

Semesterisation, New Training Programmes, Choice Based Credit System, Continuous Assessment & Grading for Undergraduate Programmes in Kerala

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0. Opening Remarks

The Kerala State Higher Education Council has recently adopted the report of the Committee on Restructuring of Undergraduate (UG) Education in Kerala. As the academic community is gearing up to adapt the same, certain ideas embedded in the report requires explanation in plain English. This article attempts to do exactly that.

1. The Four Pillars of the UG reforms

The four major aspects of the newly proposed reforms are:

- Semesterisation
- Choice-based credit system
- Continuous assessment
- Grading

There are two ways of looking at the reforms, either as a mere structural transformation, or as a philosophic transformation. While both looks are required, all the above reforms suggested by KSHEC should be viewed and implemented with the aim of a transformation in academics - a transformation where the education system changes from a teacher-oriented to learner-oriented mode, a transformation

where students change from being passive recipients of knowledge to becoming active participants of the knowledge imbibing process. A major curricular reform would be required in all UG programmes in this context, which should weave such transformation into the programme objectives, syllabus, assessment strategies, curricular transaction, educational technology and student management. All the proposed reforms are relevant only in the context of such microscopic transformation in academics being ensured.

2. Semesterisation

What should be the ideal length of an academic term? 3 years? 2 years? 1 Year? 6 months? 4 months? ... All the above models have been used/are in use in various Universities, year system being the rarest internationally. In Kerala, even 3-year term was in vogue once, for the BA/BSc Honours programme, a few decades back. The examination at the end of the BA/BSc Honours programme supposedly covered all that was transacted in the 3 years of the course. One can imagine what a

demand on memory recall would such a 3-year final examination have created. Also, it can be any one's guess as to whether examination questions in such an examination could have achieved a comprehensive coverage of topics studied.

An year system best suits the administration of examinations. However shorter terms seem to be more suited academically, as (i) shorter terms will have relatively less demand for memory recall (ii) questions can cover topics more comprehensively (iii) it is easier to ensure cohesive learning experience and momentum for shorter terms. As already noted, this requires a careful transformation in teaching and learning practices.

In Kerala, semester system has been in use for BTech courses since late 1970s and trimester was tried out in Kerala Agricultural University for some time. Almost all PG courses in various Universities in Kerala run on semester system. It is however obvious that what is applicable to PG courses need not be easily applicable to UG courses, in the same manner. UG courses have more number of students, have students who are entering the college system for the first time, and who remain in the system for 3 years. Hence semesterisation of UG courses would naturally present its own problems.

3. Choice-based Credit System

Our traditional degree courses are reminiscent of a served lunch, or the traditional *sadya*. Irrespective of the need and taste, the same food is served for all with no choice for the main course, with a few choices in the final course! It has its advantages and disadvantages. If people take the full course, some balance of diet as envisaged traditionally will be met. Also the logistics of administering the lunch is simplified. But for those who want to meet their needs only, it is no good. The new choice based system is like a *buffet lunch*, where students choose the papers of their choice, within certain broad restrictions (if we let kids eat an unrestricted *buffet lunch*, they might end up eating just chicken and ice cream, a nutritionally unbalanced meal!). In a choice-based credit system, we divide the papers into *core* and *elective* groups and ask students to choose, say, 60% of their papers from core group and the rest from electives. The electives could ideally come from other

Departments also. This ensures interdisciplinary teaching and learning. For instance, in an ideal situation, a student specialising in mathematics can opt to learn a paper in Sanskrit, or Ethics or Introduction to Life Sciences, if she so desires. A horizontal integration of learning experience across disciplines will thus become possible. This suits the changing knowledge scenario. Today, no biology student can ignore mathematics and computer science, no computer science student can ignore linguistics, no biology student can ignore ethics.

Naturally, the logistics of administering the courses under a choice based credit system will become more complicated especially, in view of shortage of teachers and also infrastructure. But the system is more fair to the student, permitting her to seek knowledge that suits her varied interests, aptitudes and also ensures the interdisciplinary knowledge requirements of the present times.

In the new system, "papers" will be referred to as "courses" and BA/BSc "courses" will be referred to as BA/BSc "programmes". One of the major features of the new system is that not every paper (course) is treated equal. While designing syllabus, courses can have weightages defined. These weightages are called credits. A paper/course which has 4 contact hours per week per semester is taken as a full paper/course and is considered as having a weightage of 4, or as a 4-credit course. A paper with 2-credits is like a half paper. An example is a seminar. Dissertation Projects typically carry higher credits. Instead of adding all marks directly, they are meaningfully multiplied by their weightages (ie, credits) to arrive at the aggregate (we will soon see that we do away with marks). This is indirectly equivalent to giving more marks for more important papers or for activities such as dissertation projects.

In the new system, instead of specifying number of papers/courses, only the total credits to be earned is specified. If a 6-semester UG programme specifies credit requirement as 120 credits, it means that at an average 20 credits need to be earned each semester, which can be earned in different ways such as: (i) five 4-credit courses (five full papers) or (ii) four 4-credit courses and two 2-

credit courses (four full papers and 2 half papers) or (iii) five 3-credit courses and one 2-credit course.

A vast majority of Universities and higher education institutions in the world (including Central Universities, IITs and IISc in India) have been practicing the credit system for decades. In Kerala also, most Universities practice the credit system in their PG courses, and also for selected UG courses³. In an age where student mobility is on the increase, this system will ensure that our academic programmes are understood well by other educational institutions and students find it easy to transfer their credits across institutions.

4. Continuous Assessment

In the year system, assessment of students is through end-of-the year university examinations. Even though class tests are practiced, as they do not form part of formal assessment. Also class tests are often a miniature of the end of the year examinations. A continuous assessment in semester system (also known as internal assessment/formative assessment) is spread throughout the duration of the course and is done by the teacher teaching the course through various means including written tests, MCQ (multiple choice question)-based quizzes, mini projects, presentations, group activities, field visits etc.

The most important aspect of continuous assessment is that continuous feedback on teaching and learning are available to the teachers /students which are crucial in readjusting the teaching and learning accordingly.

By its very nature, continuous assessment can afford unstructured assessment tasks spread across a span of time and also reaching out of the classrooms, like case studies, projects, field visits and other such activities. Typical end-semester assessment attempts to measure direct and indirect cognitive achievement alone. Continuous assessment makes it feasible to measure non-cognitive outcomes also. This implies taking into account the specific conditions of the class room and also the teaching style of the teacher and learning style of the students and hence is feasible only if conducted by the teacher concerned. Indeed, for the same reasons, there is strong case that all assessment must be made by concerned

teachers - those who teach must mark. Teaching, learning and evaluation are inseparably linked.

Continuous assessment is often discussed in the backdrop of (i) **victimisation** of students by some teachers and (ii) **generous granting of marks** in profit-motivated institutions. A very transparent and somewhat structured assessment system (structured to the extent that it does not kill the creativity in assessment envisaged in continuous assessment) will address the victimisation possibility which must be seen as one-off incidences, anyway. Transparency can be achieved by publishing assignment questions and grading policies in advance. There should also be clear grievance redressal system in place. When assignment are given, there must be clear guidelines as to how to earn each grade. See for example the assignment guideline below:

This assignment is aimed at giving the students an opportunity to practice some activities that will enable them to acquire knowledge/statistics related to some topics covered in the syllabus. The starred questions may require self-study of topics not covered in the course. Friday of the 16th week Delayed submission will attract 5% less marks/day. Any request for delayed submission will be entertained only if the work completed as on the deadline is submitted. Grading would be as follows:

- A : Evidence of exceptionally keen involvement and successful completion of all tasks.
- B : Evidence of keen involvement and attempt to solve, at least some of the starred tasks and successful completion of other tasks,
- C : Successful completion of all tasks except starred ones
- D : Partial/Satisfactory completion of all tasks except starred ones
- F : Unsatisfactory

Scientific Normalisation Procedures (for instance, conversion to z-scores) adopted by the University can, to certain extent, address the generous granting of marks in profit-motivated institutions.

Continuous assessment to the tune of 40% has been practised in professional courses in Kerala for the past 30 years. The complaints are very few (indeed, there could lot of untold complaints) considering the fact that over 25000 students in each year of four year courses, totalling 1,00,000 students, are under it anytime; currently. It is also to be noted that the democratic movements of students and teachers can play a positive and balancing

role to prevent victimisation and also in preventing false allegations of victimisation.

Appendix - I gives the UGC recommendation on Internal Assessment. These guidelines complement and supplement some of the thoughts presented above.

5. Grading : The Basic Idea

The migration from marks to letter grades proposed by the KSHEC in UG restructuring is a major transformation in academic practices in Kerala. In high/higher secondary schools and in almost all PG courses in Kerala, grading of some form is already in place and a vast majority of Universities and higher education institutions in the world (including Central Universities, IITs and IISc in India) have been practicing grading for decades. The grading system proposed in the UG restructuring is not just a mere translation of range of marks to letter grades, but a comprehensive and philosophical shift in assessment practices.

At the bottom of the practice of grading is the scientific outlook **that measurement of educational outcomes is subjective**. The subjectivity arises from many sources such as:

- the varied learning experiences of students
- the varied teaching style of teachers
- the varied linguistic skill of students
- the varied socio-economic background of students
- the subjective choice of questions in examinations
- the subjective assignments of weightage to questions
- the subjective interpretation of marking schemes by examiners
- the human element in making assessment

Even the so-called objective type test (MCQs) are subjective in the above sense. Due to long standing history of assigning numerical scores during evaluation of answer scripts, sometimes marks are taken too seriously as an indication of the exact measurement of the students' achievement. How else can we fail a student who scores 39 and pass one who gets 41? In most cases a revaluation by the same examiner might result in 39 becoming 42 or 41 becoming 37. This is not a fault of the examiner, it is the natural subjectivity of assessment coming to fore. How fair is it to compare students bases on such a subjective measurements? If we accept the premise that **educational measurement**

is subjective, then conscious steps are required to prevent disadvantage to the student community. The focus thus falls on reducing (not removing) this subjectivity.

One way of reducing the subjectivity is to consider an alternative to the 0-100 point scale of differentiation. Even though we mark answers in shorter ranges, this final scale cannot be justified, as ultimately this is what we depend on. Some means of using a shorter scale at every level of assessment would be reasonable, given the subjectivity that has already been pointed out. It would be fairer to classify students into 5 or 10 categories than 101 categories as the 0-100 mark range does. **If we choose a short differentiation range such as 0-5 and replace numeric figures with letters, we have the skeleton of a grading system.** Grading only does a coarse level of categorisation and hence is a *lesser evil* (recall that no system can claim perfection in assessment).

The reform suggested by KSHEC is to use a 5-letter grade scale for evaluating individual answers in answer scripts/ assignments etc, and for awarding grades to each course. A 7-letter grade scale is proposed for overall programme performance¹. A question that arises immediately is whether grading is **simply marking in disguise**, confined to a short range. **The answer is Yes and No.** Yes, since we can arguably replace letter grades with numerals. However these are not exactly the same. **Consider two questions with maximum marks of 3 and 7 respectively. To mark each, we have to reset our mental scales, whereas to grade them, the examiner's mental makeup can be the same.** If we decide to give 2.5 to 3 marks for the best answer in the first case, it is, say, 6-7 marks in the second case. However in grading, both are A. The evaluation of the quality of an answer and the weightage to be given to it in assessment are thus separated in grading.

Informally, a general grading scheme may be specified as follows:

- A - Wow ! Perfect answer or extraordinary expression of understanding
- B - Very Good, but not extraordinary
- C - Good
- D - Fair/Satisfactory
- E - Poor/Unsatisfactory

7. FAQ

This note has covered most of the issues related to grading. This section compiles some frequently asked questions and responses, and is expected to continue to grow.

- ? **One argument against grading is that grading "grades" students (hinting that this is a unwelcome categorisation - the objectionable *tharam thiruvul*). Is this fair?**
If one were to accept this argument, then we should first attempt to scrap awarding Distinction, First Class, Second Class etc which is practiced now, as they also categorise students. Why this, marks themselves are very fine categorisation of students!
- ? **How can we select students for admission to higher classes based on programme grades? What if all students who apply have the same grade?**
One way is to use the cumulative grade-point-average of the programme to differentiate the students. But then one may criticise that we are relying on marks- in-disguise. This is not completely true, as the weighted averaging is a meaningful aggregation of grade points only and does not directly correspond to subjective numerical evaluations. However, if one desires to ignore this altogether, then grades themselves can be relied on. If there is a tie, then number of A grades, then number B grades etc can be used to break the tie. Let us also note here that it is a merit of the grading system that there is more chance of a tie when we compare students based on overall grade. When we ruthlessly reject a student who has 0.1 % mark over another, we are relying too much on a subjective judgement. So, a tie in grades is not a bad problem to face.
- ? **Students can slip from one grade to another at a difference of 0.01 in GPA Does this**

mean that grading has the same problem of unfair border lines?

One of the consequences of the differentiating is to have a border line which always will have to be unfair to cases too near the line. This is true for grading also at some level. As we could demonstrate in practice, grading is unlikely to have the kind of judgement errors that marking has, and the weighted aggregation evens out errors to some extent. Grade B, for instance, will reflect as grade point 4.5 in calculations, whereas if marks were used in the same range, judgement could vary from 4 to 5 and each will reflect directly in the total marks.

- ? **Will not students lose motivation since marks would give them chance for fine competition which is lost in grading?**

How can students be motivated to learn as once they get A grades, more effort does not produce any "returns"? That the chance for fine competition is lost in grading is true. However this is not a bad idea. If we look at it as a means of reducing unhealthy cut-throat competition, it becomes a positive point. Also placing marks at the helm of inspiration may not be a very ideal situation.

- ? **How do we rank students if there are only letter grades to compare them?**

It is true that if we consider only letter grades, we cannot rank students the traditional way. This is not a disadvantage. It reflects the basic philosophy of grading that the sharp comparative judgement is impossible based on a subjective assessment. Hence ranking has no place in a grading system.

- ? **Grade Points and Grade point averages are marks in disguise?**

Grade points come in only as a means of combining grades. Ideally grade point averages should be disregarded as it only serves to arrive at the combined grade.

- ? **What is the difference between Absolute Grading, Direct Grading, and Relative Grading?**

What is proposed in UG restructuring is Direct Grading. This involves directly awarding grades to individual answers. Absolute grading, as practiced in SSLC in Kerala, maps mark ranges to letter grades. For example all who get more than 90% are awarded an A grade. Relative grading would award A to a certain percentage of the toppers. It would follow a specified distribution of grades. This style of grading has its advantages and drawbacks. However it is traditionally considered to be disadvantageous to ethnic/linguistic