

# *The Forces that Shape Current University Assessment Practices*

# The University

- ❶ The Hong Kong Polytechnic University
  - ❖ Academic departments: 26 from six faculties (Science & Textiles, Communication, Business, Construction & Land Use, Engineering, Health & Social Science)
  - ❖ Staff : around 1,000 Academic and 1700 Support staff
  - ❖ Students: around 17,000 (12,000 full-time and 5,000 part-time)
  - ❖ Academic Programmes: PhD, EngD, MPhil, MSc, MBA, Bachelors degrees, Higher Diplomas

## The Project

- ❖ A Hong Kong Polytechnic University initiative
- ❖ The team obtained a Hong Kong government grant to fund a project titled:  
**“Enhancing Teaching and Learning through Assessment”**

## The Aims

To enhance the quality of teaching and learning through designing and implementing effective assessment practices, and the effective use of assessment results

Specifically to:

- ❖ Explore current assessment practices
- ❖ Identify good practices
- ❖ Examine the effect of the current assessment practices on teaching and learning
- ❖ Set up an Assessment Resource Centre (ARC) to support quality assurance and improvement of assessment.
- ❖ Support for individual sub-projects that try out alternative assessment practices



- Structure of the Project

- ❖ Main project plus 8 sub-projects
- ❖ Progress of Main project: Data collected and being analysed
- ❖ Progress of Sub-projects: Data collecting and being analysed

- Disseminate results of Questionnaire Survey and Focus group Interview findings

- ❖ Current Assessment Practices in the University
- ❖ Forces that shapes these practices

# Main Project

## Questionnaire

- A Questionnaire was sent to all full time teaching staff (1,005)
- Response rate was 24%

## Focus Group Interviews

- From 15 departments of the six Faculties:
  - ❖ 15 Heads of Departments interviewed
  - ❖ 13 Groups of Teachers (around four staff per group)
  - ❖ 12 Groups of Students (around four students per group)

# Some Major Findings

- Theme 1:  
Formative and Summative Assessment
- Theme 2:  
Criteria-referencing assessment (CRA) against Norm-referencing assessment (NRA)



# **Theme 1**

## Formative Assessment and Summative Assessment

# Assessment takes Two forms\*

## Formative Assessment (FA)

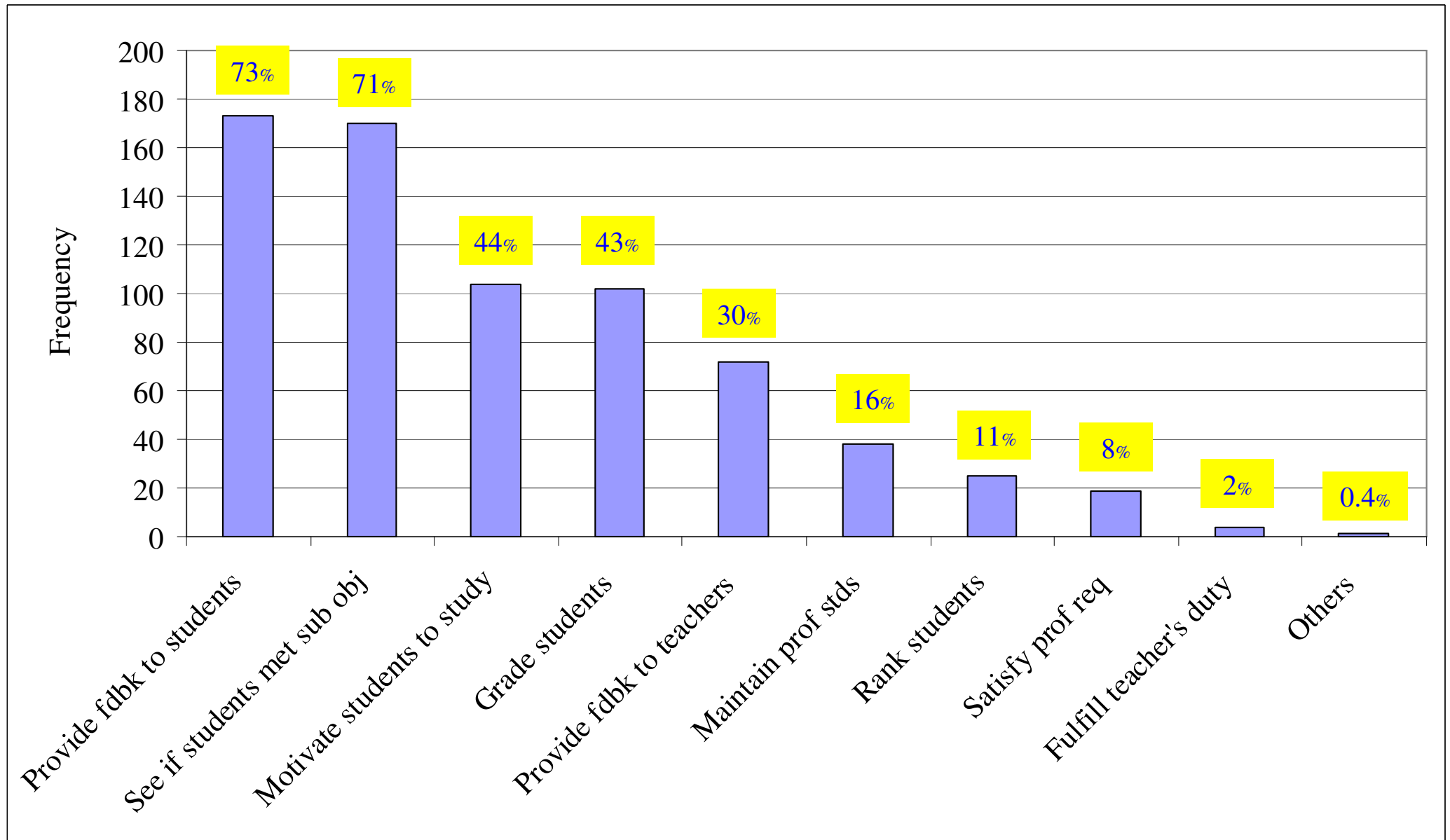
Used for feedback during learning so that students and teachers know how teaching and learning is proceeding and how it can be improved

## Summative Assessment (SA)

Used to grade/mark students at the end of a subject and later for the award level / classification of the qualification

\* Concept adopted from: Biggs, J B (2003) Teaching for Quality Learning at University, Buckingham: SRHE & Open University Press

# Teachers' perceived reasons for Assessing Students (Questionnaire)



Above items are multiple responses, and the % scores reflect the % that total respondents selected as their responses

## Teachers' perceived reasons for Assessing Students (Focus Group Interviews)

### Formative:

#### Learning:

- ❖ Assists learning
- ❖ Checks students' progress
- ❖ Helps students develop their ability to learn
- ❖ Provides feedback

#### Teaching:

- ❖ Checks teaching effectiveness
- ❖ Checks suitability of curriculum

#### Provide a platform for self- and peer-evaluation:

- ❖ Students' self-assessment
- ❖ Students' peer evaluation

### Summative:

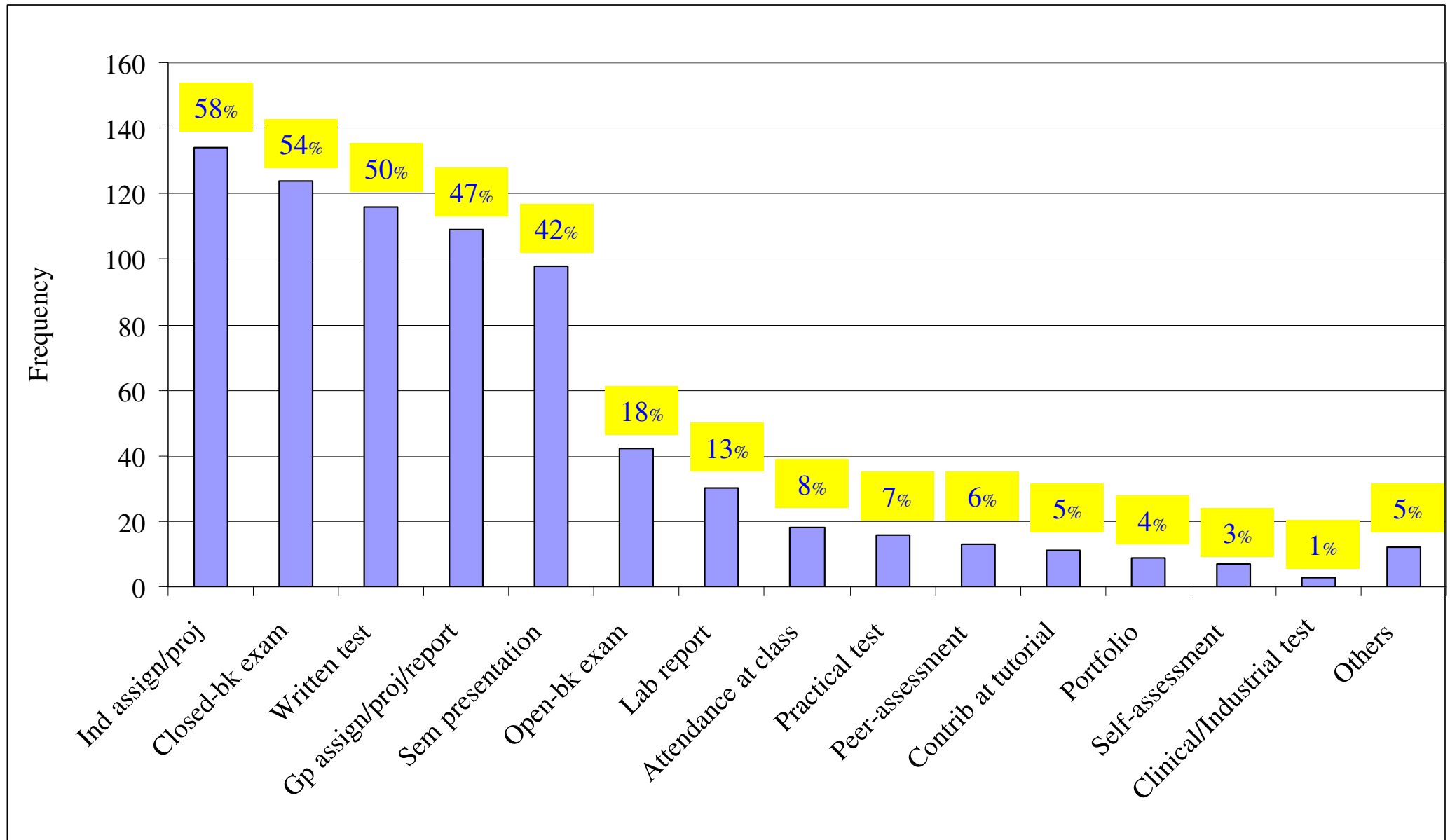
- ❖ Ensures standards are maintained
- ❖ Ranks for granting awards
- ❖ An essential requirement of the University

## **Most Teachers perceive Formative Assessment as being more important than Summative Assessment (Focus Group Interviews)**

“I’d look at their progress. When I assess students, I like to keep it formative, an ongoing progress. Through this mechanism I try to identify both weak and strong students such that we can modify our teaching and learning methodology, helping out the weak students”.

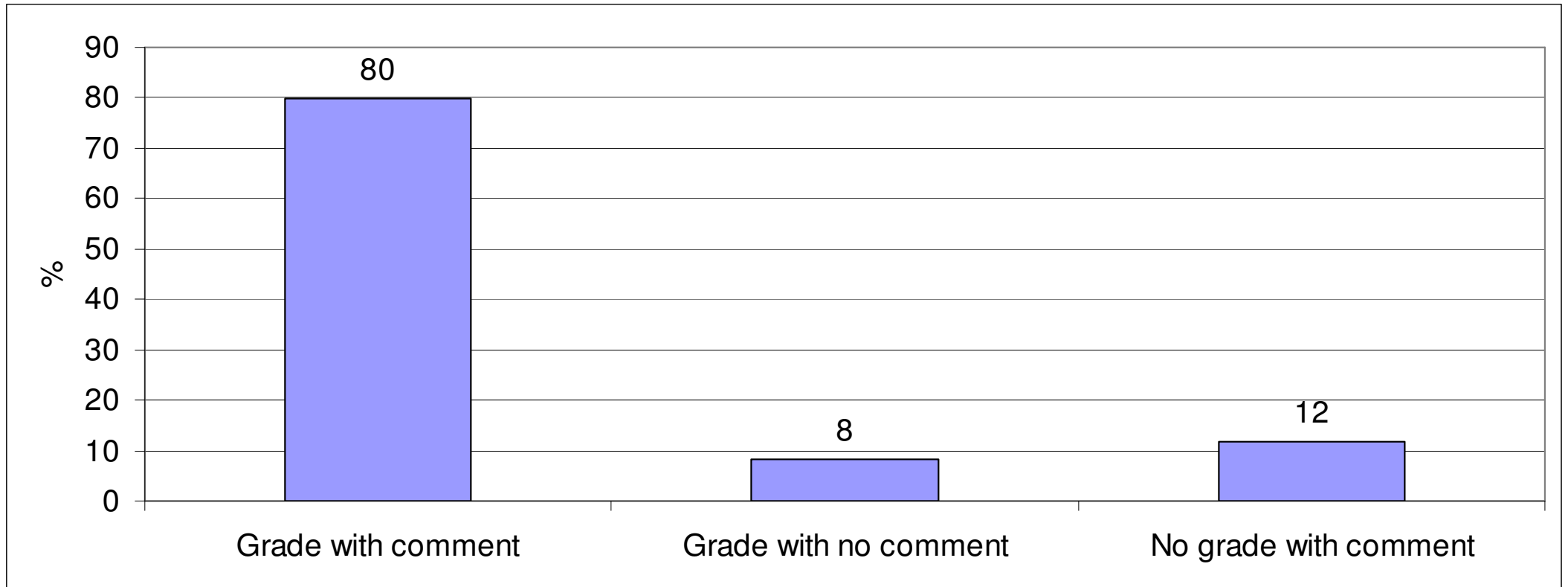
(Teacher)

## Most Commonly used Assessment Methods (Questionnaire)



Above items are multiple responses, and the % scores reflect the % that total respondents selected as their responses

## Content of Feedback (Questionnaire)



## Teachers give feedback and grades together (Focus Group Interviews)

“When we grade, we write down feedback on the paper. If there are problems with certain questions, we can include them.....

This is the main mode of feedback for written assignments but if we get to talk to the class, we can give them overall feedback, without focusing on individuals. The most direct means of feedback is what we write on students’ papers”. (Teacher)

## What's wrong Feedback only at the end?

\* The Backwash effect - students primarily focus only on the grade and try their best to improve it, i.e. The Assessment determines what and how they learn

### Advantages of Feedback during the Process

- ❖ Students will focus on the feedback to improve their grade
- ❖ It gives students a chance to improve
- ❖ Revising the work with feedback enhances students' learning

### No feedback during the Process, Feedback only when the grade is given

- ❖ No chance to improve since the assessment is completed (arguably, its only a “comment” rather than feedback)
- ❖ It misses the opportunity of enhancing learning during the process
- ❖ Students only focus on getting high grades - the backwash effect

\* Concept adopted from: Biggs, J B (2003) Teaching for Quality Learning at University, Buckingham: SRHE & Open University Press

## What factors cause the confusion? (Focus Group Interviews)

**Departmental Policy – Examination and Continuous Assessment each weigh 50% of grade in all subjects**

“If the lecturer has a different group of students or he thinks of a different assessment method, its difficult for him to change. In some ways this policy may be good as its standardised but it’s too specific that may hinder the flexibility when tailoring to the different needs of subjects and trying to assess students better ... Many assessments are by written examinations, this guarantees individual effort but it may not really reflect the capability of students”.

(Teacher)

## What factors cause the confusion? (Focus Group Interviews)

**Some teachers seem not to be aware of the Backwash effect of giving grade and feedback together**

“The score is numerical feedback. In between, whatever you put down on students’ paper, those are qualitative advice”. (Teacher)

“The score itself is also an important part of feedback, telling the students how well they have done”. (Teacher)

\* This gap matches one outstanding feature as reviewed by Black and William in their literature on teachers’ assessment practice:

“That formative assessment is not well understood by teachers and is weak in practice”

\* Black, P. and Wiliam, D. (1998) Assessment and classroom learning, Assessment in Education, 5(1), 7-74.

## What factors cause cause the confusion? (Focus Group Interviews)

### **Workload of Academic Staff – No time to give detailed feedback to every student**

“ We have so much to do, other than teaching we are required to do research and publish papers, especially if you teach MSc subjects, some academic staff are programme leaders and serve on committees. Then we are encouraged to do consultancy work so as to maintain contact with industry and make use of the work that we do in our teaching”. There is simply no time to give the formative feedback in a way that you would like to.”  
(Teacher)

“Some of us have large classes, last semester my class was over 240 students, then I was responsible for industrial placements and this consumed a lot of my time. Giving anything other than a grade for such a large class is very time consuming”.  
(Teacher)

## Implication and Recommendation

**Teachers' emphasis on summative assessment only (grading) further reinforces a backwash effect of assessment, leading students to focus on how to get the highest grade, instead of learning.**

“We do most of our studies just before the examinations and I have almost forget everything I learn after the exam ... I have heard from other classmates that they can get an A+ by using such a studying strategy.  
(Student)

**This implies the need for staff to recognise the negative effect of summative grading only.**



## **Theme 2**

# Criterion-referenced Assessment and Norm-referenced Assessment

# Summative Assessment in two ways\*

## Criterion-referencing Assessment (CRA)

Students' performance is compared against a set of criteria that match with the subject objectives

## Norm-referencing Assessment (NRA)

Students are graded according to a normal distribution curve. Their grades are determined by comparing with each other's performance

The PolyU uses NRA

\* Concepts adopted from: Biggs, J B (2003) Teaching for Quality Learning at University, Buckingham: SRHE & Open University Press

## General Assessment Regulation (GAR)

Grade	Short Description	Indicative range of normal distribution of grades
A+	Excellent	10-20%
A		
B+	Good	25-40%
B		
C+	Satisfactory	25-40%
C		
D+	Marginal	10-20%
D		
F	Failure	0-10%

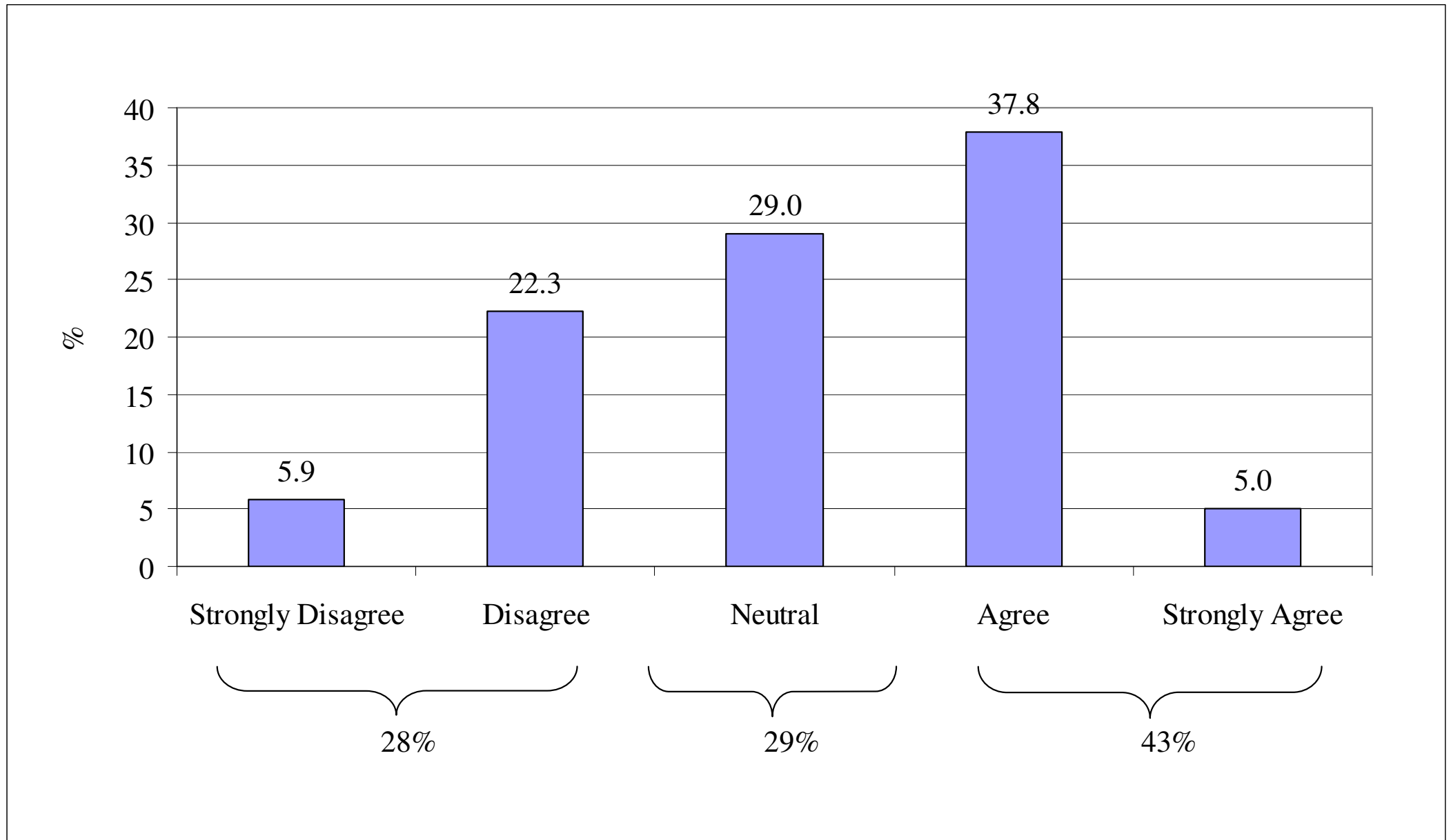
## General Assessment Regulation (GAR)

Grade	Elaboration on subject grading Description
A+	The student's work is of a standard rarely seen. It covers the necessary material and goes beyond it; it is accurate and entirely clear.
A	The student's work is of a very high standard. All the necessary material is thoroughly covered; it is accurate and clear.
B+	The student's work is above the average level for this subject. It is quite comprehensive, accurate and clear.
B	The student's work is mainly at the average level for this subject and in some aspects goes beyond the average.
C+	The student's work is mainly at the average level for this subject although in some aspects it falls below the average.
C	The student's work is below the average level for this subject. It is not comprehensive, and only partly accurate or clear.
D+	The student's work is well below the average for this subject and only just above the minimum acceptable level for the subject.
D	The student's work is at the lowest possible level that could receive a passing grade for the subject.
F	The student's work in the subject is unacceptable.

## General Assessment Regulation (GAR)

Master (Indicative Range)	Degree (Indicative Range)	GPA or Weighted GPA	Guidelines for the awards
Distinction  (0 to 10%)	1st Class Honours  (0 to 10%)	3.7+ to 4.0	The student's standard of performance/attainment is <b>outstanding</b> , and identifies him/her as <b>exceptionally able</b> in the field covered by the programme.
Credit  (25 to 45%)	2nd Class Honours (Division 1)  (25 to 45%)	3.2+ to 3.7	The student has reached a standard of performance/attainment which is <b>more than satisfactory</b> but <b>less than outstanding</b> .
Pass  (45 to 75%)	2nd Class Honours (Division 2)  (40 to 60%)	2.3+ to 3.2	The student has reached a standard of performance judged to be <b>satisfactory, and clearly higher than the 'essential minimum' required for graduation.</b>
Pass  (45 to 75%)	Third Class Honours  (5 to 15%)	2.0+ to 2.3	The student has attained the <b>'essential minimum'</b> required for graduation at a standard ranging from <b>just adequate to just satisfactory.</b>

## You are Satisfied with the University's Current Grading System (Questionnaire)



## You are Satisfied with the University's Current Grading System? (Focus Group Interviews)

### Descriptors are not clear and helpful

“The grading descriptions are too broad... some of the grades are problematical, especially the D and D+ because it’s difficult to explain to students what these mean”. (Teacher)

### Distribution may not reflect students’ real performance

“The guidelines are a constraint to us. We see that the qualities of students vary but yet we have to take into consideration the distribution, so the grade distributions every year are similar. Therefore, the grades may not be able to reflect the real qualities of the students”. (Teacher)

### Some students think it is not fair

“Even though I did a great job and should get an “A”, but when compared to others, I only got a B...it’s frustrating. ... I think norm-referenced assessment is not fair in assessing artwork. ... I think in (our profession), you can’t say 20% of students get A, and so on...Why are students put into the C category even they did a great job...I do not see the point! (Student)

# Actual Practice of Grading (Focus Group Interviews)

## The Grade Distribution

- **Teachers in most departments tend to follow the Normal distribution, otherwise they need to justify in SARP/BoE's**

“Subject grades are dealt with at the departmental level first, the SARP is the departmental body for finalising subject grades, the Chairman may ask us why our grades do not fall within the distribution, why are they not normal, then we have to justify this”. (Teacher)

- **Some teachers use Criteria Referencing Assessment first and then convert into the Normal distribution grade**

“We adopt team teaching, before we teach, we have to sit together and agree on the teaching components including content, assessment criteria, different aspects for assessment, etc. ... We also have grade moderation meetings after the projects”. (Teacher)

## Actual Practice on Grading (Focus Group Interviews)

### The Descriptors

#### ● Some departments develop their own descriptors for grading

“Yes, the programme committee who are responsible for running the programme decide the criteria, on the basis of the competences that we expect from our students. (Head of Department)

## **What factors make teachers focus on Norm Referenced Assessment (NRA)? (Focus Group Interviews)**

**Administrative Protocol – The normal distribution curve is stated as an indicator but many SARP’s and BoE’s take it literally even though some teachers use CRA to grade**

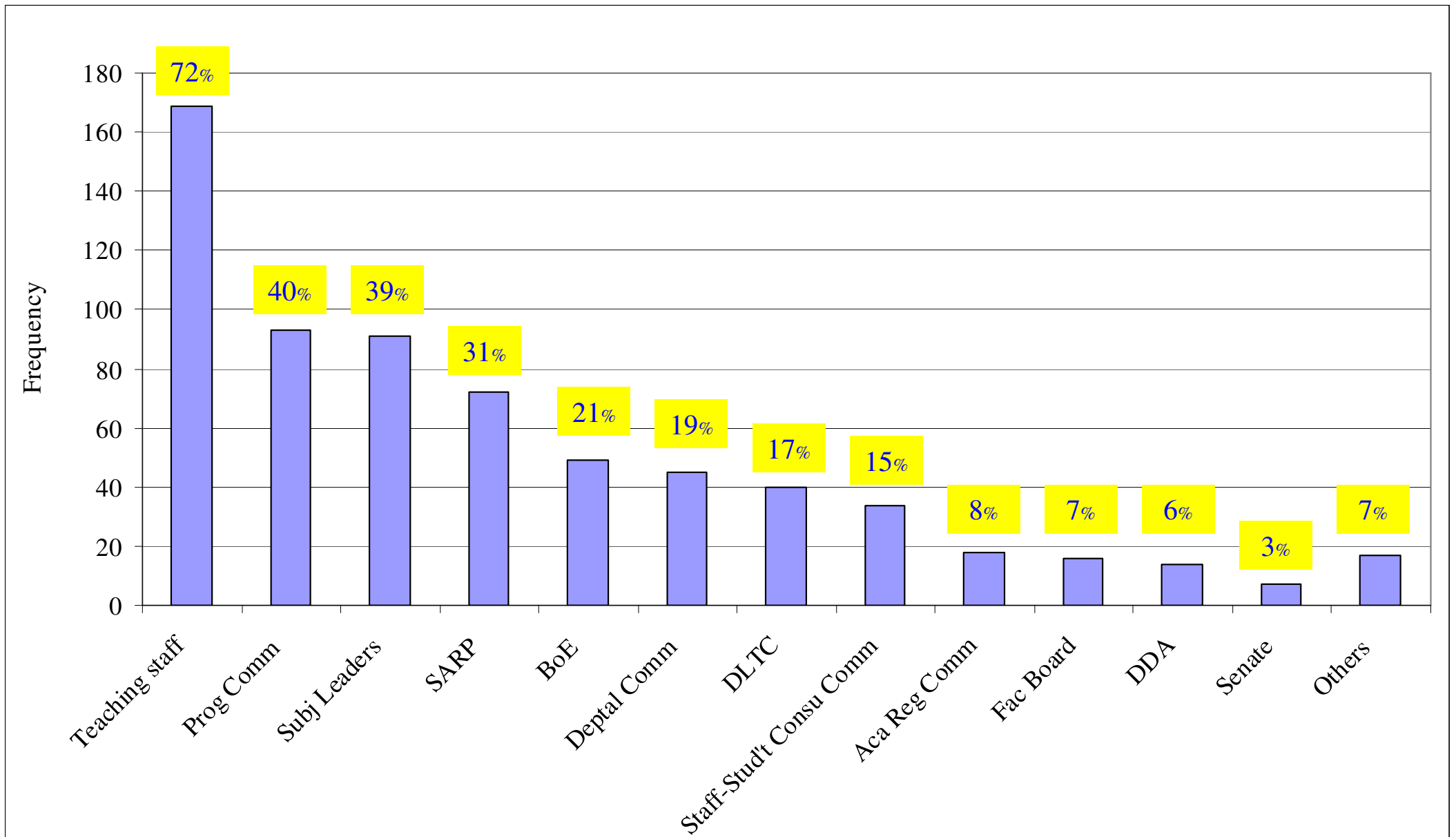
“Basically we follow it. It contains a range, A is so and so, and B is so and so. We may make adjustments but basically we use it. Although we have criteria, like this is satisfactory, that is good or excellent, but what is excellent? It can be interpreted differently therefore, we try to spell out what the standards are, the expectations of students’ work, what are considered good and what are considered very good, etc”.

(Teacher)

**Legacy – NRA is the culture of the local education system, most departments have not developed their own criteria**

**External Bodies – Focus on the final grade instead of the learning process**

## Effects of Academic Bodies on Assessment (Questionnaire)



Above items are multiple responses, and the % scores reflect the % that total respondents selected as their responses

## Implications and Recommendations

- **Criteria should be developed by each department. Workshops and seminars should be arranged for teachers on using CRA for the subjects that they teach**

“If you try to predict how well a class of students would do, it’s arbitrary but I understand why there are guidelines. The grading standard is the main issue, the range is for reference only. We need criteria to explain what the grades really mean, so both teachers and students know if the criteria has been reached. The criteria should come first. For marginal cases, adjustments can be made. Basically we should follow the criteria first and then to look at the distribution”. (Teacher)

- **That implies that the University should delegate the definition of grading criteria to individual departments and teachers.**
- **Resources – for teachers to handle large classes (so that they can provide more feedback)**

## Some Good Assessment Practices

- Open Book Examinations
- Portfolios
- On-line assessment
- Peer-assessment
- Reflective papers
- Poster Presentations
- Interviewing
- Presentations