

Selected Topics

Edited by
Udith Jayasinghe, Ph.D
Ajith Jayaweera

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Wayamba University of Sri Lanka
Makandura, Gonawila (NWP)
Sri Lanka
2010

Learner-Centered Teaching Methodology & Technology to Assess Students: Selected Topics / Ed. by Udith Jayasinghe and Ajith Jayaweera . _ Makandura : Staff Development Centre, Wayamba University of Sri Lanka, 2010.
101p.; 21 cm

ISBN 978-955-8746-69-1

i. 378.173 DDC 22 ii. Title

iii. Teaching methods – higher education

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Published by	:	**Staff Development Center** **Wayamba University of Sri Lanka** **Makandura, Gonawila (NWP)** **Sri Lanka**
ISBN	:	**978-955-8746-69-1**
Cover Page Design & Computer Applications	:	**Kapila D. Ranaraja** **Computer Application Assistant** **Dept. of Agribusiness Management** **Wayamba University of Sri Lanka**
Page Setting	:	**Ikram Mohideen** **Lecturer (Temporary)** **Dept. of Agribusiness Management** **Wayamba University of Sri Lanka**
Printed by	:	**Majestic Print Shop** **No. 95, Negombo Road** **Pannala, Sri Lanka**
Available at	:	**Director / Staff Development Center** **Wayamba University of Sri Lanka** **Makandura, Gonawila (NWP)** **Sri Lanka**
Telephone	:	**+94 31 331 5376**
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Foreword

It is with great pleasure that I write this foreword to the latest publication of the Staff Development Centre (SDC) under the themes of *"Effective Assessment Criteria for Students in Higher Education".* The launching of this publication is coupled with the Certificate Awarding Ceremony for the 3rd batch of the Certificate Course in Staff Development conducted by the SDC.

The SDC has impacted the teaching in higher education not only at the Wayamba University of Sri Lanka but at most of the other National Universities through the training of academic staff participating in the Certificate Course in Staff Development. Effective assessment is a very important aspect in higher education, which helps the teachers to assess the standing of the students and direct them to greater levels of achievement.

I take this opportunity to complement the SDC for their achievements since inception towards the improvement of the staff of the University system and thereby improving the undergraduate education. Thus, the SDC plays an important role in producing quality graduands to meet the needs of the country and the region.

While congratulating the Staff Development Centre for launching yet another batch of trained academic staff members to meet the challenges of higher education, I wish the participants and the Centre well for their future endeavors to reach higher levels of achievement.

Prof. A. N. F. Perera
Vice-Chancellor
Wayamba University of Sri Lanka

Preface and Acknowledgment

This text contains five articles written on the theme of *"student assessment"*, in general, and how the process of teaching in higher education can be improved by applying effective assessment criteria, in particular. The authors were Probationary Lecturers work in various National Universities in Sri Lanka who were trained by the Staff Development Centre (SDC) of the Wayamba University of Sri Lanka (WUSL) under its "Certificate Course in Staff Development" (CCSD), which is a 150-hour course accredited by the University Grant Commission of Sri Lanka.

This is the 5th of a series of books published by the SDC, WUSL on similar topics. The response we received from various stakeholders in staff development in the national university system as well as others involved with the field of education has motivated us to publish this text at a right time it is needed. In fact, our opinion is that "assessment criteria" is one of the least addressed areas in higher education in Sri Lanka, and failure of the most well organized course structures is resulting from their inability to address proper assessment criteria.

In this shed of light, this particular book includes a number of articles written to cover a wide area in assessment, including the impacts of conventional and innovative assessments on teaching and learning environment in higher education, the ways and means a teacher can align his / her assessment criteria with the intended learning outcomes of the course, the impacts of effective assessment to enhance quality of university education, and some empirical studies such as effectiveness of continuous evaluation methods adopted in management faculties in Sri Lanka. We wish that the academics in the university systems as well as any personality involves with teaching at higher education level may use this text to enhance the process of teaching and learning.

Out of many who helped us from various points of views to come up this type of text, we would like to convey our sincere gratitude, first, to **Prof. A. N. F. Perera**, the Vice Chancellor of the Wayamba University of Sri Lanka for his continuance guidance and support extended to us to come up with this type of publication. Also, the support extended by the Registrar and the Bursar of the WUSL their staff is acknowledged.

While extending our thanks to **authors of the five articles** published in this book, we do not forget the good work of **all Probationary Lecturers** who participated to the *Certificate Course in Staff Development (CCSD) – 2008/09* conducted by the Staff Development Centre (SDC) of the WUSL by submitting articles written on various topics for consideration in publishing in this book. Also, a special thank goes to all **Resource Persons to the CCSD** who taught these and many others aspects of teaching and learning to these authors.

Special thanks go to **Mr. Ikram Mohideen** (Lecturer – Temporary at the Dept. of Agribusiness Management of the WUSL) for his untiring efforts to go through the final drafts of each article edited by us for appropriate formatting. Of course, that helps us to come up with much user-friendly version of this. Also, I extend my gratitude to **Mr. Kapila Ranaraja** (Computer Application Assistant of the Dept. of Agribusiness Management of the WUSL) for designing an attractive cover page for it and for page setting and to **Mr. Tharaka Wijesooriya** (Research Associate – NSF / DABM Project) for his support to make our efforts successful.

Prof. Udith Jayasinghe (Director)
Ajith Jayaweera (Course Facilitator)
Staff Development Centre (SDC)
Wayamba University of Sri Lanka
04th April 2010

Content

STUDENT INVOLVEMENT IN ASSESSMENT

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Assessments

Assessment is the most powerful tool that the lecturers have, to influence students' response to courses, lessons and behave as learners. Some research outcomes reveal that the nature of the assessment affects students' approach to learning. Most assessment in universities usually uses a narrow range of methods, primarily traditional unseen written exams and reports. If the lecturer wishes the assessment to fit the purpose for which it was designed, the lecturer needs to select the assessment methods that best suit the task.

If students perceive that straightforward repeating without understanding of knowledge is what is required, then they become parrots and this is the danger in traditional assessment methods.

Purpose of Assessment

Formal definition of assessment is as the systematic approach of evaluating about the learning and development of students. The definition only elaborates the students' learning and development side of assessment. There are several other purposes of assessments. Mainly those can be identified as selection, maintaining standard, motivation of students, feedback to students and feedback to lecturers.

Selection means screening or selecting students for some purpose, such as for granting scholarships, for entrance to university or for specific course. Maintaining standards or quality assurance purpose considered under internal institution standards and external to the institution standards. These two purposes indirectly relate with the learning and development of students. If students learn then only they can select and assure the quality of the process will be awarded.

Motivation of students will encourage them to study well. This is indirectly a motivation to the lecturer as well. When students are motivated they participate in learning activities without hesitation and they will become self-achievers. Then the lecturer is required to put only a small effort to direct students into the learning process.

Identify strengths and weaknesses of students themselves and comparing their knowledge with the brightest student in the class will provide feedback to them. To deliver an effective lecture, at the beginning of a course unit, lecturer may wish to find out the students' background knowledge. In such a situation as well as to identify whether the students have learned lessons correctly and what they failed to learn, to what extent that the students decode the lessons correctly assessments give feedback to the lecturer.

As David Boud suggests, "*students can escape bad teaching: they can't avoid bad assessment*". It implies that the single most useful thing: lecturers can influence positively the processes of teaching and learning is to make the right choices in designing a 'fit-for-purpose' assessment strategy. In reality, assess students for quite a range of different reasons. More often traditional assessment methods do not achieve the above goals. Therefore it can be argued that the students' involvement in assessments is required for improving their learning.

Assessment Approaches

There are mainly two approaches in assessments; formative and summative. Formative assessment is where the purpose is to

get an estimate of students learning and to identify the scope and potential for improvements. This includes some coursework that will give feedback to help students to improve their performance at next stage. In addition, lecturer can use this approach to identify for which areas that should pay more attention in next time.

Summative assessments produce a measure of the achievement of students. Therefore, it helps in the selection process or the grading the students. This is for indicative and certification purpose.

Both formative and summative assessments may share the same methods and in theory, a measurement may have both formative and summative intention. Yet, the differences are there in two approaches, since with summative assessment there is a premium on reliability, as the results have to be communicated to the world. That results should be clear, follow some standards, which have been set and well known by others and assured the reliability.

Usually these summative judgments are simply communicated as Grade Point Average (GPA) or just as a grade as 'A', 'B' or as a percentage. In formative assessment, there is a sense of being temporal, since it is to be discussed and

negotiated as the data of the process can be used to improve the performances.

Who is the Assessor?

Assessments work best where the intended learning outcomes describes in advance, sharing with students and establish the assessment criteria. It is also very important to say who should do the assessing and who and when will provide the feedback. However it is better if the feedback could provide as early as possible after the assessment conducted. Mainly assessing is done by a lecturer or a tutor, in conventional assessments. In innovative assessment techniques, in addition to the lecturer or tutor, students also can be involved for the assessing purpose.

Methods to Involve Students

Assessments and its scores will enable to use as a way to attain greater student success. Assessment should include student-centered strategies that involve students in setting goals, choosing appropriate assessment techniques and identifying appropriate instructional strategies and materials. There are three applications of this idea: (1) Student-centered classroom assessment, (2) Student-involved record keeping and (3) Student-involved communication.

In student-centered classroom assessment, lecturer can give the opportunity to students to bring out the design and development of the assessment process. From this, students are well aware what the teacher expects from them. Through that, it would be able to limit the excuse making for assessments and being 'surprised' with the assessment.

In student-involved record keeping, portfolio or other type of information management system can be used. It helps students to be touch with and reflect on their own improvement. In this way the lecturer lets them to see them succeed as a result of their effort.

In the case of student-involved communications, students are assigned to tell their own improvement during a class meeting or discussions, this lead to a sense of pride due to self-accomplishment and student themselves try to improve without waiting till the lecturer is pushing him or her toward some goal.

There are another two main categories of student involvement in assessments: (1) Self-assessment and (2) Peer assessment. These two methods are among the more innovative techniques of assessments. The important aspect is that these involve the student in trying to apply the

assessment criteria for themselves, and making judgments on their own works.

Importance of Self and Peer Assessments

Both self-assessment and peer assessment improve the students' learning process through independent judgments; they are actively participating to the learning process. These two approaches provide mechanisms that help students to evaluate themselves and their work more critically.

An ability to assess one's own strengths and weaknesses is an essential life-skill that should be developed for the personal development of a person. It is helpful to think aloud while reviewing or analyzing the work. That improves students' learning and they learn independently through this. Rather than being assessed by the lecturer or tutor, they actively participate in the process of learning.

In addition, they give their ideas when designing assessment outcomes and give feedback to their colleagues. Moreover, they will develop their skills over the exercise. They build self-confidence, language development, assessing others work and give constructive criticisms.

Self Assessment

Some lecturers and tutors may be put-off with the idea of self-assessment, thinking that it means allowing students to give themselves marks. This is not the main objective of self-assessment. The most important aspect of self-assessment is in helping the students to think about the quality of their own work. Moreover, this might be as simple as providing a short list of headings which the students is expected to respond to, and submit with the completed piece of work.

Self-assessment is involvement of student in making judgments on their own learning, about their achievements and learning outcomes. Especially in higher education, students should practice self-evaluation on not only their assignments and other learning exercises, but also every area of their lives of graduation and it will help them in self-development and going beyond the academic life.

Self-assessment is not a new technique, but has been accepted as a technique of assessment only very recently. It is an approach of increasing the role of students as active participants in learning activities. Self-assessment is mostly used in formative assessment, which gives feedback on one's own learning.

Self-assessment can be classified under three frameworks namely (1) Conceptual framework, (2) Qualitative framework and (3) Quantitative framework. One of the most important parts in the conceptual framework is the literature about the reflective practitioner. The practical qualitative framework includes the processes involved in introducing and using self-assessment in different situations.

The quantitative group focuses on studies of student self-ratings compared to the ratings of students by lecturers. More often students tend to give lower marks than lecturer or tutor. Nevertheless, in some cases students give higher marks to their works, and seem to be overvaluing their work. Low achievers mostly do this. High achievers tend to under value their work.

Advantages of Self-Assessment

Traditional assessment practices, consisting pre-eminently of the assessment of essay and problem type final examinations and similarly constructed coursework, cannot adequately test for imponderables like independent critical thinking, creativity etc. and this is particularly so for time limited examinations. At the same time, this kind of assessment methods may not lay a strong foundation to lifetime learning or

preparation for work. In contrast to traditional methods, self-assessments will help students become more autonomous, responsible and involved in learning activities.

Student should be able to answer following three questions: (1) where am I going? (2) Where am I now? (3) How can I get there from here? That is, students need to know what the intended learning outcome or expected quality of learning. In addition, they must know how to judge and monitor their own progress and what to do to achieve the expected level by themselves as learners. Accordingly, students internalize the criteria for high quality works.

Self-assessment may be used to help develop, in students, the ability to examine and think critically about their learning. It facilitates to determine what criteria should be used in judging the work and to apply these criteria to students own work in order to facilitate continuous learning.

With the self-assessments, high-performing learners would be able to do self-monitoring and self-correcting as well. Helps students become more autonomous learners; better able to recognize the strengths and weakness of their own works.

Additionally self-assessments can be undertaken as part of the assessment requirements of a course or as an exercise within the course's requirements.

Drawbacks of Self-Assessment and Ways to Overcome Drawbacks

(1) Students do not have the experience of doing self-evaluation

To overcome, lecturer can conducted an awareness session and then involve them in assessments. One method is to arrange for students to see examples of good and bad piece of work. Pieces that have been marked and have the lecturer's comments on them make a good starting point for getting students to think about the assessment process. For an example, students will be given the bad work and asked to identify the weaknesses and make comments on it. Then they will be given the good work and asked to identify and comment on the strengths of it. Then discuss with the class on how it could be improved. Through this, students get to know, the things that should be there in a good piece of work and they will improve their learning activities.

In addition, let students to read their work after they have completed it. This may enable them to

spot and correct errors and omissions, and it can enable the lecturer to give more focused feedback. However, as with the marking exercise described above, there is evidence that training students to assess their own work results, with the time pass, producing significantly better work.

(2) Lack of accuracy in marks

This is because some students give themselves lower marks than the lecturer does, while some give higher marks than the lecturer. Using the double marking method will eliminate this problem. After student mark their own assessments, lecturer can recheck them and verify whether there is any gap of marks. If it shows some differences, let students to identify their drawbacks, by giving feedback and discussing with them. Moreover, lecturer can avoid taking the marks of self-evaluation for the final marks.

(3) High preparation time is required

Although it is believed that this form of assessment will reduce the lecturer's workload, the truth is that a lot of time is required to prepare students on self-assessment.

Peer Assessment

Peer assessment is assessment of students by other students, which provide formative reviews of both feedback and summative grading. Peer assessment is one form of innovative assessment, which aims to improve the quality of learning and empower learners, where traditional forms can by-pass learners' needs.

Peer assessment is defined as an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the products or outcomes of learning of peers of similar status. Peer evaluation is about quality and progress, not about marking, grading or passing/failing of the other student. However, these results can be used collectively with the lecturers' marks. General idea is t o give specific feedback which help student to improve his/her work. Peer assessment is qualitative and detailed, not quantitative and simplistic.

It enables students to give each other valuable feedback so they learn from and support each other. It adds valuable dimensions to learning: the opportunity to talk, discusses, explain and challenge each other, and this enables students to achieve beyond what they can learn unaided. Peer assessment helps to develop self-assessment

which promotes independent learning, taking responsibility on one's own progress as well.

Advantages of Peer Assessment

1) One important aspect in peer assessment is, planning of assessment is done together both by lecturer and students. There students get involved to decide assessment process, assessment criteria and its intended learning outcomes. This gives students a sense of ownership of the assessment process and improves their motivation. Also it helps students to become more autonomous, responsible and involved to clarify assessment criteria

2) Knowing the assessment process encourages, in students, a sense of ownership of the process. Therefore students are committed to the outcomes, rather than dismissing them as the ramblings of an inadequate or biased external evaluator

3) With clear explanation of intended learning outcomes behind each task and how they related to the learning objectives, will enables assessments to become part of the learning process rather than an adjunct to it

4) With the identification of learning side of the assessment, students stimulate learning through assessment criteria

5) Encourages students to take responsibility of their own learning developing them as autonomous learners

6) Encourages students to critically analyze work done by others rather than simply seeing a grade
7) Develop self assessment abilities, through peer assessments

8) Encourages deep learning rather than surface learning, because to evaluate others work evaluator should have a deep knowledge on the work

9) Reduces the marking load on the lecturer

10) Always provides high quality feedback

11) Gives students a wider range of feedback

12) Several groups can be run at the same time as not all groups requires the lecturer's presence

13) More closely parallels possible career situation where judgment is made by a group

14) Develop a whole arrange of transferrable skills valuables to students during their course and in subsequent employment and facilitate lifelong learning

Drawbacks of Peer Assessments and Ways to Overcome Such Drawbacks

1) Student may lack the ability to evaluate each other

2) There are issues with the validity and reliability of assessments done by students.

3) Student may not take this seriously, allowing friendships, entertainment value etc. to influence their marks. Students should be consciously aware of what their target is. Then they will take this seriously.

4) Marks will be biased - in some occasions, not only students but also some lecturers will also be biased and allow personal relationships to decide the marks. Anonymously conducted peer marking can

overcome this by improving the reliability of the marks awarded

5) Student may not understand the assessment criteria and objectives

6) Without lecturer intervention, students may misinform each other. Monitoring and guidance by the lecturer can lead students towards the expected goal and will avoid such misinforming

7) Student may not like peer marking because of the possibility of being discriminated against, being misunderstood, etc.

In order to have a successful peer assessment session some important activities need to be taken note of. Brief knowledge must be given to students and fellow tutors before introducing the processes, making it quite clear in advance, what is expected of them.

Explain carefully the purposes of self and peer assessment to all parties who are engaged in the process. Make sure that students are working with explicit criteria for success of the assessment process as well as the learning process. Ensure that whenever students are evaluating work, they provide full and

appropriate evidence for the marks or awards given, based upon the agreed criteria. Provide opportunities for rehearsal of the process in stress-free contexts. Collaborate with colleagues who have already used self and peer assessments. Then they will give supports to beginners.

Lecturers cannot expect to get everything right at the first time. Note what worked and did not work in the first instance and build on the results of the learning experience to the assignment with the next group of students. Peer assessment process should be a continuously improved one and not ending within a day or two. Generally most of peer assessments' weaknesses can be avoided with anonymity, multiple assessors and tutor moderation.

Developing Self and Peer Assessment

Self-evaluation and peer evaluation capabilities cannot develop overnight. It takes considerable time; which takes planning, deciding the methodologies, patience and commitment. If the students are not aware of the intended learning outcomes at the beginning, they find it difficult to move beyond the apparent criteria related to neatness and spelling.

By using a range of strategies and by dedicating time to allow students to reflect on and discuss about their learning, lecturers can develop skills of self assessment and peer assessment. The most essential skills in this process are skills of self awareness, managing feelings, and empathy, and these should developed step by step.

When is it Appropriate to use Peer and Self-Assessment?

Peer and self-assessment are very appropriate when used for formative purpose that is to provide feedback. More often students improve a lot by receiving feedback from their peers, as well as they learn a lot by giving feedback to their peers.

In some situations, peer assessment can be used for summative purpose as well. In that case, some percentage of students' marks can be allocated for the final marks. Lecturers can parallel mark, get some percentage, and finalize the module mark. When peer assessed marks are taken for the final marks, the process should be carefully moderated and there should be an appeals process, with the lecturer as the final decision maker.

Usually self-assessment is conducting only for formative purpose. However, students can be

asked to submit self-assessment of a piece of work, along with the assignment. This can be assessed by the lecturer and the student's marks can be compared with lecturer's marks. This approach encourages reflection of student's work and self-criticism.

Group presentations, poster displays, group project process, reports, laboratory reports, portfolios are some areas in which peer and self assessment be conducted.

USE OF POWER POINT PRESENTATIONS TO ASSESS STUDENTS' KNOWLEDGE

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Introduction

The purpose of outcomes assessment is to continually improve student learning. Information gathered at the Departments, Faculties or University level is used to ascertain students' knowledge, understanding, and ability to use their knowledge in the particular subject. Student outcomes assessment is interwoven into program review, accreditation, curriculum development, and internal academic standards.

Effective outcomes assessment is necessary for the institution to achieve several educational goals articulated in the current strategic plan: improving the rigor, challenge, and international reputation of academic programs; strengthening students' critical thinking, creative abilities, and communication skills; and enhancing students' understanding of global, cultural, ethical, and diversity issues.

Successive fulfillment of the criterion of the assessment of the student knowledge can be achieved in numerous ways; however the most effective method of assessment is described in this chapter.

Expected Guidelines for Student Outcomes Assessment

Undergraduate students are expected to improve their general intellectual skills to attain proficiency in one or more academic disciplines of their choice and to develop interpersonal and leadership skills needed for productive careers and effective citizenship.

Graduate students are expected to develop professional, research and scholarship skills. The faculty is responsible for designing curricula and educational experiences to achieve these goals and for assessing how well the goals are attained. Instruction varies from structured classroom, studio and laboratory experiences to one-to-one contacts between individual faculty members and students, and it may include extra-curricular programs of various types.

To determine the effectiveness of these educational experiences, two related questions must be answered: To what degree have students attained desired educational goals? And, how

effective have various programs and experiences been in facilitating the learning and development of students? These are fundamental questions of student outcomes assessment.

In order to evaluate the effectiveness of programs and to develop methods for improving learning and instruction, evidence must be collected about the degree to which the desired outcomes of the educational process have been attained. This process is effective when the assessment results are used to improve subsequent learning.

Direct Assessment of Student's Subject Knowledge

Direct assessment methods require students to demonstrate knowledge and skills and provide data that directly measure achievement of expected outcomes. Following methods are presently used in the universities, in general to evaluate student's knowledge

- Term tests or exams
- Practical tests
- Viva voce
- Tutorials
- Quizzes
- Assignments
- Power point presentations

However, the degree of effectiveness of the above methods can be changed with different circumstances. Evaluation of answer sheets with respect to question papers, practical tests and viva voice are the main methods of evaluating student's knowledge. During the semesters, quizzes, assignments and power point presentation are been used to evaluate students and marks scored by students are finally counted with test results. Especially information for the evaluation of direct methods on student's achievement is very important. Moreover, information on the evaluation of students' assignments compared to power point presentations is scanty.

Assignments

Assignments are tasks that require student engagement and a final tangible product. They are one of the most common ways to assess student learning. The type and number of assignments you will design depends on your course learning objectives and teaching goals.

Suggested Uses of Assignment:

Demonstration or development of:

- Higher level thinking skills
- Writing skills

- Oral presentations skills
- Observation or training of collaborative and interpersonal skills
- Critical thinking skills
- Application of knowledge
- Demonstrating depth of knowledge
- Information synthesis
- Evaluation of knowledge

Strength of Assignment:

- Easier and less time-consuming to construct than exams
- Promotes higher level thinking (application / synthesis / evaluation)
- Allows for a variety of student learning styles
- Transfer and generalization more likely than for exams

These outcomes through assignments cannot be perfectly expected because students do not exactly follow the rules and regulations of assignments.

Related Difficulties and Problems with Assignments:

Students-side:-

Copy from each other:

A majority of students copy the information from others. In addition, major problem is that the information from the website is cut and pasted just without understanding the content of documents. The most students are not independently thinking to fulfill the requirements of assignments.

Repetition/unnecessary information:

The most of students repeat the information and some information is irrelevant to the topic of the assignment.

Bulky reports:

Students prepared bulky reports especially due to gathering of unnecessary information and ease of collecting them by copying from others and websites.

Poor interest:

They have many subjects to pursue. Assignments should be written well with understanding and this requires a lot of time to complete. Therefore assignments are created quickly with poor interest in the exercise.

Delay of on time submission:

Especially due to the facts mentioned above reports submission could be delayed. Some students are careless to submit assignments on time.

Often requires additional resources:

The majority of students are not independent thinkers and especially at the initial stage of degree, students do not have thorough knowledge about the subjects and students are therefore directed to use library, lab and web facilities etc.

Utilizing class time:

Some students tend to use class time to prepare assignments thereby missing other valuable time enrolled with other subjects.

More time-consuming to grade than exams:

During the limited semester time students should have to complete the requirements for all subjects. Students are suffered with much stress concerning limited time that could be hindered to their independent thinking ability.

Teachers-side:-

Temporary demonstrators and Assistant Lecturers:

Usually temporary staff members are responsible for marking assignments. Especially due to bulky and number of assignments, the assignments are not properly scanned for accurate evaluation of students.

High number of students:

Allocated compulsory working hours by the Grant Commission are greater than others and work load for demonstrators are therefore higher than other permanent staff members. Due to these constraints looking into the assignment cannot be fulfilled properly thereby students are not accurately evaluated through assignments.

Not interested to read:

Assignments are not readable especially due to a lot of repetitions, high numbers and large number of pages. Assignments of the students are not properly evaluated due to the above constraints and limitations are concerned in both students and teachers contributions.

Power Point Presentation

The advent of the "power point" has greatly benefited in lecture rooms for knowledge distribution but has also led to widespread misuse. When the classroom lights go out or are dimmed and the power point comes to in effective, students begin chatting, working on other teacher's assignments, and passing notes to each other. Power point limits good classroom management and, if used as an end to itself, may actually hinder solid instruction.

Proper Use of the Power Point

Power point presentation is one of key tools to be used by teachers or students to improve learning and instruction. Too often, it becomes the *only* tool. Good power points should enhance and complement classroom instruction. They work well with charts, maps, and other visuals used to illustrate lectures and discussions. Alternatively, when asking students to do power point presentation with respect to entrusted topic under particular subjects gives greater benefits compared to assigned assignments.

Power point uses to assist visual learners and helps students to a schedule lesson plan. Through the use of key words or phrases, power points reinforce important concepts. Since the

best student recollection of learned material is tied to short term memory "clues," power points can provide those mental sign posts, enabling students to better recall the parts of the "bigger picture."

Student generated presentations are also enhanced with power point as long as students are discouraged from *reading* their frames. Students delivering their acquainted knowledge through meaningful power point presentations uniformly distribute information among students which help to upgrade their career development.

Improper Use of the Power Point

Too often, the power point becomes a poor substitute for *instructing*. In many ways, the power point has replaced the endless mimeographs and later worksheets duplicated on Xerox machines. Yet the results are often the same: instruction is depersonalized and student interaction is limited. The constant use of power point presentations also tempts teachers not to vary instructional goals from year to year, despite the fact that objectives and outcomes may change based on curriculum reforms.

Teachers that use power points to project their notes will find that rather than listening to the accompanying drawl of information, students are

too busy writing down the outlines or paragraphs. Outlines are a helpful tool for all students, particularly those with organizational deficiencies or learning differences, but there are better ways to post or disseminate them. The power point should not be used for this purpose. However, when students do the power point presentation they can be compulsorily asked to note down important points as those important for their viva voce examination and multiple choice questions

Constant use of power point devalues instructional time. Like teaching to a test, intellectual curiosity is stifled and there is little room for rich interaction, discussion, or analysis of the concepts under discussion. Additionally, students use these periods, when the lights are dimmed, to engage in activities they normally would not in a classroom situation where the teacher is able to move among the rows of students.

Common sense should dictate that power points work best when they complement instruction, not supplant it. All technologies should be used wisely, but power point presentations are at the very top of the list of cautious usage. In this regard, some disadvantages are prevailed in use of power points for teaching, but use of power points presentation to evaluate student's

knowledge compared to that of assignments could be extremely useful.

As far as student's power point presentations are concerned, summarized below are some problems or limitations which have been observed in the past. Proper understanding of these limitations would be extremely useful to improve and popularize power point presentations among undergraduate students.

Major Limitations Observed in Students' Power Point Presentations

Should be lower number of students:

Evaluation of the student's knowledge through their power point presentation will be more effective when the student number is low. Because time factor is limited within the semester and completion of the evaluation of students during limited time is difficult. Therefore as a solution extra time in weekends or after official hours can allocated for students with their interest. Other alteration is that students are requested to give group presentations. In this regard, group leader can be present the information but each other student should involve in preparation of presentation under some subheadings of the topic of presentation.

Student should have adequate knowledge about the subject:

Usually third year and final year students have thorough knowledge about subject compared to 1st year and 2nd year students. Therefore, they are capable of gathering information required for the presentation.

Students are shy to be come forward:

Some students, especially female students, feel shy to come forward and give their presentations in front of teacher and other students. However, those students can be familiarized with well understanding and thereby student's motivation, self-confident etc. can be improved well.

Training for power point presentation:

To make successful presentations, students should be trained well on how to prepare for good power point presentations. Therefore students should be aware on creating an effective power point presentation as follows:

Hints for a Successful Presentation:

- Plan carefully
- Do your research or subject matter survey

- Understand your audience
- Well timing your presentation
- Practice your presentation
- Speak with confidence, comfortably and clearly

Effective PowerPoint Slides:

- Use design templates
- Standardize position, colors and styles
- Include only necessary information
- Limit the information to essentials
- Content should be self-evident
- Use colors and contrast
- Be consistent with effect, transitions and animation
- Too many slides can be loose your audient attention

Text Guidelines

- Generally no more than 6 words a line
- Generally no more than 6 lines a slide
- Avoid long sentences
- Large font indicates more important information
- Font size generally ranges from 18 to 48 point
- Be sure text contrasts with back ground
- Fancy fonts can be hard to read

- Words in all capital letters are hard to read
- Avoid abbreviations and acronyms
- Limit punctuation marks

Clip Art and Graphics:

- Should balance the slide
- Should enhance and complement the text, not overwhelm
- No more than two graphics per slide

Overall information of the effective assignment and power point presentation are indicated in the chapter. As far as practically assessment of students through both category is important to make conclusion of the relevant information. Therefore, actual benefits of power point presentation compared to assignment are essential and important to make reliable conclusion.

Benefits of Power Point Presentation Compared to the Assignments

Student's attendance:

Usually, during the power point presentation, 100% attendants were observed because of students have keen interest to attend power point presentation. Not only is that but students

also willing to get much detail of the particular topic because students attempt to explain the information simply in front of others.

Thorough knowledge about the subject:

When the different topics about the particular subjects are allocated to students, students individually try to find important and relevant subject matter with the competition among students and acquainted knowledge can then be distributed throughout all students during presentation time.

Knowledge distribution:

As far as assignments are concerned, the knowledge gained through it is confined to particular students, but when student presenting their acquainted knowledge in front to other students answering audience questions, the knowledge can be uniformly distributed among students.

Improve confidence:

Students know that they are going to present their collected information in front of other students and teachers. In addition, they should be ready to face different questions from the

audience in the particular area. Executing these successfully automatically boosts confidence.

Student's interest:

Most of the students are interested to do power point presentation in front of others. They are willing to show their ability and skills to others. In addition, the information can be presented during short time period.

Impossible to copy from each other:

There is much possibilities copy from each other as students produce their assignments. But preparation of power point presentation with different titles is impossible to copy but students can discussed with others to make effective presentation.

Improve the independent thinking:

Young students have creative minds. They should be allowed to think and completed their work. The most probably when they are producing assignments, they are coping and use other's mind to complete their work. Their individual motivation of gathering information to produce power point presentation is very good and therefore, their independent thinking can effectively be improved.

Personality development:

The power point presentation is one of key tools to develop student's personality. Their actions to take attention and deal with audience are the success of power point presentation.

Improvement of enthusiastic ability:

A few students of batches have the enthusiastic characters. The power point presentations of students show their skills and ability. Those students display their endeavors to others and the most of students who have poor enthusiastic ability try to improve following students who are displaying enthusiastic characters.

Teachers are also possible to hear new information:

Young students have creative minds and they are trying to collect different types of information under particular subjects. Teachers are also very much interested to focus their mind on new information which is gathered by students.

The evidence from the information reveals that 95% students are very much interested to follow power point presentation compared to producing assignments. Few students do not prefer power

point presentation, because they expressed that initial presenters at the class room would have less experience about power point presentations to score marks, however, later presenters could have a chance to get much experience from the other presenters and the audience. The best classroom presentations are created by students who are comfortable with what they are going to talk about.

USE OF ORAL PRESENTATIONS TO ASSESS STUDENTS

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Introduction

Oral presentation is an important and effective way of communicating once ideas and plans to the target audience, and oral presentations are often used to present information, thoughts, lessons etc. at educational institutions, business organizations, government meetings, seminars, conferences and at scientific meetings.

The Universities wish to offer their students a variety of opportunities to learn successfully as well as to prepare them effectively for life in the working world by developing soft skills as well as hard skills. One of the important elements in soft skills is communication skills including presentations skills.

It is possible to argue that learning to give a formal presentation will be more useful to students in the working world, when coping with

situations such as interviews, many of which now require candidates to give a presentation. Presentation skill is also required in certain jobs.

If the presentation is followed by a period of time for questions and discussion, this will also allow the student to develop skills such as persuasive and coherent argument, sharpness of thinking, listening skills, the ability to cope under pressure, and the ability to accept and deal with criticism, all of which are invaluable skills when facing interviews as well as in the working environment. Therefore, it is imperative to incorporate the oral communication features more formally in the learning and assessment procedure.

Assessment

In higher education, the term "assessment" has taken on a rather broad meaning. It has been defined as getting to know our students and the quality of their learning and described as a way of teaching more effectively through understanding exactly what students know and do not know. Thus, assessment enables the teacher/lecturer to understand the processes and outcomes of student learning.

It helps to determine what students actually achieve in their study. Such meaningful

information on student learning can be used for academic improvement. It is not an end in itself but a means to an educational purpose. Assessment plays a key role in determining the quality of student learning. If students perceive that their learning will be measured in terms of producing facts, they will adopt surface approaches to learning. Therefore, whatever assessment methods we adopt will encourage different approaches to learning.

Why Assess Students?

- Students expect it
- Students are motivated by assessment to work harder (but don't overload/ over-assess)
- It focuses learning and guides student learning (be conscious of gaps between a teacher's rhetoric and assessment practices, therefore assessments and stated goals must be consistent)
- It stimulates and consolidates student learning
- It enhances learning by structuring the study efforts (consider the effect of "distributed practice" versus one big

assignment as a form of assessment. On the other hand, over-assessing sometimes stifles learning and the enjoyment of learning)

- It guides and corrects learning through feedback - remedies mistakes, diagnoses faults, identifies misconceptions and difficulties (this is only possible through useful feedback. A mere mark/grade has limited use. Perhaps structured feedback forms would be helpful to students to improve learning and it forces staff to be explicit in what he/she intends to assess)

- It indicates readiness for progression

- It recognizes levels of achievement, enabling grading and final degree classifications to be made

- It assists in the evaluation of teaching and focuses on the performance of the whole class and acts as a performance indicator for the course

- It assists in the evaluation of teaching by providing a performance indicator for staff

Why Use Oral Presentations as Part of Assessments?

- Good exercise in verbal communication skills, which are an unavoidable part of life outside the academic world, and are particularly important for job-hunting graduates

- Opportunity for the student to be seen as an individual, rather than a series of essays – some students are able to present themselves better verbally than on paper

- Opportunity for students with writing difficulties or dyslexia to demonstrate their true potential

- The act of preparing a seminar / presentation aids learning and develops the student's ability to select relevant information, summarize main points, and present a concise argument

- The assessments are usually carried out by the class teacher, who knows both the module content and his / her students

- Provides the class teacher with feedback on the module

Assessment of Oral Presentations

Before deciding how oral presentation assess, there is a need to be clear as to what the learning objectives of student presentations are and then to ensure that the assessment method addresses them. Is it to teach students to be good at doing presentations (then that skill should be assessed) or is it a way of finding what they know about the subject-matter that is being presented (then that should be assessed), or is it to test whether they can construct a convincing argument, or some combination of these.

Oral presentation can be evaluated based on assessment criteria; which are the details of performance, on the basis of which a presentation is given the marks, or on which feedback is given

Hounsell and McCune (2001)[1] in their paper 'Making the Most of Oral Presentations by Undergraduates' highlight a number of factors influencing student performance that should be taken into account by the assessor. These factors include:

[1] Hounsell, D. and McCune, V. (2001) *Making the most of oral presentations by undergraduates*. Paper presented to ILTAC 2001 conference.

'the conditions under which the presentations are made (physical setting and layout, the approach taken to questions and comments, ground-rules and etiquette); the stratagems the students deploy to communicate their material effectively to their audiences; the impact of the experiences of listening and presenting; and the role of pre-presentation guidance and post-presentation feedback '

Brown *et al.,* (1997)[2] also review the range of criteria that can be used to assess presentations. They suggest that a simple 4 or 6-point rating scale may be useful. Criteria may include:

- Structure of presentation
- Clarity of presentation
- Enthusiasm of presenter
- Interest of presentation

They also give examples of longer checklists, each scale combines assessment of elements of *performance*, for example, fluency and engagement with the audience and *content*, therefore focusing on clarity of argument and use of evidence.

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[2] Brown, G., Bull, J. and Pendlebury, M. (1997) *Assessing student learning in higher education.* London Routledge.

However, it would not be appropriate simply to provide a standard list of assessment criteria that would guide the marking of any presentation because what is valued in a presentation might differ. For example, in one presentation, the knowledge content might be assessed, whereas in another the focus might be the clarity and pacing of the speech. These are very different features of the same performance and reflect different purposes for the exercise.

It is indicated above why it is not appropriate to provide a standard list of assessment criteria for the evaluation of oral presentations. The list below is designed to help in the development of assessment criteria. It provides a range of features of oral presentations from which assessment criteria may be selected and developed, depending on the focus of the presentation.

Assessable Features of Oral Presentation

- Presentation skills
- Ability to construct and present an argument
- Knowledge and understanding of course content
- Research / preparation skills
- Organization
- Logical thinking

- Ability to cope under pressure
- Listening skills
- Originality and sharpness of thinking
- Personal qualities, e.g. enthusiasm for the subject
- Memory
- Ability to accept criticism

(a) Presentation skills

This skill can be assessed by evaluating following criteria

i. Voice

Assessor can assess whether the presenter is speak too softly, too fast, or mumble and whether the audience is able to hear what presenter say (voice amplitude) and understand what he say (speech, word resolution, and clarity). Whether, he uses voice emphasis to stress important points and modulate, enunciate, and use tonal variety. Whether, presenter is expressing important thing by a well-timed pause, lowering his voice, or talking deliberately, as well as by stressing the points.

ii. Posture, Gestures, and Movement

Whether the presenter is using gesture or not and whether he is using same gesture always or

different gestures as appropriate to the point. And whether the presenter is moving as appropriate or standing alone while doing the presentation.

iii. Facial expression

Whether the presenter is stressing the points that he is talking by having suitable facial expression.

iv. Eye contact

Eye contact is analogous to plugging into audience's brain. Therefore, it is an important feature in oral presentations and should be assessed. It can be assessed by confirming whether, the presenter tries to make eye contact with every person in the room and avoid fastening his gaze on his notes or on screen, or on some point in space above the heads of the listeners.

(b) Ability to construct and present an argument

This is an important feature of oral presentation. The assessor can evaluate this feature by assessing whether the materials are presented logically and organize the content as appropriate to topic presented etc.

(c) Knowledge and understanding of course content

This can be assess by evaluating whether the depth of the content is sufficient or not and by asking questions after the presentation.

(d) Organization

Assessor can evaluate whether the presentation is well organized, i.e. at the beginning there should be good introduction to topic, at the middle content and at the end conclusion of the presentation. In addition, they can check whether the presentation was finished on time or whether it is too short or too long and whether, the presentation materials (PowerPoint slide, Overhead Transparencies) are clear & readable.

Even though, there are large number of assessment criteria, and different ways in which they may relate to the allocation of marks. When deciding upon the marking criteria, it is first necessary to decide what exactly is being tested by the oral presentation.

Another important thing of an oral presentation is that it does not leave a record. Unless the presentation is recorded, there is no chance for discussion of a disputed mark. For this reason,

the assessment procedure must be simple so that the assessor can use it easily and fairly from the beginning. This in turn implies that the assessment should operate on the basis of very few assessment criteria – in effect those that the assessor can hold in mind during the presentation. Therefore only the important criteria should be included in the evaluation sheet.

Not only is it important to develop a list of assessment criteria that are appropriate to the task at hand, but the list should also be conveyed to students in advance. Also it is important to make clear to your students how the marks will be awarded for different aspects of the presentation (breakdown of marks).

In this way, they are enabled to shape their skills in a manner that they know is appropriate. It is not helpful to learning if students have to guess the basis for their assessment. Sharing the criteria with students before preparation of the presentation and providing feedback on performance rather than just a grade are both important.

Evaluation of Assessment Criteria

We can identify that most of the assessment criteria listed above are qualitative variables

which cannot be measured in interval or ratio scale. Because the evaluator can only feel the performances of the presenter with respect to each of these criteria but not measure exactly. Therefore, these criteria can only be marked on ordinal scale. Thus, Five-point Likert-Scale can easily be used to evaluate above criteria. Using this scale performances of student can be marked as *Poor, Satisfactory, Good, Very Good* and *Excellent* with respect to each component of assessment criteria.

As described above, importance of assessment criteria will vary from presentation to presentation. Some of criteria might be very important for one presentation than other criteria. In such a situation different weights can be assigned to each assessment criteria depending on the importance of them.

Problems in Assessment of Oral Presentations and Some Recommendations

Whatever the form of oral assessment is used, there are various problems and pitfalls, which must first be addressed.

Difficulty in Deciding Assessment Criteria

When selecting assessment criteria it must refer to the curriculum statement and ensure the

appropriate criteria are used, as some teachers award marks for 'other' criteria such as voice, confidence and structure, which are not part of the set criteria. Therefore, according to the objective of the assessment of the presentation, compare the importance of assessment criteria and include most important criteria in the evaluation sheet.

Double-Marking

Should the oral presentations be double-marked? If so, how should this is done? If the contributions of the marks of oral presentation is less, for the final grade of the course or module, then presentation does not need to be double-marked, as a thumb rule if the oral presentation mark amounts to 20% or less of the entire module. Otherwise, the presentations should be double-marked to ensure fairness and a consistent standard of marking, in which case the following options could be considered.

It may be possible for a pair of lecturers to run the oral presentation assessments together – perhaps two parallel seminar groups could merge together for this purpose, thereby saving a certain amount of time and resources as well as providing the opportunity for students to discuss their ideas with different people. If it is not feasible to spare two members of staff to mark

each individual presentation, it may be possible for the presentations to be recorded, either by tape or video. An external examiner or second marker could then award a mark on the basis of the recording. However, this method could just cause extra complications in terms of arranging and setting up recording equipment, causing students to become more nervous because their performances are being recorded, and distancing the external examiner / second marker from the live presentation.

Alternatively, a second marker could moderate the marking of the presentations. In this case, the moderator would have to attend the presentations of 10% of the candidates, or at least six if there are fewer than sixty candidates in total. This option may not be possible in practice however, as work seen by a moderator should form a representative sample, including those awarded the highest and the lowest marks; but it would be possible if the oral presentations were to be recorded.

Time

Running oral presentations can be very time-consuming in terms of the assessor arranging appointments for each student, in contrast to – for example, having the whole class sit a 3-hour written exam paper.

In addition, when the number of students in the class is high, it will lead to lengthy session, which could also quite easily turn into a dull one both for students listening and for the marker. It is possible to reduce the likelihood of this happening and make the best use of time available by ensuring that each student chooses a different topic for his/her presentation.

In this way, the students will be teaching each other about various aspects of the module and the presentations, being different, will be more interesting to listen to. It may also be advisable to incorporate the oral presentations into the seminar programme at regular intervals throughout the year. This will ensure that the teaching will be more varied and interesting, and the students will become accustomed to this type of assessment being a normal part of their module, instead of an ordeal which they have to struggle through at the end of the year.

Dealing with students who lack self-confidence

Students who are lacking self-confidence are likely to be far more nervous than when sitting a written paper, and therefore likely to give a distorted reflection of some of their abilities.

Although these students feel at a distinct disadvantage when giving oral presentations, they will actually benefit more from the exercise, as it will be invaluable in increasing their confidence and providing them with experience, which can then be used in situations outside the academic environment.

Examiner(s) / class teacher(s) should be prepared to make reasonable allowances for students' nerves, and the marking criteria should reflect the student's abilities as a whole, in which case the mark that they receive should not be unrealistically low simply due to nervousness. For example, a very nervous student may score highly in demonstrating evidence of thorough research and preparation, choosing relevant material, clear knowledge and understanding of the subject, and effective use of visual aids; but badly in overcoming nerves, making eye-contact with the audience, and presenting at a steady pace.

If students are given the opportunity to choose topics which are of particular interest to them, this will help those students who lack self-confidence to enjoy the presentation more, and therefore overcome some of their nervousness.

USE OF CLASSROOM QUESTIONING IN THE TEACHING PROCESS

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Introduction

Classroom questioning has a long and venerable history as an educational strategy. Socratic method (Socrates was one of the greatest educators who taught by asking questions and thus drawing out answers from his pupils) of using questions and answers to challenge assumptions, expose contradictions, and lead to new knowledge and wisdom is an undeniably powerful teaching approach. In 1912, Stevens stated that approximately eighty percent of a teacher's instructing time was spent asking questions to students. More contemporary research on teacher questioning behaviours and patterns indicate that this has not changed. Teachers today ask between 300-400 questions each day.

Questioning is also of interest to researchers and practitioners because of its widespread use as a contemporary teaching technique. Research indicates that the questioning is second only to lecturing in popularity as a teaching method and that classroom teachers append anywhere from thirty-five to fifty percent of their instructional time conducting questioning sessions.

A question is any sentence, which has an interrogative form of function. In classroom settings, teacher questions are defined as instructional cues or stimuli that convey to students the content elements to be learned and directions for what they are to do and how they are do it. In order to teach well, it is widely believed that one must be able to question well.

Asking good questions fosters interaction between the teacher and his/her students. Large amounts of student-teacher interaction promote student achievement. Thus, one can assume that good questions fosters student understanding. However, it is important to know that not all questions achieve this.

Objectives of Classroom Questioning:

- The act of asking questions helps teachers keep students actively involved in lessons

- While answering questions, students have the opportunity to openly express their ideas and thoughts

- Questioning students enables other students to hear different explanations of the material by their peers

- Asking questions helps teachers to pace their lessons and moderate student behaviour

- Questioning initiate the two way communication, developing the relationship between students and teachers

- Questioning students helps teachers to evaluate student learning and revise their lessons as necessary

Questioning can also be used to develop interest in a particular topic. The lecturer can ask questions in relation to the subject at the beginning of the class. If someone wants to deliver lectures on meteorology, s/he can ask few questions about the present environment conditions from the students, i.e. "Today is a hot day. Isn't it? ".The curiosity created by the questioning will make students in interest on the subject.

Sometimes it is not so much the initial question that will make students interested in the material, but showing problems with their initial answers that gets them involved. This can happen when different students come up with completely opposed answers to a question and are stunned to see that could happen, and they begin to argue with each other. Or it can happen when the teacher shows flaws in their answer by showing how their reasoning leads to consequences they would not themselves accept.

Teachers cannot "give" students insight and understanding, but they can more effectively foster (or prevent it) by setting up conditions under which it tends to occur (or be impeded). Insight and understanding are strange phenomena in certain ways. They are difficult to explicate and difficult sometimes to diagnose. What seems like student understanding can always be his/her merely parroting what s/he has heard somewhere else without the teacher's realizing that. Students can be knowledgeable without having understanding, so understanding can often be difficult to diagnose. However, attempt needs to be made because generally it is better to teach for understanding than to teach for factual knowledge or formula application only.

Insight and understanding comes when one suddenly "sees" relationships or implications of material one did not see before, even though one had all the same information or knowledge in some sense that one had before. It is one thing to know something and quite another to see how to use it, or to be able to make use of it. Questions can help determine whether students have insight, and they can even often help students gain insight, as in Socratic teaching.

Types of Questions

(1) Open-ended questions

An open-ended question leaves the form of the answer up to the person answering and so elicits much more thinking or information. If an instructor wishes to encourage student involvement, open-ended questions are preferable because they require a more complex student response. Instructors sometimes complain that students never enter into a discussion that they answer only in monosyllables. This may be because that is the only kind of answers our questions permit.

(2) Close-ended questions

A close-ended question structures the response for the student and can be answered by one word,

often "yes" or "no", or by a very brief phrase. Closed-ended questions are most appropriate when the instructor wants to check whether the students have learned or remembered specific information, or to get or keep their attention.

(3) Divergent & convergent questions

The distinction between convergent and divergent questions is whether there is a single or accepted "correct" answer (to a convergent question) or are there a number of possible answers, many of which may be acceptable (to divergent questions). Convergent questions may expect the student to repeat some conventional wisdom. Divergent questions often require new, creative insights.

E.g. (Sociology):

Instructor: "According to our textbook, in what ways does the present welfare system solve the problems of poverty?" (Convergent question, the range of acceptable answers is determined by the textbook.)

Instructor**:** "What are some ways in which the country might solve the problems of poverty?" (Divergent questions, a wide range of acceptable answers are possible.)

Comment: Notice that question 1 is an open-ended question even though a convergent one. Convergent questions are often closed-ended; divergent questions must always be open-ended.

Some answers to divergent questions may be more acceptable than others in terms of logical consistency, synthesis of relevant data, solutions of major aspects of the problem, etc. The major advantage in asking divergent questions is that the task they set for the students is to think about an issue or problem, not to discover the "correct" answer or the answer the teacher is looking for.

Usually students are more willing to attempt answering divergent questions because they run less of a risk of giving a "wrong" answer. In addition, divergent questions require a "higher" level of thinking (Gronlund, 1985)[3]. They cannot be answered from just memory (unless the student has already been exposed to answers to the question in a lecture, reading, etc.).

We have emphasized divergent questions because they are employed less frequently, even in college-level instruction. It is not mean to

[3] Gronlund, N. E. (1985). *Stating Objectives for Classroom Instruction* (3rd ed.). New York: Macmillan.

imply that instructors should not ask convergent questions. In so far as what is taught at the college-level deals with correct answers, convergent questions are obviously appropriate. What we do wish to caution against is using mainly convergent questions, especially when trying to teach divergent thinking.

Methods of Using Questioning

Questioning process may be initiated from teacher's side or the student side.

(a) Teacher initiated Question

The questioning is started by teacher. Based on the target, questions can be categorized into three groups.

i. *Overhead questions*: The questions are addressed to whole class and any student may answer.

   e.g."Can anybody tell me…? "
   There is a possibility to dominance a one or two students in overhead questioning. However students are not under stress in this type of questions.

ii. *Directed*: In directed questioning, name used to appoint an answerer. Student

dominance can be prevented by directed questioning.

e.g. "Saman, Can you tell me…"
In this case, student attention can be maintained while the authority of the teacher is saving.

iii. *Unspecific*: Questions are asked unintentionally to check overall feedback of the students.

e.g. "Is that clear?"; "any questions?"
Care must be taken in using these types of questions and it is advisable to use unspecific questions infrequently.

(b) As a response to a Student Question

Questioning is started by the students. When a student asks a question from teacher it is quite possible that teacher simply answers it. If teacher's goal is to increase the students' knowledge, this is quite appropriate. However, if the goal is to develop the students' thinking skills, s/he may wish to begin a dialogue or use another technique to help the students discover their own answers. There are different techniques that can be used against students questioning.

1. Repeat / paraphrase the question

This serves two purposes: it insures that the entire class hears the question. More importantly, it lets the questioner check your understanding of his or her question. When teacher has not completely understood, often the student will rephrase or elaborate upon the question. In doing so the student is often "thinking out loud" and may come to his or her own conclusions without further help. This process also gives the other students time to think about the question and possible answers to it.

E.g. (Psychology):

Student: "You've said that learning is defined as changes in behaviour that result from past experience, but can't people learn without any change being apparent?" (Q1)

Instructor: "You're questioning whether learning has to be tied to observable change (Reaction to Q1), right Ann?" (Q2)

Student: "Right. (Answer to Q2) Although given our definition of psychology, I guess it would have to be perceivable in some way." (Reaction to Q2 and Answer to Q1)

2. Redirect the question

Teacher might ask another student (one who might know the answer) to respond or redirect the question to the class in general, asking for an answer or comment, or an elaboration upon the issue. This procedure not only encourages more student participation, but it also implies that peers are a resource for learning.

E.g. (Environmental science):

Student 1: "If people know about all of these harmful effects that pollute the environment, why doesn't the government stop the polluters?" (Q1)

Instructor: "Anura is asking, why our political leaders don't do something about those things that we know hurt the environment." (Paraphrasing it.) "What are some reasons the rest of you can think of that might explain this apparently illogical behaviour?" (Q2, redirecting Q1 to the entire class.)

Student 2: "Well, many of the things people do that cause pollution also have a lot of benefits: factories produce goods we want, provide jobs, etc." (Answer to Q1 and Q2)

3. Ask probing questions

Teacher might respond to the student's question by directing her (or his) attention to a particular aspect of the issue she has raised, or drawing her attention to some previously learned course material that is relevant to answering the question or by going beyond what the student has said in some way. The intent of probing questions is to draw the student's attention to things that may be only implied in her answer, and so help her answer her own question.

4. Promote a discussion among the students

The three previous suggestions usually involve communication between two people, typically the instructor and one student, with the rest of the class simply listening. It may be that teacher will want to involve the majority of students in trying to answer some questions, for example, where there is considerable difference of opinion about the answer.

It is not recommended when a student asks a question is to assign that student the task of looking up the answer. Frequently all this practice accomplishes is to teach the class not to ask questions.

5. Directly answer the question

One obvious option an instructor has when a student asks a question is to answer it. In general, it is not recommended answering a student's question directly if the instructor wishes to foster thinking or problem-solving skills. However, when the questions ask for information that other students in the class are not likely to have (or questions asking for the instructor's opinion), directly answering the question is appropriate.

Directly answering questions takes less time than attempting to have a student or the class comes up with answers. If you choose to answer directly, make your answer brief and to the point. After responding you may want to check to see if you have really answered the question by saying something like: "Does that answer your question?" or "Was that what you were asking?" etc.

Sometimes an instructor would like to use a student's question as an opportunity to bring in a related topic that the instructor wishes to cover, reasoning that students learn better when they see the material as relevant to their own interests. This should be done with care or it may only confuse everyone. Answer the student's

questions first, and then be explicit that you are covering something else that is on your agenda.

6. Postpone answering the question

Students are more likely to learn and remember if the instructor answers their questions when they ask them. Nevertheless, on certain occasions teacher may decide to put off answering a question, for instance: when teacher has very short of time, especially if the answer is complex, or when the material will be covered in an upcoming class, or when the answer is of interest to only a few students. When the material is covered later, call it to the student's attention: "Here is the answer to the question teacher asked before, Nimal ...."

If the answer will not be covered during the course, it is recommended that the offer to answer it after class or make an appointment to get together with the student sometime. By doing this instructor very clearly communicate to all of the students teacher's willingness to try to answer their questions.

7. Discourage inappropriate questions

Usually students ask questions because they wish to learn, but sometimes a student will ask a question to sidetrack the class, to get attention,

or even to embarrass the instructor. Handling such questions presents a dilemma.

If instructor treats them like other questions s/he may encourage the student to ask more of the same, but if teacher turn that student down abruptly teacher may discourage not only that student but the rest of the class from asking any kind of question. In reacting, it is probably best to indicate tactfully what about the question is inappropriate

8. Admit when you do not know an answer

If teacher does not know the answer to a student's question, it is recommended that s/he say so. Although one of the roles of a lecturer is that of "expert" and "information source," admitting that you do not know the answer to a question will probably not damage the students' confidence in you. In fact, giving the students clues about how certain you are of your answers is likely to increase their confidence in you, for example: "The experts agree that....," "as I recall they found....," "I'll have to look that up....," etc.

On the other hand, if you try to fake it, there is a good chance the students will find you out and your credibility will be seriously damaged. Unless the question is tangential to the objectives of the course, we recommend that you

assume responsibility for finding the answer to questions you do not know and report back to the entire class.

Distribution of Questions

The teacher should try to include all members of the group/class in questioning process. Answerer should select randomly and it is not recommended asking question from one or two students at all the time. Number of questions should be balanced among the group members. Questions may be directed to both challenge and encouraged individuals.

How to Ask Questions that Foster Student Achievement

In a research review on questioning techniques, Wilen and Clegg (1986)[4] suggest teachers employ the following research supported practices to foster higher student achievement:

- Phrase the questions clearly and specifically. Avoid vague and ambiguous questions

[4] Wilen, W. and Clegg A. (1986). *Effective questions and questioning*: A research review. Theory and research in social education, 14(2), p. 153-61.

- Ask questions of primarily an academic nature

- Allow three to five seconds of wait time after asking a question before requesting a student's response, particularly when high-cognitive level questions are asked

Waiting time:

If teacher really wants the students to answer the question, s/he must give them enough time. You might want to try one or more of the active learning techniques. Students should be given a few minutes to write out an answer. Students can be allowed to work in groups of two or three to solve the problem, or propose possible solutions. Such techniques require that all of the students are actively working on the answer, not just the smarter or faster students.

Wait or you will establish an undesirable norm. Classes, like any group, fairly quickly establish norms, that is, standards of what will be considered acceptable behaviour in that group. If, in the first week or two of class, the instructor waits only a few seconds before answering her (or his) own questions, the class will quickly learn that when the instructor asks a question s/he does not expect an answer; wait a few seconds

and s/he will answer it herself/himself. Students are often more than willing to let the instructor answer all of the questions.

- Encourage students to respond in some way to each question asked
- Balance responses from volunteering and no volunteering students
- Elicit a high percentage of correct responses from students and assist with incorrect responses
- Probe students' responses to have them clarify ideas, support a point of view, or extend their thinking
- Acknowledge correct responses from students and use praise specifically and discriminately

Sanders (1966)[5] stated that good questions recognize the wide possibilities of thought and are built around varying forms of thinking. Good questions are directed toward learning and evaluative thinking rather than determining what has been learned in a narrow sense. With

[5] Sanders, N. M. (1966). *Classroom questions: What kinds?* New York: Harper & Row.

this in mind, teachers must be sure that they have a clear purpose for their questions rather than just determining what knowledge is known. This type of question planning results in designing questions that can expand student's knowledge and encourage them to think creatively.

ASSESSMENTS IN OPEN AND DISTANCE LEARNING METHODOLOGY

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This article covers the most suitable educational assessment methods in the Open and Distance Learning Methodology. This also includes a brief discussion of the definitions of Open Learning, Distance Education, Distributed Learning, Flexible Learning, and Open and Distance Learning. In addition, it explains that in what ways the students get support for learning under open and distance learning methodology. It surveys some current learning motivation theories and purposes. The latter part of this article explains about the educational assessments, their types and methods.

Open Learning (OL)

Open Learning is defined as a student-centered approach to education that removes all the barriers to access while providing a high degree of learner independence. It offers flexibility for both teachers and learners. Students can study at their own pace which makes it an attractive

option for continuing education. It encourages collaboration between teachers and learners, between learners and learners, and between educational partners.

Summarized below are eight characteristics of Open Learning:

- Who? (Flexible entry provision)
- Why? (Responsive to learner needs)
- What? (Learner can negotiate content)
- How? (Resource-based, alternative strategies)
- Where? (Home, workplace, study centre)
- When? (Flexible start, pace, completion times)
- How effective? (Learner participates in assessment)
- Who helps? (Variety of advice, support available)

The tools and software used in Distance Education (DE) are often quite the same as in Open and Distance Learning (ODL), but there is

a shift in weight from a more teacher-focused environment towards an open learner-centered and virtual learning environment with a focus on distributed expertise and cognitive tools.

Distance Education (DE)

Distance education refers to a mode of delivering a course of study in which the majority of communication between teachers and students occurs non-contiguously, and the two-way communication between teacher and student necessary for the educational process is technologically mediated. Distance education may or may not be based on open-learning ideals. Open learning and distance education as two non-traditional learning approaches that might provide an option for reaching non-traditional students.

Distance education and open learning should be recognized as two distinct concepts. Distance education refers to a mode of delivery with certain characteristics that distinguish it from the campus-based mode of learning. Open learning refers to a philosophy of education providing students with as much choice and control as possible over content and learning strategies. A distance-education institution could be open or closed. An open learning course could be offered on university or at a distance.

There have also been changes in terminology and in emphasis regarding distance education (DE), which used to be the main concept in the 1980s and even in the early 1990s. It could be mentioned that distance teaching (DT) and distance learning (DL) are often substituted for DE in modern educational parlance, but it remains to be seen which of the terms now in use will outdo the others. At present, distance education, distance teaching and distance learning are being used, together with other terms indicated in Figure 1:

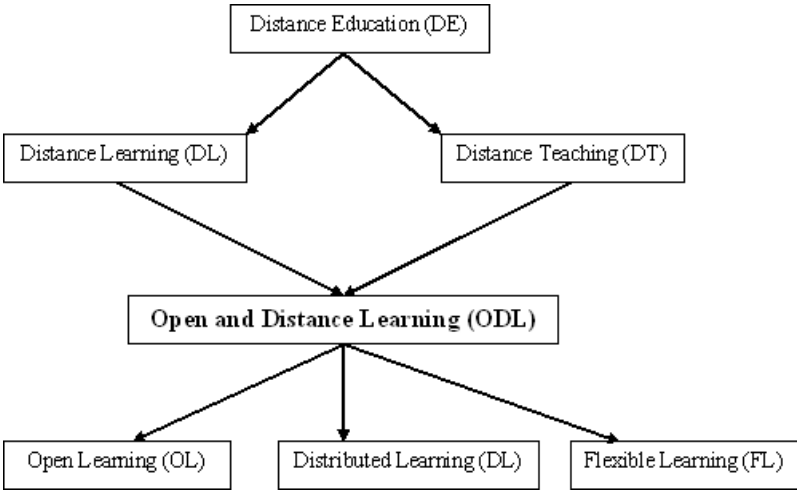

Figure 01: Some changes from distance education to open and distance learning

Distributed Learning (DL)

The "learner - centered approach" to education integrates a number of technologies to enable opportunities for activities and interaction in both asynchronous, i.e., not happening at the same time, and real-time modes.

The model is based on blending a choice of appropriate technologies with aspects of campus-based delivery, open learning systems and distance education. The approach gives instructors the flexibility to customize learning environments to meet the needs of diverse student populations, while providing both high quality and cost-effective learning.

Although many people use the terms 'distributed learning' and 'distance education' interchangeably or assume that they mean the same thing, this is not the case. For example of university-level courses for fully registered, on-campus students where a substantial part is available on the Web or on CD-ROM. Students can access this material at any time, from the campus or from home, which certainly makes the course more easily accessible.

However, these students have to be 'resident', i.e., available for lectures. In this case, this is

distributed learning but not distance learning or open learning since students have to meet all the stringent entrance requirements to be registered as university students.

Flexible Learning vs. Open Learning

Open learning carries suggestions of learning not being closed or blocked off, and so able to be more readily accessed with the opportunity to participate and succeed, while 'flexible learning' carries suggestions of learning being more adaptable and versatile, so enhancing opportunities to participate and to be successful. Openness can be seen as relating more to an outcome and flexibility to the means of achieving this outcome.

The two terms appear to be two sides of the same coin. Flexibility contains dimensions of access (the opportunity to participate), timing and duration, location of study, curriculum factors, and learning support. Open learning (OL), together with flexible learning (FL) and distance learning seem to have formed the concept of open and distance learning (ODL).

Why do students select Open and Distance Learning Methodology?

- Opportunity to study while you are employed
- No upper age limit
- Another opportunity for those who have missed higher education
- Study at their own pace and own place
- Opportunities to develop a variety of skills and good practices through independent self study
- Range of discipline options, including non-science subjects for science students
- Recognition to qualification already obtained
- A degree well recognized as that of any other university
- Affordable fees payable in installments
- A good student support system through a Network of regional and study centers

As the advance of technology requires a greater need for worker retraining, as the population ages, and as educational institutions extend their

campuses, colleges increasingly have to provide to a different type of student in order to stay ahead and serve their communities.

These students are over 18 years of age and most will work during traditional classroom hours. They require flexible learning schedules. They demand professional development opportunities and classes to help them keep up with today's ever-changing work environment.

Students come to university for various reasons. They could be interested in changing careers or they might simply want to expand their knowledge base for work or personal reasons. They might want to expand their cultural background, learn a new language, or start a degree program that was postponed due to family or career needs.

Their main reason for choosing distance education as a delivery method is that they want to learn at their own pace, and at a time and location that is convenient to them. A majority of distance learning students are female and many are single parents who want to stay close to home for various reasons. They might not be able to afford child care or must care for a confined relative at home. Other students are physically disabled and cannot easily travel to campus.

Some do not have the time, money, or educational background to come to university grounds. Distance education can capture an audience that has been virtually unused for many years. It makes education accessible and available. The study system is based on distance learning methodology which is different to the conventional study system that most of you are familiar with. Regular attendance to the university is not expected and is therefore well for those of you who are employed or engaged with other commitments.

Student learning is facilitated through carefully prepared printing course material suitable for self and active learning. Printing course material is supplanted with audio visual learning material to enhance learning. You progress in course is evaluated at different time points using a variety of assessment method such as assignment tests, home assignments and final examinations.

Student support for learning in Open and Distance Learning methodology is provided in many ways:

Counseling:

At the time of registration students will be assigned an academic staff member as a personal counselor, who will assist them to overcome any

problems they may have related to their studies. In addition, faculties generally have student counselors to help students with any other general problems they may face.

Day Schools:

Day schools are interactive sessions where students are given an opportunity to meet the academic staff coordinating the course (their course teacher) and discuss problems they may come across in studying course material. In addition to day schools, universities generally provide support through workshops, tutorial sessions and tutor clinics, which are normally conducted at the end of the semester.

Supplementary Online Support for Courses:

In order to give students additional help and also to get them familiarized with modern learning trends and tools, certain courses in the degree program are supplemented with an online component. Once students register for a course with an online component, they will be informed and advised on how to access and use it.

Laboratory Facilities:

Laboratory facilities are available at university, where students have the opportunity to engage

in practical work. Computer Laboratory facilities with internet access are also available.

Library Facilities:

The library is an important resource for learning. These libraries have a latest collection of books for reference and lending purposes as well as access to past examination papers. Library also provides facilities to view CDs/ DVDs and videos relevant to your study program. Students have free internet access including access to valuable e-learning resources. Universities generally encourage students to make the maximum use of this facility.

Learning Motivation in Open and Distance Learning

A search through the literature on learning skills also tells some uncertainty about what learning skills are and how they may be most effectively developed. There are examples that suggest learners can learn effectively in many different ways – for instance, the studies that suggest students who take notes in lectures do no better than students who do not take notes.

Gibbs suggests that there may be no clear fixed set of learning skills appropriate to all circumstances and all learners, and that the

important thing to do is to help learners experiment and develop study methods that work for them.

Finally, the related field of learning style evaluation, where it was argued that learners will learn more effectively if they find their personal learning style, is becoming discredited as evidence now suggests it is not effective in promoting learning. There is, however, one clear agreement in much of the literature: 'Study skills training that do not consider motivation may result in little skill improvement'.

This is reinforced by findings, which suggest that students who receive stress and self-efficacy training have higher maintenance rates than students receiving learning skills training.

Thus, in searching for a new theory of learner support, it would seem useful to look at learning motivation. Most educators would agree on the central importance of motivation to a learner's success. Indeed, some educators argue that motivation is not only a necessary condition for success but is also a sufficient one.

A learner who is fully motivated will overcome barriers of situation and time, find ways of developing appropriate skills and be able to deal with the stress of study with very little extra

external support – the 'independent learner' concept.

However, most research into learner motivation in distance learning so far appears to centre on asking students for their reasons why they are studying. There seems to have been little research on the effect of learner motivation on student retention or on how learner motivation can be changed by institutional activity. There is some limited evidence that concentrating on learner motivation can increase learner success.

Nevertheless, given the near-universal belief amongst educators in the efficacy of motivation in distance learning, it is worthwhile to review the current state of knowledge of learning motivation and make some suggestions for possible ways forward.

Theories of Learning Motivation in the Open and Distance Learning

There are a number of theories of learning motivation of possible interest to open and distance learning educators, such as:

Self-determination Theory

Self-determination Theory might be the most immediately applicable theory to distance

learners. This highlights the role of 'Study Motivation'. Independent here implies that learners' motivation depends on them having some freedom about their study behavior.

This freedom is promoted by choice, participation in the processes of learning and recognition of the learner's feelings, both positive and negative. Independent Study Motivation is contradicted by deadlines, surveillance, and guilt- invoking commands and ignoring the learners' negative emotions.

Epistemological Identity Theory

It has been suggested that the most effective model of motivation for learning is the 'Epistemological Identity' motivation theory, which is essentially about learners being able to say 'I'm convinced this particular learning is exactly right for me'. Thus, perhaps one of the most effective ways of ensuring learners' motivation is to make certain that they are on the right course for them in terms of level, content and outcomes.

This deduction is certainly matching with the findings from surveys of withdrawn students, which consistently present 'wrong course choice' as the second most important reason for dropping out after 'insufficient time' and support the

contention that merely using course descriptions to try to get potential students on the right course may not be nearly enough to ensure their motivation.

Achievement Goal Theory

Achievement Goal Theory may also have things to tell distance educators. According to this theory there are three different types of goals:

- *Mastery Goals* – associated with reaching competence
- *Performance Goals* – associated with demonstrating competence to others
- *Performance Avoidance Goals* – associated with avoiding looking inadequate

Research suggests that students with Mastery Goals tend to do best. Such goals are promoted by having short-term objectives, 'private' assessments (i.e. assessments not seen by other students), and training in planning and self-motivation.

Performance Goals and Performance Avoidance Goals are those associated with overt competition, perhaps with other students. They may be less helpful in promoting motivation for

some students (although there may be cultural differences here) but the theory as yet does not seem to suggest other ways in which students might be encouraged to change their goal strategies, apart perhaps from the use of formative assessment.

Self-perceived Competence Theory

Self-perceived Competence Theory may also have lessons for distance educators. Students were asked how competence might be achieved – whether through effort, ability, luck or unknown causes. Researchers found that roughly 20% of students had illusions of their own incompetence – they felt that success was due to luck and unknown causes, and felt generally helpless. Roughly 60% of students had realistic views of their competence and another 20% held illusions that they had high levels of competency. Perhaps helping students with unrealistic views of their competencies to develop a more rational view of themselves would help their motivation. But the theory does not suggest ways in which this might be achieved.

Self-concordance model

This theory suggests that there are four different kinds of motivation:

- *External* – driven by outside forces
- *Introjected* – acting in order to avoid guilt and anxiety
- *Identified* – based on subscription to the underlying values of the activity
- *Intrinsic* – driven by curiosity and pleasure

Findings suggest that external and introjected motivations are associated with lower self-esteem, more drug abuse, more television consumption and acting in a selfish and competitive manner. Identified and intrinsic motivations are possibly more effective in promoting successful learning. And others that tend to be similar. Different theories may apply to different aspects of the distance learning situation.

Educational Assessments

Educational assessment is the process of documenting, usually in measurable terms, knowledge, skills, 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.

It is important to notice that the final purposes and assessment practices in education depends on the theoretical framework of the practitioners and researchers, their assumptions and beliefs about the nature of human mind, the origin of knowledge and the process of learning. According to the Merriam-Webster online dictionary the word assessment comes from the root word assess which is defined as to:

1. determine the rate or amount of (as a tax)

2. impose (as a tax) according to an established rate b: to subject to a tax, charge, or levy

3. make an official valuation of (property) for the purposes of taxation

4. determine the importance, size, or value of (assess a problem), and

5. charge (a player or team) with a foul or penalty

Assessment in education is best described as an action "to determine the importance, size, or value of." Without question, assessment is one of the most vexing and taxing issues associated

with teaching. It is also one of the most important, both for students and teachers.

Good assessment and evaluation strategies provide students and teachers with information about how well students are learning and about the effectiveness of teachers' instructional practices. Of course, any kind of assessment or evaluation can only examine a picture or small percentage of the total possible understandings or abilities that students have.

That reality makes it crucial that teachers think carefully about the development of their instructional objectives and the relationship between those objectives and their choice of assessments. Students and teachers cannot benefit from assessments that focus on relatively unimportant aspects of the material presented or demonstrated by students.

Some Types of Assessments

The term assessment is generally used to refer to all activities teachers use to help students learn and to gauge student progress. Some important types of assessment are:

- Pre-testing
- Objective Assessment
- Subjective Assessments

- Self-Assessments
- Interactive Assessments
- Practice Exams
- Group Projects
- Students as audience and peer review
- Participation

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:

- Formative and summative
- Objective and subjective
- Referencing
- Informal and formal.

Formative and Summative Assessments

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

- **Summative assessment -** 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.

- **Formative assessment** - 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.

Educational researchers explain the difference between formative and summative assessment with the following analogy: "When the cook tastes the soup, that's formative, When the guests taste the soup, that's summative".

Objective and Subjective Assessments

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 assessments 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.

Informal and Formal Assessments

Assessment can be either formal or informal. Formal assessment usually implicates 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.

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.

Internal and External Assessments

Internal assessment is set and marked by the institute (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. With external assessment, students only receive a mark. Therefore, they have no idea how they actually performed (i.e. what bits they answered correctly.)

Methods of Assessments

There is a wealth of assessment methods used in higher education to assess students' achievements, but how to choose?

The primary goal is to choose a method which most effectively assesses the objectives of the unit of study. In addition, choice of assessment methods should be aligned with the overall aims of the program, and may include the development of disciplinary skills (such as critical evaluation or problem solving) and support the development of vocational competencies (such as particular communication or team skills.)

Hence, when choosing assessment items, it is useful to have one eye on the immediate task of

assessing student learning in a particular unit of study, and another eye on the broader aims of the program and the qualities of the graduating student. Ideally this is something you do with your academic colleagues so there is a planned assessment strategy across a program.

When considering assessment methods, it is particularly useful to think first about what qualities or abilities you are seeking to engender in the learners. Eight broad categories of learning outcomes can be listed as shown below. Within each category some suitable methods are suggested:

- *Thinking critically and making judgments*

(Developing arguments, reflecting, evaluating, assessing, judging)

- Solving problems and developing plans

(Identifying problems, posing problems, defining problems, analyzing data, reviewing, designing experiments, planning, applying information)

- Performing procedures and demonstrating techniques

(Computation, taking readings, using equipment, following laboratory procedures, following protocols, carrying out instructions)

- Managing and developing oneself

(Working co-operatively, working independently, learning independently, being self-directed, managing time, managing tasks, organizing)

- Accessing and managing information

(Researching, investigating, interpreting, organizing information, reviewing and paraphrasing information, collecting data, searching and managing information sources, observing and interpreting)

- Demonstrating knowledge and understanding

(Recalling, describing, reporting, recounting, recognizing, identifying, relating & interrelating)

- Designing, creating, performing

(Imagining, visualizing, designing, producing, creating, innovating, performing)

- Communicating

(One and two-way communication; communication within a group, verbal, written and non-verbal communication, Arguing, describing, advocating, interviewing, negotiating, presenting; using specific written forms)

The attendance for the classes (Lectures or day schools) is not compulsory; the students can study at their own place. Therefore, the most suitable assessment method in the open and distance learning is informal assessment method. Since this informal assessment methods do not contribute to a student's final grade.

Teachers cannot assess students' performance through assessments which affect their grade (result), but teachers can use any classroom assessment techniques in an informal way to make students attraction in the class. Formative or summative, subjective or objective assessment methods are also applicable in this methodology. Home assignments or small test such as open book test or closed book test can be given to assess all the students those who are registered under the open and distance learning methodology, but those tests should be supervised by the teacher or any academic staff member to verify the reliability.

Learner-Centered Teaching Methodology & Technology To Assess Students

Selected Topics

Student Involvement in Assessment
P. A. Anoja U. Jothirathne

Use of Power Point Presentations to Assess Students' Knowledge
Lal P. Vidhana Arachchi

Use of Oral Presentations to Assess Students
A. M. Keerthi R. Bandara

Use of Classroom Questioning in the Teaching Process
U. G. Anura I. Sirisena

Assessments in Open and Distance Learning Methodology
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Publisher :

Staff Development Center
Wayamba University of Sri Lanka
Makandura, Gonawila (NWP)
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2010

ISBN : 978-955-8746-69-1

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