



## Essentials of Quality in Higher Education Teaching - Assessment

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*When the Quran began to be revealed, the first word of its first verse was 'Iqra' that is, read..*

*To seek knowledge is a duty obligatory on every human, male and female.*

### INTRODUCTION

Before discussing the education issues in relation to “qUaLiTy” lets understand what do we mean by quality?

"Quality itself has been defined as fundamentally relational: 'Quality is the ongoing process of building and sustaining relationships by assessing, anticipating, and fulfilling stated and implied needs.' It can be defined through equation:

$$\text{Quality} = \frac{\text{Results of work efforts}}{\text{Total costs}}$$

Assessment is a continuous process of evaluation that should be simple as well as easily understood and embraced for what it can do to improve student learning and the quality of education. Indeed, results worked out for assessment are key drivers of reform, and thus any efforts to improve student learning must be tied up to this teaching and assessment process. The assessment about the student learning and degree of knowledge is an effective framework that focuses on interpretation of outcome. By understanding philosophy of this framework assessment can be used to denote quality projected in qualitative and quantitative fashion (“A” grade or excellent student, Fail). Assessment could be alarming if processes are not designed in a well thought manner or any fault has over sighted. However, such flaws can be identified easily by checking out fault variance that is gap in the outcome of what was anticipated or desired. This is generally known as surrogated information. For example assessment of a class is taken after class teaching of 15 weeks. Unfortunately, half of the class is flunked in the assessment!!! Now instead of frightening, we must investigate what went wrong with this class? Why it happened so? Basically its problem identification. Either problem lies with teacher, teaching methodology, de motivation of students or class room management problem or what else. With meaningful and fair

assessment we can build adaptive measures that are responsive to what we learn from the results. The initiative taken to identify root cause of failure is the first steps towards the quality. The time, energy and cost incurred in fault finding process will be considered as the cost of quality. Under the given circumstances, It's imperative to go for streamlining the whole system once and commitment is pledged to trouble shoot this problem remains no more daunting.

When Education process is tagged with the quality then it encompasses all other elements invariably responsible to deliver. It starts from an individual (student) to parents, department to the teacher and then university to university policies linked to mission statement. It scrutinizes every major or minor activity associated in the process and before proceeding to the next level.

The quality assessment and its results can also be viewed as information too. The resource person must get to know this information not only to grade students but also to assess outcome of his own teaching efforts. Thus he can identify area of improvement in relation to teaching and developing student interest in the course. Referring back to the same point I urge that whatever assessment methods be adopted care must be taken that it should be compatible and harmonious to the objectives they are referenced to. Assessment method is used and has been used to basically quantify and identify knowledge learnt, retained and understood by the student which was imparted formally by some qualified faculty. The outcome or information derived from assessment definitely indicates degree of knowledge in terms of grades or score. Ideally, in the education setup the assessment process informs the teacher and the students about how well they are contributing to the learning process. In other words assessment measures meaningful learning outcomes administered under fair, reliable and, accurate system. These outcomes must be interpreting information required to determine quality of education as discussed above.

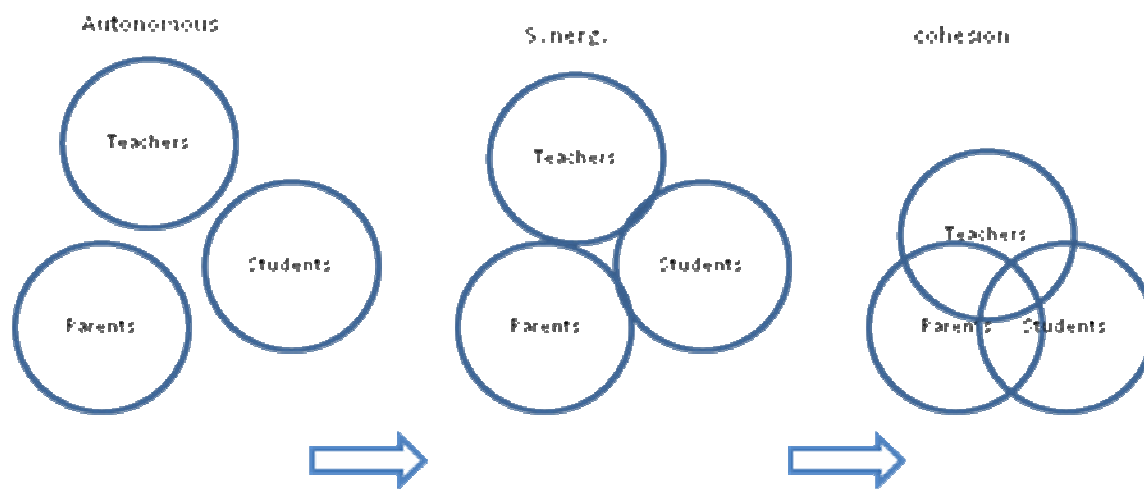
Emphasizing too much on quality even after the past of decades of development does not mean that quality was absent or dormant before. In fact, quality comes through flourishing quality culture which is synonymous to process of arranging systemic things in a systematic manner. Quality indeed is a product outcome but a process also resulting out from relentless persuasion.

The notion that assessment just reflects the scholarly performance of the student only without taking into account vital information as regards to the student attitude, critical and creative thinking etc... I think this notion is not substantial in a way that when student under go evaluation the process has in-

built feature to gauge ability of a student to decipher and disseminate concepts and theoretical understanding about the subject knowledge.

Following quality model signify the relation among the key stakeholders. It depicts the achievement of quality hallmark at the third stage i.e cohesive.

### QUALITY CIRCLE DIAGRAM



### PARENTS' RESPONSIBILITY

Parents play a vital role in almost every stage of their children growth right from childhood to school going age. They are responsible to carve personality and make him responsible and reasonable member of the society he belongs to. In order to do that, certain values must be added such as to distinguish between right and wrong, does and don'ts. Initially parents owe the responsibility to plan for the education of their children before delegating this responsibility to the professionals called teachers. Parents – teacher involvement has positive impact on the student's achievement. Input from the parents is also very valuable in continuing the education process in a systematic way. There could be many means and ways to allow Information flow either side. However, direct interaction is the preferred one. Parents' role is usually preliminary and begins much before the attainment of adolescence age of their child. To do so, they choice the approaches that can best inculcate rudimentary aforesaid values in the character of their children no matter how they go about.

Colleges / Universities are also equally responsible to take parents on board as partners and involve them in formulating their strategic planning for quality improvement in the education. Of course, universities pursuits for quality assessment will safeguard the interest of teachers and parents who have invested resources in building educated society.

It is true that to some extent parents are less likely to go into the details of the University operations such as curriculum, teaching pedagogy, assessment tools and other academic activities instituted by the university yet they expect from the University to return good dividend of their long term investment.

### **TEACHERS' RESPONSIBILITY**

Looking from the realistic purview, assessment is a two way process. It is not only the student who is assessed in the examinations but teacher's performance is invariably gets into the way. Teachers must possess the necessary skills to effectively deliver knowledge to class comprises of different IQ levels. Teachers try to educate students as per prescribed syllabi and assess them regularly through small class tests / assignments. It enables, teacher and students to evaluate their weaknesses and strengths before the completion of academic session or term. All what faculty need to know about the performance of a student is the degree of knowledge and student's command over the given knowledge. At times some teachers do not give due importance to the assessment process as they believe they are the teachers and just concerned with the teaching. Assessment and evaluation is not their jurisdiction

Teacher in the class is a like a captain of the ship. He is a figure head in universities. Minor issues related the student's attitude must be addressed by the teacher through his influence not by the authority. To prevent escalation or external intervention against indiscipline in the class room teachers must get over the issues by portraying himself as the role model though some time there are stubborn students in the class who give torment time to the teachers by deviating his concentration from the lecture or impairing the class time through unnecessarily questions etc... Only in extreme situation where academic integrity is at stake should be referred to the university management or disciplinary committee for intervention and action.

### **STUDENTS' RESPONSIBILITY**

Heavy responsibility lies on the students to behave and act in a manner that unleash their personality and ethical values accepted by the society. They are considered dual members of the University community and society at large. The student's primary responsibility is to study and strengthen their

learning capacity and comprehension to be able to solve the complex problems of the practical life. It creates a vivid picture of everything around us and paves the path leading to disillusionment. To allow students to pursue successfully their educational, professional, and personal objectives, the University identifies responsibilities expected of students as members of their learning community regardless of their color, race, creed, religion or location. Students have the opportunity to learn freely under the conducive and propagating learning environment.

Students are also responsible to remain focused on their studies and do their best to produce good results. They should refrain from any misconduct activities on/off the campus. They are expected to respect the endeavors of academic and administrative pillars. In this regard, important information are generally provided to the students by the University during first few days of their semester or separately through orientation session.

Students are assessed regularly in one way or the other by the teachers. Their attendance and class participation do carry some weight, in addition to final exam marks that are accumulated in the total score of the student. To ensure and maintain the quality standards of the academia university closely watch the student's academic performance by evaluating learning content of any course for which they have registered themselves. Those who perform low are warned and even if they do not escalate their performance or score to the minimum criteria set by the university they are advised to seek extra consultation from the concerned teacher or chairman department to make up deficiency.

### **UNIVERSITY'S RESPONSIBILITY**

Schools and Universities define the cardinal framework of education. It lays the Quality creeps into education when educational institutions universities show their commitment by organizing best resources and facilities for its students. These facilities generally refer to human resource and learning resources. Good universities very wisely reflect their commitment to in their mission statement and after having set this mission their entire policies and strategies will govern according to the quality principles.

It is a fact that student's performance is also influenced by the University policies. For example, student wishes to transfer his credits to some other universities it's imperative that this university is accredited by any regulatory agencies and has approved curriculum. In order to attract and motivate students for education they need to design their programmes that have greater demand in the job market. Students

must also acquire and equip themselves with the skill set required to do things in business life effectively and rationally.

Time has come that Institutions must move their focus from traditional teaching to interactive learning process for value addition in the student's character and practical performance. Universities have been the platform for the students and teachers to initiate sacred process of learning knowledge, wisdom and civic values that is the core essence of education.

### **EDUCATION SYSTEM OF PAKISTAN**

Pakistan emerged as an Islamic Republic state on August 14, 1947. It has an area of about 796,095 Sq. kilometers. The capital city of Pakistan is Islamabad. Pakistan extends from the Arabian Sea 1600 kilometers northward. It's neighboring countries are Iran, Afghanistan, China and India. A number of regional languages are also spoken in various parts of the country. National language is Urdu where as English is used as official Language. The medium of education in higher education and professional colleges / universities is also in English.

Unfortunately Pakistan got a weak educational setup at the time of independence. Educational institutions were insufficient. Since then strenuous efforts have been made to develop education system that is compatible with the international standards. The education system in Pakistan is divided into government supported schools, private and religious schools.

Education in Pakistan is divided into five levels: in lurch

1. Primary Level Education (grades 1 - 5) Age 5 – 9 years
2. Middle Level (grades 6- 8 ) 10 – 12 years
3. SSC (grades 9 – 10)

*Exams conducted by The Board of Intermediate and Secondary Education*

4. HSSC (11 – 12)
5. University (Graduate and post graduate degrees)

1. Cambridge International Examinations (O / A Level )
2. Technical and vocational institutions (after grade 5 or 8)

Currently examinations are usually held annually in most of the public colleges / universities however, these universities are switching to semester system for making compliance to Higher Education Commission guidelines. On the basis of results of these examinations, it is certified that whether the student has acquired required level of knowledge or not. Although required level of knowledge seems a

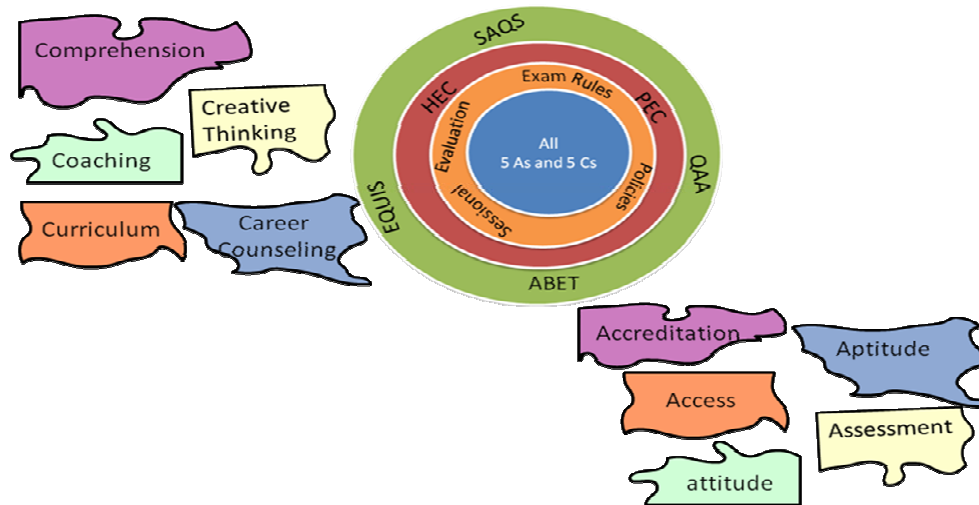
bit vague terminology yet it is good enough to reflect students' academic performance in terms of marks or grades. Successful students are promoted to higher classes / grades and failures are retained in the same class / grade. Till SSC assessment and evaluation is generally conducted internally by the respective school / colleges or education department.

Assessing the growing need of qualified teachers Government has done remarkable work in this area. In view of dirt of qualified teaching resources Government has opened up lots of training institutions committed to providing training to the trainers and re-orient teachers to conversant them with latest teaching pedagogy especially at the grass root level. Primary Teaching Certificate (PTC) and Certificate in Teaching (CT) are just few to mention here. Private sector has also undertaken very concrete steps to upgrade teachers' skill set and adaptability with cutting edge teaching and assessment techniques through the exposure of international practices.

Despite of two prone efforts by the Government, education system of Pakistan is still besieged with multiple issues and graved challenges. Major challenges are lack of physical facilities, shortage of qualified teachers and high dropout ratio of students from middle and secondary schools. Split society in urban and rural areas has contributed lot in aggravating problems. Another worst example is the mushrooming of public and private schools which arbitrarily set the own curriculum, textbooks and dubious assessment methods. These school/institutions do not follow the prescribed instructions and playing with the career of the students. How with the outdated curriculum and theories students can find solutions of the present era. This all eventually culminates on poor planning on the part of education departments and regulatory agencies who neglected the most crucial sector of the economy for a long time. This bad governess in executing and implementing educational reforms and policies has become mockery now.

### **Education Catalyst Mode**

The model describes how 5 Cs and 5 As magically works to influence upon teacher – student outcome based quality in higher education

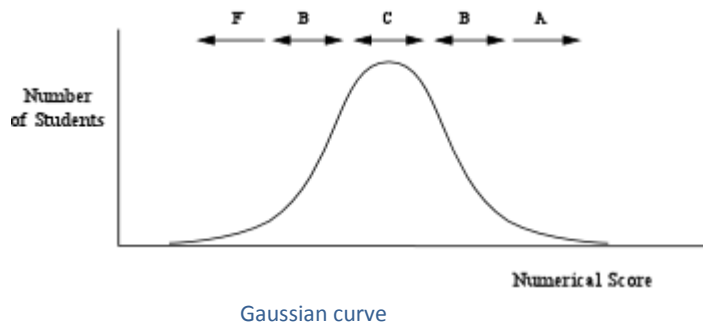


### ASSESSMENT AND ASSESSMENT METHODS

Assessment and evaluation is an integral part of learning and key issue in education especially. In Pakistan, there is no single or standard method that has been used consistently in the assessment of students. Multiple assessment methods or their combinations have been tried to measure the quality of knowledge learnt by the student. So far what we have been getting out of these hybrid assessment methods is not the quality but the quantity. For instance, how many passed or failed in a course Vs. how many of them create a theory, present the model etc...

In wake of numerous alternative methods adopted by private and public schools students have suffered a lot and they are ambivalent that how they will be assessed and evaluated in the next grade. Public sector schools/Universities thrust upon setting an exam from the whole syllabus no matter chapters or the contents have been adequately covered or not. However, they try to hide this thing by setting a question paper which gives the choice to the students to attempt any specific no of questions out of given questions. In private sector schools/Universities, choice is less likely to be given to the student and he/she has to make up complete syllabus ready for examinations.

Generally comprehensive examinations or semester examinations are considered measurement tools in higher education. But there is wide range of other grading tools available to quantify given knowledge of a student such as GAP method, Gaussian curve, Standard Deviation Method, relative grading and absolute grading.



#### *Absolute Grading Method*

Grades	Marks	Remarks
A	90 and above	Excellent
B	80 - 90	Good
C	70 – 80	Average
D	60 - 70	Passing
F	Less than 60	Fail

The examinations taken under the semester system generally include assignments, quizzes, presentation, case study, research papers, project, labs, demonstration, mid term etc... for every assessment variety of instruments are applied as per the requirement. That is why, assessment and evaluation is gaining pivotal importance internationally owing to promoting continuous assessment of a student.

#### **ASSESSMENT SYSTEM OF UMT**

Assessment is carried out primarily to strengthen the learning and teaching process under semester system. At UMT we do have formative assessment called sessional evaluation. Its kind of feedback highlighting area's of weaknesses for the benefit of students and teachers. It also aligns the derailed activities of the academics and establishes strong bond between the students and teachers. Programmes of the University were designed earlier for trimester system have been converted into semester system to make it compatible with the leading Universities of the world. Semester system has lots of verity and flexibility which are preferred over the annual system. It is more intensive and rigorous system because it encourages and tie up students in relation with the teachers who very often interact

with their teachers in quick successions for problem solving. The essence to adopt this kind of systems is indeed to reap the benefits of underlined in the philosophy and vision of the university. Personal and professional attributes of a teacher is also value added feature when the assessment under semester system gets in the way.

Another beauty of the semester system is that it extends the flexibility to the students to decide upon course load as manageable by them. If any student gets a poor grade in a course he can repeat that course in the summer semester designated for grade improvement and deficiency removal purpose. Thus student remain with the class/batch while improving GPA/CGPA. Under semester system students are free to move to some other universities on their accord by virtue of credit transfer policy.

In our graduate program most of the students get a job while studying. It yields dual benefits. One, the student gets a chance to relate his knowledge and bookish theories with the real life. Secondly, to continuing his educational pursuits students do internship / apprenticeship as part time from where they can and make good money to meet their University expenses.

Two methods are employed for student assessment during the semester

- Sessional work
- Final Exams

In sessional work students are evaluated through different techniques of assessments. It carries about 65% weight. Final Exams conducted at the completion of a semester carries 35% weight. Grades are worked out on the basis of composite score i.e sessional evaluation plus final exam score.

Theory Course	
Instruments	% Marks
Assignments	10 – 15
Quizzes	10 – 20
Class Participation	5
Attendance	5
Mid Term Exams	25 – 35
Final Exams	35 - 40

Lab	
Instruments	% Marks
Project	40 – 50
Attendance	5
Mid Term Exams	10 – 15
Viva Voce	5
Final Term	20 - 25

## GRADING SYSTEM AT UMT

UMT is using relative grading scheme. Teachers are supposed to announce the student's sessional evaluation in the class before the closing of classes. Final Term Examinations are conducted by Office of Controller Examinations as per the date sheet.

A grade is considered to be a testimony of competence that should reflect student's performance in a course as accurately as possible. In fact, it's the human psychology that how much efforts must be put in to measure intellectual progress with standardized objective criteria. Moreover, the key feature of any grading system in fact based on its fairness, transparency and rational. Grades are the indicator of particular subject knowledge and skill being taught. Pedagogy also greatly impact on the dissemination of knowledge and must be attuned to make it effective for boosting the student performance at the desired level.

Unlike absolute grading scheme, UMT is using relative grading scheme which allows for screening students according to their performance relative to their peers in a particular class. Relative grading aims to compensate for an examination that student find much easier or harder than the teacher expectation. Relative grading is carried out by taking difference of highest and lowest marks of a class divided by total letter grades. It gives a numerical value to be used in creating equal intervals or ranges. Student results / marks are then compared with these ranges and corresponding grads are allocated.

Those who fall between the top ranges get high grades like "A", "A-". Those who concentrate in the middle range get moderate grades such as B or B- last category is of those students who barely pass the course are placed in "C" or "C-" category. Any one below than this is awarded "F" grade that is a failing grade and reflect the unsatisfactory performance.

Equation for defining the ranges under the relative grading system is as under:-

$$I = (\text{Highest Marks} - \text{Lowest Marks}) / \text{Total Letter Grades}$$

Where "I" denotes the interval to be used for groups / ranges

Following table illustrates comparison of students' performance enrolled in two sections "A" and "B"

*Section A*

Grades	A	A-	B+	B	B-	C+	C	C-
Marks Range	87 - 85	84 - 82	81 - 79	78 - 76	75 - 73	74 - 72	71 - 69	68 - 66

*Section B*

Grades	A	A-	B+	B	B-	C+	C	C-
Marks Range	79 - 77	76 - 74	73 - 71	70 - 68	67 - 65	64 - 62	61 - 59	58 - 56

Relative grading has several advantages over the other grading methods but certain disadvantages are also associated with it such as

- Interpretation of grades with respect to marks is vague
- It does not define Min & Max threshold, therefore intervals between the grades becomes meaning less and does not represent fair evaluation especially if the class size is too small or too large
- Skewed grading

**COMPUTING CPA / CGPA**

In education grade is a teacher's evaluation of a student's work. It can be expressed quantifiably, and calculated into a numeric grade point average (GPA), which is used to denote the intelligence level of the students. Student performance in a semester system is indicated through cumulative grade point average (CGPA). By definition, CGPA is the sum total of all the grade points (GP) achieved by the student divided by total credit hours earned. GPA may only refer to the student's performance in a single semester whereas CGPA is the overall performance of the student

Following table indicates the Grades and corresponding grade points required to computing GPA/CGPA of the student.

*Grades and Grade Points*

Grade	A	A-	B+	B	B-	C+	C	C-	F
Points	4.00	3.70	3.30	3.00	2.70	2.30	2.00	1.70	0.00

How grades are computed?

Subject	Letter	Cr.	Grade	Total	
	Grade	Hrs	Points	Points	
Management	A	3	4.0	3 x 4.0	12.0
Marketing	B	3	3.0	3 x 3.0	9.0
Introduction to Finance	B	3	3.0	3 x 3.0	9.0
English	C	3	2.0	3 x 2.0	6.0
<b>Total</b>		<b>12</b>			<b>36</b>

$$\text{GPA} = \frac{\text{Total Points}}{\text{Total Cr. Hrs}} = \frac{36}{12} = 3.00$$

Subject	Letter	Cr.	Grade	Total	
	Grade	Hrs	Points	Points	
Management	A	3	4.0	3 x 4.0	12.0
Marketing	B	3	3.0	3 x 3.0	9.0
Introduction to Finance	F	3	0.0	3 x 0.0	0.0
English	C	3	2.0	3 x 2.0	6.0
<b>Total</b>		<b>12</b>			<b>27</b>

$$\text{GPA} = \frac{\text{Total Points}}{\text{Total Cr. Hrs}} = \frac{27}{12} = 2.25$$

### CHEATING AND PLAGIARISM

Cheating is a natural tendency in most of the students. They are forced by the instinct to find possible means and ways to steal the information of other students be it home assignment, quiz, reports or comprehensive assessment. They do attempt to cheat other's work. According to psychologists there is no single reason that can best describe the state of a student when he intends to cheat. But there are some mechanisms definitely within each of us which triggers us to commit that. One reason could be that student was not prepared at all for which he is going to be assessed. Instead of overcoming his indolence he finds short cut means to save his honor before the teacher and class by producing someone's work.

Unfortunately, despite of strenuous efforts, this practice cannot be put to an end rather internet has become blessing in disguise for such students. Nevertheless, we cannot simply ignore this malicious act from the students' side. At least we can make strength rules against this offence and do not relax anybody who is found convicted of this offence. In Pakistan, there are various agencies who have laid down very comprehensive rules against cheating and plagiarism. Following are few regulatory agencies of Pakistan who have already undertaken this issue.

- National Committee on Examination System
- Punjab Public Service Commission Examination Reforms Act 1977
- Higher Education Commission of Pakistan (HEC)
- Public examination systems (Boards, AGKP)

UMT has also taken up this issue as a important agenda and constituted a campus wide unfair means cases committee which deals with malpractices cases firmly when reported.

UMT expect from its students to be honest and committed to their cause. It does not believe in forced inculcation of moral values rather provides an atmosphere conducive to nourishing these values with the greater sense. However in order to keep a standardized code of conduct and ensure fair and impartial examinations, certain rules have been laid down to deal with any unpleasant situation.

- Grade "F" in the course; and/or
- Fine upto Rs. 10,000/-; or
- Suspension from the Program; or
- Expulsion from the University.

## **POBLEMS AND RECOMMENDATIONS**

The upfront challenges of higher education in less developed countries (LDC) are not the teaching problem but teaching the wisdom. Teaching and testing go hand in hand and considered integral part of any education system word wide. But by default, the testing system is not immune to certain gray areas in highlighting those deficiencies which are detrimental to effective assessment system of a student and a teacher.

In view of the above, there is a sheer need of evolving a unique assessment system that more focusing the quality of application of the learned knowledge to solve day to day business problems instead of quantitative reflection of outcomes of assessment. The system must be capable of highlighting strength and weaknesses in relation to pedagogy and usefulness of knowledge in changing the life style of the most precious and intelligent asset - human beings.

### **Implementing the Education Catalyst model**

No education plan can be designed nor implemented until it safe gauds the interest of its all stakeholders. Parents, Teachers and Students are basically responsible to understand their responsibilities and steer their all energies for bringing education in their personality, lives, economy and businesses. Of course an educated society can rid the LDCs from many socio economic, political, regional and geographic problems and foster the ongoing development plans. It is needless to say that education reforms can be implemented successfully without the mutual cooperation of each three entities.

### **Radical changes at the grass root level**

Unless paying heed to grass root level problems existing the education system it cannot be claimed that a robust or super duper system will be of any worth. If we have to cure any disease it is not possible without examining its root causes. Similarly to deem of any good quality education system, we have to find out what preventing it from being a good system. Solution will come out automatically. There are many problems as regards to our education structure. First of all, education has never been given a priority in the planning commission. There is no rationalization in the scheme of studies that give you a pathway for the next class.

### **Discrimination on the Basis of social status**

It has been unfortunate part that Pakistani education system is socially biased. It does not give the same education to all. Within the education system there are standards in the education. Those who can pay more get the more quality education as compare to those who do not have enough money but might have enough interest. This class suffers from discrimination and remains deprived from access to quality education. Due to commercialization of schools, society has been dissected into affluent and destitute classes. With this kind of social system how country can progress in the field of education. Pakistan is already in the grip of daunting challenges of low HDI, economic recession, low per capita income and increasing unemployment.

It is suggested that without the good governance and bulldozing disparity low development countries (LDC) can never turn dream of prosperity and well being into reality. It must be the first priority of the Government to provide basic facilities like medical, health, shelter, justice and education to all without any discrimination.

### **Medium of instruction**

Another gigantic problem to the Pakistani education system is multiple medium of instructions. No specific medium of education is being followed at the school levels consequently students have great difficulty in understanding concepts from the books which are published generally in second language such as English.

### **Relationship with theoretical and practical knowledge**

Knowledge is the most important and powerful thing in one's life. It leads us to enlightenment.

Knowledge can be divided into two categories due to its distinct nature. Religious knowledge and secular knowledge. Secular knowledge is essential for shaping up worldly life and day to day affairs.

Religious knowledge is also integral part of our learning process because it makes our life successful here and hereafter. In most of the LDCs only bookish knowledge is being imparted to the students.

Unfortunately our education system is pursuing for quality without predefined objectives. Lessons are taught but real lessons of life are not taught. Students do not know what they are being taught has any relevancy to their field or industry.

**Grades are not the exact indicators of quality measurement**

Students and teachers must understand that grades do not reflect the capability of a student to handle all sorts of future challenges thus grades and exams should not be given as much weight as the subject knowledge and insight is concerned.

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