

THE CHINESE UNIVERSITY OF HONG KONG



# THE UNIVERSITY BULLETIN

VOLUME ONE • SUPPLEMENT, JUNE 1965 • NUMBER TWELVE

## *Special Supplement* *on* *New Teaching Methods*

### CONTENTS

The Vice-Chancellor's Statement to Senate on Implementation	
In English ... ..	2
In Chinese ... ..	3
Memoranda of Colleges on Implementation	
In English ... ..	4
In Chinese ... ..	6
A Letter From the Vice-Chancellor	
In English ... ..	7
In Chinese ... ..	8
Report of The Committee On Teaching Methods	
In English ... ..	10
In Chinese ... ..	18
Lehmann/Loach Report	
In English ... ..	24
In Chinese ... ..	44
Summary of Two Reports With Particular Reference To Actions To Be Taken	
In English ... ..	59
In Chinese ... ..	61
INDEX ... ..	62

## THE VICE-CHANCELLOR'S STATEMENT TO THE SENATE ON IMPLEMENTATION OF THE NEW TEACHING METHOD

[The following Statement of the Vice-Chancellor is the amended version after discussion at the May 18th meeting of the Senate, which also adopted the resolution put forth at the end of this Statement.]

It is most gratifying to see that all the three Foundation Colleges have not only endorsed the Lehmann / Loach Report enthusiastically but have mapped out carefully the steps to be taken, beginning in September 1965, to implement the proposals in an orderly manner. As may be gathered from the College memoranda, which are attached herewith, there is unanimous agreement on —

- (1) Introduction of small-group teaching (tutorials and seminars),
- (2) Reduction of lecturing hours,
- (3) Re-examination of course-contents and introduction of new syllabuses,
- (4) Streamlining of College curricula,
- (5) De-emphasis of examinations.

While it is not necessary that each College should proceed with exactly the same speed in implementation, it is imperative that for each subject field the College department concerned should have continuous exchange of information and opinion with its counterparts in the other Colleges and also complete knowledge of what these latter are doing and will do. This may best be handled by each Board of Studies.

As a result of discussions with the Professors, the Directors of University Studies, and the College Presidents, I would like also to propose that each Board of Studies should also be charged with the responsibility of working out the details for implementation of the following plan regarding examinations:

- (a) With all the written work required in smallgroup teaching and with the Intermediate and Degree Examinations, each College should be given

full flexibility to determine the achievements of the students during the four years of College. (For example, in an extreme case, a teacher may find it possible to give no examinations at all in any one of the courses he teaches.)

- (b) At the end of the second (Sophomore) year, the University will conduct an Intermediate Examination in the month of June—

(i) Subjects to be tested for each student: Chinese, English, a paper on his major subject, a paper on his minor subject, and a paper on his elective which may be General Education. (It should be noted that each paper is not a *course* examination, but one on a subject-field.)

(ii) The nature and form of the examination, and the minimum standard required should be worked out by each Board of Studies directly concerned, subject to the approval of the Senate.

(iii) Students sitting for the Intermediate Examination must be recommended by each College of the University.

(iv) Students who fail in one or two papers will be required to take at least three more years of residence before taking the Degree Examination. Upon the recommendation of the Board of Studies, however, some of these students may be given a supplementary examination in September of the year.

(v) Students who fail in more than onehalf of the papers will be asked to leave the University.

- (c) At the end of the third (Junior) year, the students will take the first part of the Degree Examination, given by the University, covering about one-third of the Degree papers.

- (d) At the end of the fourth (Senior) year, the University will give the second part of the



Degree Examination consisting of the other two-thirds of the papers. A written thesis may be required, this to be recommended by each Board of Studies for either all or some of the graduating students. In that event, the thesis may be regarded as a substitute for such part of the Degree Examination as determined by the Senate at the recommendation of the Board.

In summary, I would like to propose to the Senate to adopt the following resolutions:-

- (1) To endorse whole-heartedly, in principle, the Lehmann/Loach Report as well as the Report of the University Teaching Method Committee;

- (2) To give full support to the Colleges in their effort to implement the new Teaching Method, as programmed in their memoranda;
- (3) To request the Boards of Studies —
  - (a) to study and discuss thoroughly the two Reports;
  - (b) to conduct continuous discussion on the implementation of the proposals;
  - (c) to make definite recommendations to the Vice-Chancellor in regard to the proposals specified in this Statement not later than August 1, 1965.

May 18, 1965.

## 校長致大學教務會關於實施新教學方法之報告

〔以下為校長致大學教務會報告之修正本。該報告曾於五月十八日大學教務會會議予以討論。本件末段之提案業經教務會決議採納。〕

本校各學院對於賴盧報告不僅熱烈支持，并皆審慎擬定執行步驟，期於本年九月間開始實施，至足欣慰。就各學院之備忘錄觀之，下列各點各學院已一致贊同：

- 【一】實施小組教學法（導師教學及研究班）。
- 【二】減少講授時數。
- 【三】重新審定課目內容并製訂新課程綱要。
- 【四】精簡各學院課程。
- 【五】減輕對考試之重視。

在實施新教學方法時，各學院雖無須以同一速度進行，但凡屬科目範圍內之問題，一學院之學系與其他學院之同系彼此交換消息及意見，并充分瞭解其目前與未來之措施。此等事項，最宜由大學系務會處理。

本人經與講座教授、大學系主任及各學院院長會商，建議大學各系務會對於下列新考試辦法負責擬定實施細則：

- 【一】各學院之學生既在小組教學中有寫作作業併須參與大學舉辦之中期考試與學位考試，各學院得自由決定如何測定該院學生四年來之成績。（例如，在極特殊情形之下，教師對其所教之任一課目，可不舉行考試。）
- 【二】大學於每年六月，舉行大學二年級終結之中期考試：
  - ①每一學生必考科目為中文、英文、主修科試卷一、副修科試卷一，及選修科一。通才教育之學科亦可作選修科論。（應請注意者，所稱試卷非指某課程之考試，而為系別科目。）
  - ②考試之性質、格式，及其最低標準，由各有關系務會擬定，呈請大學教務會核准。

③參加中期考試之學生須由各學院提名。

④學生試卷中如有一門或兩門不及格者，則須再肄業三年後方准參加學位考試。但如經系務會提出，一部份未及格之學生得於同年九月參加補考。

⑤學生如有過半數之試卷不及格者，即勒令退學。

【三】第三學年（三年級）終結時，學生須參加大學學位初段考試，其範圍約佔學位考試全部試卷三分之一。

【四】第四學年（四年級）終結時，學生須參加大學學位之第二段考試，其範圍約佔學位考試全部試卷三分之二。如系務會建議認為該系畢業班全體學生或若干學生得寫論文時，該論文得用以代替由系務會建議并經大學教務會認可之某一部分之學位考試。

概括而言，本人擬向大學教務會建議通過下列提案：

- 【一】原則上，衷心贊同賴盧報告書及大學教學方法報告書之意見。
- 【二】各學院依照其備忘錄之建議實施新教學方法時，應予以全力支持。
- 【三】指示各系務會：
  - ①將該兩項報告書加以詳盡研究與討論；
  - ②關於實施方案及方法應彼此不斷研討；
  - ③最遲於本年八月一日前，就本件所提出各點，向校長提出具體建議。

一九六五年五月十八日

## COLLEGE MEMORANDA ON IMPLEMENTATION OF THE NEW TEACHING METHOD

### Chung Chi College

#### 1. First Year Students:-

##### a) General requirements:

- (1) *Chinese*. Teaching in 2 parts: (a) large lecture class, 2 hours a week, on a Systematic Survey of Chinese Studies, conducted by several teachers; (b) Small groups of 5-10 students in practical essay-writing, each meet once in 2 weeks. Topics of essays will include general as well as specialized ones, according to student's major field of study.
- (2) *English*. No major change. Present practice already includes tutorials for students deficient in English.
- (3) *Philosophy of Life*. No major change as tutorials are already in practice.

##### b) Field of Speciality:

Steps will be taken toward the goal of 2 lines of common core courses, one for science students and one for arts and commerce.

*Science*. All physical science students will take mathematics, physics and chemistry in 1965-66. Integration of biology into this core in 1966-67. Some difficulty is expected for students of doubtful command of English. Reduction in class hours is only practicable in laboratory exercises in the coming year.

*Arts & Commerce*. Introduction of tutorials for all students in their major course. Reduction of lecture hours to 4-5 hours/fortnightly, (at present 3-hours per week). Teachers will prepare for further reduction from 1966.

#### 2. Second Year Students:-

All departments will have fortnightly tutorials in at least one course in 1965-66 and two in 1966-67.

#### 3. Third & Fourth Years Students:-

Many departments at present conduct tutorial hours in one or more of their advanced courses. Their effort in this direction will be further intensified with the aim of conducting tutorials for all courses in 1967.

4. All teachers are asked to produce detailed syllabuses, after consultation with the Boards of Studies concerned, on lectures, tutorials, and seminars for courses offered in 1965-66 before August 15, 1965.

### New Asia College

At a meeting held on 11th May to study the Lehmann/Loach Report on teaching methods and to devise means for its implementation, the following resolutions were adopted.

- (1) It was resolved that the following suggestions in the Report should be accepted:

- a. introduction of small-group teaching;
- b. reduction of lecture hours;
- c. simplification of the contents of courses.

These suggestions, it was noted, are in line with the Regulations which were passed by the College in 1962 to improve teaching efficiency.

- (2) It was resolved that in order to provide favourable conditions for the successful implementation of the above suggestions the College should propose the following:

- a. that the Degree/Diploma Examination scheme be re-examined with a view to reducing the number of papers and the contents of the examination syllabuses;
- b. that the training of students' reading ability should be adopted as the aim of general English teaching;

- c. that the College be allowed to employ more tutors in arts and social sciences;
  - d. that special committees be formed to translate works in foreign languages into Chinese.
- (3) It was resolved that beginning from 1965 the following steps should be taken:
- a. The College curriculum should be re-examined and its contents pruned;
  - b. The number of lecture hours should be reduced;
  - c. To lessen the teaching load, some courses should be offered in alternate years;
  - d. The provisions of the 1962 Regulations should be strictly enforced;
  - e. Small-group teaching should be introduced in two stages:
 

1965/1966 50% of the students should have at least one tutorial weekly or fortnightly;

1966- all students should have at least one tutorial weekly or fortnightly.
  - f. Detailed recommendations for enforcing Resolutions (3) a-e should be worked out by the Departments for approval.
- (4) It was resolved to defer discussion of other suggestions of the Lehmann/Loach Report to the next meeting.

## United College

### I. For 1965-66

#### A. Pilot Scheme for 1st Year Students

- (1) Introduction of tutorials in the major course;
- (2) Reduction of lecture hours  
(There are, however, reservations about the reduction of 2 lectures to one lecture); and
- (3) Consideration at College Departmental level — To produce syllabuses etc., and details of lecturing/tutorial schemes within a month. (Courses in the first year are NOT common to all colleges).

#### B. Pilot Scheme for 3rd Year Students

- (1) Introduction of inter-course seminars on a departmental basis (See 5.13 of Lehmann/Loach Report);
- (2) Same as above; and
- (3) Consideration at Board of Studies Level — To produce syllabuses and details of lecturing/tutorial/seminar schemes within a month. (Courses in the 3rd Year are normally common to all Colleges).

### II. For 1966-67

If the above Pilot Schemes for 1965/66 are successful, then the whole Scheme can be implemented in 1966/67 for all the four years.

# 三學院教學方法實施方案

## 崇基學院

### 【一】一年級學生

#### (甲) 普通必修科目

- ①中文：中文教學方法分為兩部：⊖每週上大課二小時，由本系主任及其他教員講授中國學術通論；⊖每兩週上小組課一次，每五人至十人分為一小组，以練習應用文及有關學生主修學科之寫作。
- ②英文：無特殊變更，對於英文程度較低之學生，早經採用小組教學方法。
- ③人生哲學：亦無特殊變更，小組教學方法早經採用。

(乙) 專修科目 目前正採取適當步驟，將一年級學生之應修科目分為兩類：其一為理科學生之共同專修科目；其二為文商二科學生之共同專修科目。

理科——一九六五至六六年度，所有理學院各系之學生，除擬主修生物學系者外，均須選修數學、物理、化學三科為共同專修科目。一九六六至六七年度，生物系學生亦將加入此種共同專修科目辦法。此辦法對於英文程度稍低之學生，或將感覺困難，自應特別注意。減少上課時間辦法，明年僅能在實驗時間上予以施行。

文商科——所有主修科目均須採用小組教學方法，目前每週三小時之講授教材將縮短為每兩週四小時至五小時。一九六六年後擬準備再予以縮短。

### 【二】二年級學生

一九六五至六六年度，各學系至少一科須採取每兩週一次之小組教學方法。一九六六至六七年度則至少須有兩科採用小組教學方法。

【三】三、四年級學生

目前若干學系，業經在少數高級科目中採用小組教學方法，希望在一九六七年以後，全部採用小組教學方法。

【四】本年八月十五日以前，所有教員應與有關大學系務會商討後，提出一九六五至六六年度所授科目之講授教材、小組教學及小組討論等詳細課程大綱。

## 新 亞 書 院

本校曾於五月十一日邀集全人討論教學方法問題，茲將討論結果瀝陳如後：

與會全人均認為：

【一】賴盧報告書之建議：甲、實行小組教學；乙、精減課程內容；丙、減少講授時數。為本校今後教學方法改進應循之方向。此項建議實與本校一九六二年所定之「增進教學效率辦法要點」之精神符合。

【二】為實行賴盧報告書創造有利條件，本校應力促下列各事之實現：

甲、精減學位文憑考試科目及內容。

乙、確立普通英文科教學應以訓練學生使能具備大學程度之閱讀能力為目的。

丙、增聘文科及社會科學助教。

丁、設立專門委員會從事各科外文書籍及資料之翻譯。

【三】本校應自一九六五年度始參照賴盧報告書之建議，按照後列原則改革教學方法：

甲、精減課程內容。

乙、減少各課講授時數。

丙、選習人數較少之科目，應酌量隔年開設，以減輕教員負擔。

丁、嚴格執行增進教學效率辦法要點之規定。

戊、實行小組教學，分下列二期進行：

①一九六五年度——半數學生每週或每二週須參加小組教學一次。

②一九六六年度——全體學生均須每週或每二週參加小組教學一次。

己、詳細辦法由各有關學系會商擬具草案以便核定實行。

【四】賴盧報告書其他建議留待下次會議討論。

## 聯 合 書 院

【甲】一年級：

⊖主修科實施導修制。

⊖儘量減少上課時數。

⊖在一個月之內提出修訂課程內容及講授與導修細節。

【乙】三年級：

⊖實施學系內各有關課程之小組討論。

⊖儘量減少上課時數。

⊖在一個月之內提出修訂課程內容及講授、導修、小組討論等實施辦法，交大學系務會討論。

上述計劃，如實施成功，則在一九六六至六七年度，由一至四年級普遍施行。

# THE CHINESE UNIVERSITY OF HONG KONG

OFFICE OF THE  
VICE-CHANCELLOR

April 14, 1965.

677 NATHAN ROAD  
KOWLOON, HONG KONG

To: Members of the Senate and Chairmen of College Departments

Dear Sir/Madam,

I am sending you herewith a copy of the Teaching Methods Advisors' Report and the Report of the University Teaching Methods Committee, both of which were prepared at my request.

Now that these reports are before us, I not only endorse the basic suggestions embodied in them, but I am certain that we must adopt them. It is our duty to the future of Chinese youth to give our students the opportunity to learn and grow under the best conditions.

I realize that the changes called for may be substantial in some respects. That is why I am sending these reports to you for your serious consideration as to how best to implement them. Since some of the suggestions do require rather drastic changes from the present practice, it is conceivable that the changes would come in stages but a significant start must be made with effect from the 1965/66 academic year.

As to General Studies, it will be necessary to devise a programme to meet the needs of our students; needs different from those in the United Kingdom and in America. This may take a little time. We will not, however, postpone the work of implementation of the reports but will rather consider the whole subject of General Studies concurrently.

My plan is to first consult the Professors and Directors of University Studies on Saturday, 1st May, at 9:30 a.m. in the Conference Room of the Central Office and I hope they will come prepared to express their views.

The next step will be to circulate the reports to the members of the Boards of Studies and then to each member of the teaching staffs.

Yours faithfully,



Choh-Ming Li  
Vice-Chancellor.

Encl.

求，但本港學生之需求與英美各大學者不同，故此項計劃之擬訂，或尚需時日，惟吾人殊不能因此之故，而延緩上述兩項報告書中建議之實施。將來似可於討論之時，將普通學科之整個問題，同時予以改憲。

本人現擬於五月一日（星期六）上午九時卅分，假本校會議室舉行會議，先與各講座教授及大學系主任交換意見，然後將此兩份報告分送與大學系務會委員及各教師，每人一份，俾其查攷。此致

大學教務會委員

各學院學系主任

校長 李卓敏



四月十五日



啓者：

本校教授法顧問及大學教授法委員會，應本人之請，各擬就報告書一份，茲以奉上，尚請查收。

此两份報告中之主要建議，本人均所贊同，且認為務須予以實現。蓋莘莘學子須有良好學習機會並須於最佳條件下予以培育，此為吾人對於中國青年前途之責任。

惟建議中所牽涉之變更，在若干方面言，影響異常鉅大，用特將此两份報告送請台端予以審慎攷慮，研究應如何以最妥善方式，將此建議，付諸實現。若干建議中之變更事項與現行者差異極巨，故實施時勢須採漸進方式，分期推行。但在一九六五至一九六六年度內，則必須着手辦理。

關於普通學科，吾人自亦應擬定計劃以適應學生之需

## REPORT OF THE COMMITTEE ON TEACHING METHODS

### I. PRELIMINARY

**C1.** The committee was appointed by the Vice-Chancellor in March, 1964. Its first meeting took place on 1st April and its thirteenth and last on 7th September. Its members were:—

Dr. C.T. Yung, Chung Chi College, Chairman,  
Dr. N.E. Fehl, Chung Chi College,  
Dr. S.T. Tsou, United College,  
Dr. J.M. Yang, New Asia College,  
Dr. K.Y. Yen, New Asia College,  
Mr. N.H. Young, United College,  
Mr. R.N. Rayne, Chung Chi College, Secretary.

Mr. S.K. Su, New Asia College, replaced Dr. K.Y. Yen at the second meeting and was himself replaced by Dr. B.S. Hsu, New Asia College, at the ninth meeting. Dr. P.C. Chen, United College, was invited to join the committee at the second meeting and then replaced Dr. S.T. Tsou at the fourth meeting. Dr. Joseph C.C. Hwang, Chung Chi College, replaced Dr. N.E. Fehl at the fifth meeting.

**C2.** The Vice-Chancellor defined our task as follows:—

“The Committee is requested to examine in detail the present teaching system and to come up with a proposed workable program which will adapt the best features of the British, American and other systems to our needs. I have conducted some enquiries along these lines in the past, and have come to the tentative idea that for our purpose the emphasis may well be on tutoring (in some form) in the first two years, on lecturing and small group discussions in the next two years and on seminar work in the post-graduate schools. As regards syllabuses, while their content need not come under the purview of the Committee, their nature will have to be commented upon. Moreover, as far as under-graduate teaching is concerned,

it might be better to divide the examinations into two stages, one for the first two years and the other for the last two years. Although purely tentative, these ideas will suggest to you what I have in mind.”

Moreover he expected our report to serve as a basis for further discussion with two experts from the United Kingdom, Professor A.G. Lehmann, Professor of French in the University of Reading, and Dr. J.V. Loach, Registrar of the University of Leeds, who are to visit the University from 12th September.

**C3.** We soon found that it was impossible to study teaching methods effectively without some consideration of the academic structure of the university as a whole. Time, however, did not allow us to go into every aspect of this, so we confined ourselves to discussing one problem which seemed to us to be of fundamental importance, that is, General Education. Hence our report falls into two parts, one on Teaching Methods and one on General Education. But we are only too well aware that teaching methods are affected by many other factors which we could not deal with, e.g., the organization of inter-collegiate teaching, the content of degree programmes and postgraduate studies.

**C4.** Teaching methods are regarded by university teachers as their own concern, peculiar to each individual teacher and built up gradually out of each individual's education and experience and conception of what the job of teaching in a university means, so that for a committee to enunciate rigid dogmas and rules about them would rightly be resented. We can only put forward ideas and suggestions for discussion and experiment and make such proposals as are likely to make the task of teaching easier and more efficient and rewarding.

C5. Furthermore, in a new university where so much is in the melting-pot, any proposals which we make may be rendered impractical or irrelevant by the decisions that are being made about a multitude of problems almost every day. All we can hope is to stimulate thought and experiment about a subject that lies at the very heart of the university's *raison d'être*.

## PART II. TEACHING METHODS

C6. We began by sending round a questionnaire to the chairmen of departments of the three colleges, most of whom went to considerable trouble to answer our questions, and we should like to take this opportunity to thank them for their cooperation. We give in Appendix A a report summarising the replies.

C7. We then asked ourselves whether we could claim to be satisfied with the type of student produced by the colleges, and we agreed that there are two factors which should cause us disquiet:—

(a) While many of our students do well in further study and research, they do not seem to be readily accepted by local industry or commerce for positions appropriate to their training, and many of them either go in for school teaching or take jobs for which their education seems extravagant and irrelevant.

(b) Members of staff frequently complain that their students suffer from two faults, the one that they are too passive, contented to sit through a lecture without asking questions, able only to learn off by heart what they read or hear, and the other that they think in watertight compartments and cannot transfer their knowledge in one field to assist their work in another.

C8. We then asked ourselves the following questions:—

(a) Does education in the middle schools emphasise learning by heart? Do teachers expect pupils to *listen* all the time? Does the intense competition for entry into schools and universities, with its attendant system of excessive examination, demand too much of pupils so that they have neither the time nor the energy to do more than learn what they are given by heart?

(b) Does the university perpetuate this tradition by having too many lectures and too few small discussion groups, by insisting on too many examinations, by emphasising the department too much?

(c) Does the necessity for a sound knowledge of English seriously affect a student's progress? And what about the problem of Mandarin and Cantonese?

(d) Is the load on the teaching staff so heavy that they have the time neither to think systematically about their teaching methods nor to give to students the individual attention that they need?

C9. (a) and (b) We felt that our answers to these must be yes. We do not mean to criticise the schools, for the situation caused by this intense competition is not within their control. Our concern is whether the university is doing anything to counteract this tradition. The replies to our questionnaire make it clear that the lecture is the chief instrument of teaching, and we are convinced that there is too much emphasis upon examinations. An excessive diet of lectures and examinations is bound to encourage students in their habits of listening passively and then trying to learn off by heart all they have heard, so that they may reproduce for the examination what they consider to be the correct answer.

(c) It is obvious that the lack of a good working knowledge of English is bound to slow down a student's progress in an institution where so many of the books used at present are written in English, and many of our students do not possess an adequate knowledge. Our impression is, however, that the Mandarin-Cantonese problem does not cause trouble to students after their first years, as they can at least understand the other dialect well enough by then. There is, however, the question whether the demands of English do not slow down students' reading of their own language, to which we are not in a position to give an answer.

(d) To this question the answer is more difficult. So much depends upon the individual and the differing demands upon his time. But we are agreed on three things, one that a load of three courses per term is excessive and that some of our teachers are already carrying a heavier load than this, two that the teacher's daily time-table is so chopped up, and the vacations are so short and so occupied with other tasks (e.g., marking degree and matriculation examination papers) that it is very difficult to find long periods of time when he may concentrate without distractions on academic work, and three that the next few years, when the whole physical, administrative and academic structure of the university has to be built up, are going to make very heavy demands on all members of staff.

We concluded, therefore, that our answers to all these questions must be yes, even if there are exceptions to the general picture drawn, and in the following paragraphs are some of the suggested remedies which we discussed.

C10. *Lectures* (a) The number of lectures given should be cut down. Staff giving lectures should continually ask themselves if their lecture is meeting a real need. Above all, every effort should be made to see that enough of the necessary books and periodicals are in the library and that students possess the recommended textbooks (see section 15). This would at least remove the necessity for the lecture that has to be delivered in order that students may be informed

of the contents of an inaccessible book.

(b) Students need to be encouraged to participate more actively during the lecture by being given assigned reading and questions to think out beforehand, by asking questions during the lecture and by doing written work and attending discussion groups afterwards. Intelligent note-taking is usually a sign of active attention, but it is hard to lay down rules about note-taking. Students in their first year should certainly be given advice and it would be helpful if their notes could occasionally be checked or if they were to write, as an exercise, a summary of the lecture. Tutors may help in this as in other things, and this should be borne in mind when appointments are being made.

(c) Lecturers need to be asking themselves not only whether their lecture is really necessary but whether they are "stimulating and inspiring" their students (see Appendix A, Section 1(b)). Their lecture should fit into the whole scheme of their programme, including reading, writing and tutorial groups.

(d) Certain courses at present are offered in alternate years so that students of two different years can attend the same lecture. This practice should be encouraged wherever practicable to lighten the lecture load of the teachers. In the end, when all three colleges have moved out to Ma Liu Shui, a careful intercollegiate coordination of teaching programmes should further reduce the teaching load.

**C11. Tutorial Groups.** (a) The teaching of small groups or of individuals is usually accepted as the most effective method. Learning to think for oneself is a psychological and moral as well as an intellectual problem. To persuade students to think for themselves, to break down their fear of venturing on their own, to wean them from their reliance upon 'authority' — this task needs not just a Socratic attack on their intellectual inertia but also pastoral care on the part of their teachers in winning their trust. We agree with the Vice-Chancellor that it is above all in the first year that this must be done, and the smaller the groups the better, so that teacher and student can get to know each other and establish from the start that basic of mutual cooperation and confidence on which the student's whole career to a very great extent depends.

(b) But the great difficulty is the lack of time. With a staff: student ratio of 1:10, tutorials would be either too big or too infrequent to be of much use. This is a problem not peculiar to our university but one that is going to loom larger and larger in the whole rapidly expanding world of the university with its demands for more and more staff. We can suggest only the following measures:—

- (i) Cutting down on the number of lectures (see section 10(a) and (d))
- (ii) Using audio-visual and other aids (see section 16)

(iii) Employing tutors and demonstrators to lead tutorial groups

(iv) Employing graduates as part-time tutors as soon as graduate studies have begun.

(c) Tutorial groups are not automatically a panacea for all teaching difficulties. There are different types, hearing and commenting on essays by one or two individuals, giving back and discussing written work, group discussion of paper by one of its members, discussion by a group of a theme or book, and each type needs careful thought and preparation on the part of student and teacher.

(d) Departmental programmes should be so flexibly organized as to encourage those members of staff who are willing to do so to experiment in different types of tutorials. We also recommend that members of staff who are just beginning on their careers should be given definite advice and help on the running of tutorial groups (see section 24).

(e) Departmental programmes vary so widely that it would be pointless to recommend a definite number of tutorials. But we urge that during the first two years, students should be given *some* tuition in small groups every week; ideally the number in each group should not be more than six. During their last two years much of the teaching is done in small groups in any case, and by then students should be familiar enough with their teachers and mature enough to be able to approach them on a more informal basis.

(f) We further recommend that inter-departmental groups should be organized with staff as well as students from more than one department. Sometimes the subject could be a completely general one to which students of several departments could be expected to have some interest, e.g., modern methods of advertising, and sometimes one in which the students of perhaps only two departments would be likely to have the specialist interest; e.g., physics and religious knowledge students could discuss the influence of modern cosmological theories on religious beliefs. In this way students might be led to lift their heads out of their own exclusively departmental studies and to realize that they can learn from and teach students in other departments.

**C12. Written Work.** Practice varies greatly in the different departments of the three colleges, but our impression is that there is not enough of the kind of written work that makes students think for themselves instead of merely copying out information from lectures or books. The correction of written work again means work for members of staff, and we can only refer to what we say in section 9 (d) and 22. We believe that a definite number of essays should be demanded of each student every term and that of these one or two should be on some subject that cuts across departmental boundaries. Such essays could, perhaps, be organised by the departments in coopera-

tion with the English or Chinese Department as part of their regular programme.

**C13. Coordination.** One ought not to talk of lectures, tutorial groups, written work and so on as if they were tools that could be used independently of each other. A good teacher will use all of them for their own proper purposes. Their use needs careful thought and dovetailing, so that one develops and strengthens the work of another. The great aim all the time is the progress of the student.

**C14. Examinations.** We suggested in section 9 (a) and (b) that our students, both at school and in their four years at the university, are being subjected to too many examinations. Examinations, if they count for too much in an educational system, are liable to encourage an excessive reliance upon memorising the correct answer. In our present world we regard examinations as a necessary evil since they give to students the final incentive to strive for rigorous standards in their studies. The type of questions set, especially in the matriculation examination, needs revision so that they test the power to think rather than to memorize. Dividing the examination up into two stages, or more, has the advantage that students do not have to revise matter which they no longer need to know off by heart. But this is a complex and important problem which we have no time to go into thoroughly. We very much hope that the Senate will regard it as one of its earliest tasks to conduct a thorough investigation of the whole examination system from matriculation to graduation.

**C15. Lack of Books.** Most members of staff think that there are not enough books in the libraries and that many students are unable or unwilling to buy the recommended textbooks (Appendix A, section 16). This, of course, is a problem that affects the university's whole function. We make the following recommendations:—

(a) The provision of more money for the libraries to buy more books and in particular several copies of important textbooks,

(b) the mimeographing of extracts and articles,

(c) the translation of foreign books and articles into Chinese,

(d) the encouragement of staff, through grants and through relieving them of duties, to produce textbooks and translations,

(e) the provision of book grants to students, and

(f) the establishment of a book-store.

We also urge the university to appoint a university librarian and assistants as soon as possible to coordinate the services of the college libraries and to plan for the central library.

**C16. Teaching Aids.** The language laboratories of the three colleges use up-to-date equipment with considerable success, and the English departments are clearly giving much thought to improving the efficiency of their aids. But, otherwise, little is being done except for the occasional use of alms and tapes, of maps and models for geography and of the usual equipment in the Natural Science laboratories. The work being done upon them in other countries suggests that they not only enliven teaching but also save the time of the teacher. We therefore recommend that a committee should be set up to consider the whole question of teaching aids (radio, tapes, films, television, etc.) and to explore the possibility of help not only from local sources (e.g., United States Information Service and the British Council) but also from abroad. It should make a particular point of encouraging local products. Since the library would probably be the custodian of such aids, the committee would best be set up under the auspices of the general library committee, but it should number a majority of teachers among its members.

**C17. Language Difficulties.** Our recommendations about the teaching of English are to be found in the part of our report dealing with General Education (section 27). Here we have in mind the problem of the speed of reading in Chinese as well as in English, whether studying in a virtually bi-lingual institution does not slow down the speed at which students read. Slow reading would obviously retard their studies generally. This is a question to which we have had conflicting replies, but we feel it is important enough to be made the subject of study, and we therefore recommend that the university should carry out a survey into this matter.

**C18. Instructing Students in Methods of Study.**

Each college has some form of orientation programme and the individual departments regard it as part of their duty to give new students advice on methods of study. Some departments give a great deal of time and thought to this matter and we feel that we cannot do more than recommend that all departments should carry out such instruction systematically and should follow it up with occasional tests, especially in the first year. The following are some of the points which need attention:—

(a) How to use library, familiarity with its procedure and classification of books, how to use reference books, etc.

(b) How to take notes in lectures and tutorials

(c) How to read, when to skip, how to take notes from books

(d) Use of mechanical aids, including, of course, the equipment in the language and natural science laboratories.

(e) How to develop proper habits of study, to work sensible hours and to give time for recreation.



**C19. *Transfer*** In Part III on General Education (section 25(d)) and in Appendix A (section 9), we refer to the advantage of making transfer from one department to another easier, especially at the end of the first year. This indeed is one of the great advantages of a common general course for all first-year students, that not only do students have greater maturity and experience of studying at a university so that they are likely to make a wiser choice at the end of their first year than while still at school, but also those who make a change start at the same level as their fellows.

**C20. *Use of Vacations*** We recommend that the vacations should be longer. But even if they remain as short as they are, we believe that students would benefit from some advice on how to make the best use of their vacations. Some staff give this already. We recommend that this practice should be carried out systematically. We believe that, while some academic work within their own departments must be done by students, the chief emphasis during the vacations should be on broadening their interests. This can be done in the following ways:—

(a) Reading good books of general interest apart from their own major interest.

(b) Carrying out research projects or field surveys

(c) Travel, physical work, apprenticeship in industry. (Perhaps the University Placement or Appointments Secretary, if and when appointed, can make regular arrangements with local industry and social institutions).

**C21. *General Supervision of Students.*** We are convinced that most members of staff do everything within their power to advise and help their students both in academic matters and in their general lives, but in Appendix A it is suggested that they cannot always give them enough time (section 6) and that students hesitate to approach them (section 13). We do not feel that we can suggest any other schemes than those that are in practice already. On the other hand, non-academic problems, such as worries about money and home, can disturb students' progress so drastically, that we urge that the colleges and departments should keep their procedures of consultation and general supervision under constant review.

**C22. *The Problem of Time.*** We refer to section 9 (d). A university teacher has to fulfil several different kinds of duties, teaching, guiding and advising students, doing research, thinking about and improving both the content and the method of his teaching, as well as a variety of administrative and committee work, quite apart from that public work which society has come to demand from him almost as a duty. Moreover, as we have already pointed out, in the immediate future the formative years of the university the demands upon his time are likely to be even more exacting. We therefore make the following suggestions:—

(a) A more generous proportion of staff to students.

We feel that the arguments for this have already been ably stated by the Fulton Commission when it was advocating a greater proportion than 1:8 (see section 139 of the Fulton Report).

(b) Longer vacations. We refer again to our remarks in section 9 (d). In particular a long summer vacation makes it possible for members of staff to devote longer, uninterrupted periods of time to their studies and research.

(c) Reduction of courses. Every department should scrutinize rigorously the courses which it offers and ask itself whether some cannot be combined and some dispensed with. Our opinion is that each teacher should not take more than two courses per term.

(d) Intercollegiate teaching. See section 10 (d).

(e) Reducing number of lectures. See section 10 (a)

(f) Provision of more clerical help, so that members of staff do not have to waste their time in doing their own typing, mimeographing, etc. At the moment junior members of most departments are expected to do most of the department's clerical duties.

**C23. *Research into Teaching Methods.*** We are only too well aware that we have but skimmed the surface of this whole subject, but we believe that it is of such vital importance to the university that it must be kept under constant review. We therefore make these two general recommendations:—

(a) The Department of Education, when established, should regard as part of its whole task a continuous research into, and experiment with, teaching methods in the university. This should be done in cooperation with the teachers themselves. In addition, in order that the Department may be kept in close touch with the daily work of the university, its members should take some part in the normal teaching of the university, as part-time members of a department.

(b) In Appendix A (section 6) it is stated that there is much informal discussion about teaching methods. We recommend not only that all departments should discuss teaching methods regularly but that there should be more informal discussion among staff members generally, e.g. in staff clubs.

**C24. *Training of Graduates.*** We make this recommendation with some hesitation as we are well aware of the university teacher's desire to work out his own methods. It has, however, been accepted for some years that teachers in schools need training, and we cannot help feeling that young university teachers would benefit from some more systematic advice than they get at the moment. We therefore recommend (a) that there should be regular supervision of all research graduates who are doing some teaching and (b) that there should be discussion groups and occasional lectures organized for them by the Department of Education in cooperation with the other departments. These might well be open to junior members of staff.



### PART III. GENERAL EDUCATION

**C25.** Some form of general education for the students of the Chinese University is desirable for the following reasons:—

(a) The basic justification of an education that is broad rather than narrow lies in the very nature of the modern world. The complexity of organization, the degree of specialised and intelligent skill required for most jobs, the unceasing changes that accompany a desire for progress in every sphere of activity, and the fundamental interdependence of every branch of knowledge—these factors demand of our leaders something more than the skill of a specialist. Specialist knowledge they must have but in addition an awareness of what is happening outside their own field, a willingness to learn from, and cooperate with, other disciplines, a readiness both to evaluate and, when approved, to adopt new techniques, and a devotion to their own line of activity coupled with a humble yet rational appreciation of their own dependence upon the labors of others. (For an illustration of what we mean see Appendix B).

(b) The rapid changes in society make it very difficult to forecast what its future needs will be; a narrow field of study, carried out without an awareness of what is happening in other fields, may make a student unfitted for the world where he or she hopes to make a living.

(c) There are indications that in Hong Kong, as in other industrial societies, employers may prefer to employ a student with a good general education who can readily learn the technique necessary for his or her position rather than one who is equipped only with a narrowly specialized education.

(d) A course of general education during the first year enables students to postpone the choice of their degree subjects until the end of the first year when they will be in a position to make a more rational choice than directly after finishing at school.

**C26.** Ideally all students should study during their first year a common course consisting of three parts, Humanities, Social Sciences and Natural Sciences. Lectures would form part of such a course but the chief method of teaching would be small

tutorial groups backed up by reading and written work on the part of the students. An integrated first-year course along these lines might necessitate a reorganization of the present programmes in the different degree subjects. We spent a great deal of our time discussing different schemes but could come to no conclusion, chiefly because we felt the colleges are not yet ready for such a step. It does seem, however, that an integrated course would present less difficulty if confined to the Natural Sciences alone. In these there is already common ground, especially between Physics and Chemistry, and in many schools and universities in the U.S.A. and the U.K. there is to hand a good deal of proven experience to serve as guide. We therefore recommend that the Faculty of Science should work out a scheme for a common course in the Natural Sciences for all first year students of the faculty to be introduced by stages, the first stage to begin as early as possible. Although we do not propose a common course for *all* first-year students at the moment, we recommend that this ideal should be considered by Senate and that detailed plans should be produced as soon as possible.

**C27.** The study of languages should not be regarded as a part of the general course. These are 'tool' subjects and the stress is solely on the proficiency in the actual language; the appreciation of the language as literature would be part of the literature courses in the Humanities. A test in both Chinese and English should be held not later than the first month of each of the first two years, and all those students who were recommended by their departments would be allowed to take it. Those who passed would be exempt from language study during that year. The university might well organize intensive language training courses during the vacation before the autumn term. The ultimate ideal is that students should come up to the university needing to study only one language. We look forward to the publication by New Asia College of the evaluation of the results of their pre-terminal month's course in English for their new students.

**C28.** We further recommend that some part of the time of all students during their remaining three years should be given to some form of general education; the organization, content and examination of such a course would be in the hands of the college.

## APPENDIX A.

The committee sent out a questionnaire to members of the teaching staff of the three colleges. The following is a summary of those replies which were sent in. As was to be expected, there was little uniformity in the replies, and this summary cannot do justice to the wide variety of points of view presented.

### PART I. THE LECTURE AND OTHER METHODS OF TEACHING

1. The functions of the lecture are:—

(a) to present the fundamentals of a subject or theory, to make clear that 'high lights',

(b) to stimulate and inspire students (especially by showing how the lecturer himself grapples with his problems),

(c) to present up-to-date material (especially when it is scattered in different journals),

(d) to comment on, discuss and evaluate the contents of assigned readings, and

(e) to illustrate methods of dealing with a subject.

2. For most departments the lecture is the most important method of teaching. Often lectures are linked up with assigned reading and discussion in group afterwards, and students are given advice about preparatory reading and taking notes. Diametrically opposed views are held about the giving out of summaries and checking up on students' notetaking; some teachers dictate or give summaries and some check up on students' notes occasionally, while others on principle leave it entirely in the students' own hands. It is generally agreed that lectures should not necessarily attempt to cover the whole syllabus and that questions should be set on topics that have not been dealt with in lectures. But in some departments, especially in the Social and Natural Sciences, the lack of the necessary textbooks and periodicals means that the whole syllabus must be covered in lectures.

3. A few departments make the small discussion group their main instrument of teaching, but most use it only to follow up a lecture. Some experiments are being made in the use of these and of seminar groups especially in senior years.

4. Except for the English Department of one college, which streams its students into three groups according to their ability and deals with each group in different ways, little is done to vary methods of supervision and teaching according to the ability and standard of students on entry, except that nearly all departments give extra time to weaker students and closer supervision to new students in the form of scheduled interviews and follow-up of examination results (see 7 below).

5. Except for the occasional use of films and slides and for the routine use of tapes in the language laboratories, few departments make any use of audio-visual or other aids for teaching.

## PART II. STAFF

6. Most staff take a wide view of their responsibilities towards the students. They regard it as part of their duty not only to supervise the academic progress of their pupils and give them what assistance they can but also to take an interest in their life outside teaching hours and to be at their disposal for consultation, advice and help. In all colleges indeed staff

are expected to keep a certain number of 'office hours' when students know they can find them in and ready to listen. But there is a widespread feeling among members of staff that they just do not have time even to discharge their full responsibilities towards students, let alone to give systematic thought to the improvement of their teaching methods. There seems to be a good deal of informal discussion and exchange of information about teaching methods, but only one or two departments discuss them regularly in staff meetings. Most new demonstrators and tutors are, however, given some advice about preparing for laboratories, etc.

7. As far as the organization of teaching is concerned, members of each department share the teaching load equally. The only differentiation made is that it is the usual practice for more experienced teachers to take the first-year students.

8. The work of some departments, especially in the Natural Sciences, has been hampered through posts being unfilled. The only measure that can be taken to overcome this is to use parttime, local lecturers, tutors/demonstrators and visitors from overseas.

## PART III. STUDENTS

9. Most staff are of the opinion that students should be permitted to change their department at the end of their first year without having to take an extra year. Changes later than that will, of course, necessitate a fifth year. Some departments emphasised that failure in one department may be due not to lack of ability but to an unwise choice of subject and that no penalty (e.g. loss of grant) should be inflicted on the student who does change for the latter reason.

10. Staff do not feel that the students' teaching load is excessive under present circumstances but that, with improved facilities and better quality of students, formal instruction may be cut down with advantage.

11. New students are given some instruction on methods of study (note-taking, use of books and journals, etc.), and information on such matters is passed on in the course of teaching, but few departments do this methodically (see also 14, below).

12. Some departments encourage their students to pursue their studies during vacation by giving them programmes of reading or other work and some even give tests on this work, but many departments hold firmly that students should be left alone during vacation and others that they should do some non-academic work for at least some of the time.

13. Although staff do make themselves available, few students do in fact come of their own accord to staff and seek their advice about non-academic matters.

#### PART IV. LIBRARY

14. In every college new students are given formal instruction on how to make the best use of the library facilities. This is sometimes done by

members of the teaching departments, sometimes by the library staff.

15. There is a unanimous conviction among members of staff that students ought to be allowed access to open shelves.

16. Considerable teaching problems are caused both through the shortage of books in the libraries and also through the students being unable or unwilling to buy the recommended textbooks.

### A P P E N D I X B .

One of our colleagues has declared the following list of skills to be necessary for our graduates if they are to meet the local needs of Hong Kong commerce and industry:—

“(1) To ask intelligent questions and to participate effectively in classroom discussions, seminars, conferences, meetings, etc.

(2) To investigate original and undefined problems, to define problems properly, to establish the pertinent facts, to use imagination in formulating alternate solutions and to use judgment in selecting the best solutions to specific problems.

(3) To communicate effectively, both in Chinese and English, in order

- (a) To express ideas clearly and convincingly in oral discussions,
- (b) To make presentations and lead conferences and meetings,

(c) To prepare technical reports covering a variety of situations,

(d) To write business letters,

(e) To do technical translations, particularly from English into Chinese,

(f) To abstract and summarize information.

(4) To design, construct, maintain and repair laboratory and other equipment required for experimental and practical applications.

(5) To use library facilities in seeking information in subjects not covered by course work during his college career.”

Not all teachers would agree that it is the task of a university actually to teach all these skills, but we think it is none the less a valuable exercise to ask oneself whether such qualities are likely to be fostered under our present system of education.

The report was signed on 9th September, 1964.

# 大學教學方法委員會報告書

## 第一部分 導言

**C1.** 本委員會在一九六四年三月由校長委派組織。第一次會議係在四月一日舉行，其第十三次會議（亦即末次會議）係於九月七日舉行。其委員名單如下：

容啓東博士	崇基學院	主席
范擲亞博士	崇基學院	
周紹棠博士	聯合書院	
楊汝梅博士	新亞書院	
任國榮博士	新亞書院	
楊乃舜先生	聯合書院	
雷恩先生	崇基學院	秘書

在第二次會議時，改由新亞蘇林官先生接替任國榮先生任委員；第九次會議時，改由新亞書院徐培深博士接替蘇林官先生任委員；第二次會議曾邀請聯合書院陳炳權博士出席，並自第四次會議起，改由陳炳權博士接替周紹棠博士任委員。第五次會議中，改由崇基學院黃志昭博士接替范擲亞博士任委員。

**C2.** 校長對於我們的職責指定如下：

「我請委員會詳盡地研究現行教學方法並建議一項可行的方案；在那項方案中要擷取英、美及其他各制度之優點來適應我們的需要。我以往曾在這方面作過一些考察，並曾構成一項假定性的意見，我們的目的，在一二年級時，可着重在導師教學（採用某種方式）；到了三四年級時，可着重在教材講授及小組討論；在研究院時，則可着重在研究班工作。至於課程綱要，雖然其內容不一定在委員會研究範圍之內，然其性質亦需要加以評論。關於大學本科教學，似可將各項考試分為兩階段，頭兩年為第一階段考試，後兩年則為第二階段考試。雖然這純是假定性的，但將我心中所想到者，提供各位參考。」

此外，校長希望用我們的報告書作為和英國來港兩位專家進一步討論的基礎。那兩位專家是雷丁大學法文教授賴

曼教授，及立次大學校務主任羅池博士。他們將在九月十二至二十六日間訪問本大學。

**C3.** 我們不久發覺，若不稍稍討論一下大學的整個學科結構組織，就無從有效地研究教學方法。然而時間却不允許我們在這有關各方面的問題仔細研究，我們只得限於討論一項在我們所認為基本上重要者，那就是，通才教育。因此，我們的報告書分成兩部分，一部分談教學方法，一部分談通才教育。我們當然深知許多其他因素可以影響教學方法，但是這些因素都不是我們所能談到者，例如院際教學之組織，學位課程之內容及研究院的課程等。

**C4.** 大學教師認為教學方法是他們自己的事，是每一位教師個人所獨有，由於其個人之教育與經驗以及其對於在大學任教的意義上所產生之觀念而逐漸建立起來的，因此委員會所發表關於教學方法之硬性的教條與規則勢必為他們所憎惡。我們只能提供意見及建議以供討論與試驗，而所提議者，則在使教學的工作更為容易更有效率，並且能有良好的結果。

**C5.** 還有一點，在一所新大學，事事都在變易中，差不多每天都有大批問題等待解決。其解決辦法可能使我們所作的任何建議，變為不可行或無意義。我們所能希望的只是將一項大學所以存在的核心問題提出來，以便引起大家的思考及試驗。

## 第二部分 教學方法

**C6.** 我們一開始即向三學院的各學系主任分送了調查表，請其答覆。許多位都費了好多麻煩來答覆我們的問題。我們願藉此機會謝謝他們的合作。我們在附錄甲中，將所有的答覆作一簡要報告。

**C7.** 後來我們自問對於三院所栽培出來的那一類的學生是否滿意，我們大家同意對於兩種事實感到不安：

(甲)我們許多學生，雖然在深造和研究方面，都能有良好的成績，而當地工商界不大樂於僱用他們來擔當一項適合於他們訓練的職位。於是，好多人前往中小學校作教員，或就其他職位，而便使他們所受的教育，成為浪費而不相關連。

(乙)教師們常有怨言，認為學生們有兩項短處：其一，是過分的被動，他們以靜坐聽講為滿足，不肯發問，只能死記其所讀者和所聽者。另一項，則為他們的思想不能靈活運用，將所得的學識運用在工作上而得到幫助。

**C8.** 於是，我們對於下列各問題應當自問：

(甲)是否中學教育偏重死記？是否教師們希望學生們將所有的時間都用於聽講？是否由於投考中學及大學之強烈競爭，及其連帶之過多的考試制度，對於學生們所要求的太多，因而，他們除了背誦指定的功課外，既無餘時亦無精力再作更多的功課？

(乙)是否大學想繼續維持其傳統辦法，必須要有極多的講演和極少的小組討論，堅持極多的考試，偏重於系別的區分？

(丙)是否良好英文程度之需要對於學生的學業的進步有所影響？國語及粵語問題的影響又如何？

(丁)是否教師們的負擔過於沉重？因而他們既無餘時對於他們的教學方法加以有系統的思考，對於學生們亦無餘時給以個別所需的照顧？

**C9.** (甲)及(乙)，我們覺得我們對這些問題的答案只能是「是的」。我們不打算批評中學，因為由於強烈競爭而生的情況是在他們控制之外的。我們所關心者，只是大學是否要作些事來糾正這個傳統狀況。我們的調查表所得到的答覆明白說明講演是教學的主要工具。我們也深信一向太側重於考試。過量講演和考試的規定勢必至於鼓勵學生們採取被動性地聽講，和強記聽講所得的習慣，以備在考試時將他們所認為正確的答案重寫出來。

(丙)我們的許多學生都沒有足夠的英文知識。很明顯的，在一所學校內，現時所用的許多的書籍都是英文著作，缺乏工作上所需的良好英文知識，勢必減緩學生的進展。然而就我們的印象而言，國語粵語的問題在學生入學一年以後並不引起困難，因為入學一年後他們至少能了解另一種方言。是否對於英語的要求會不會影響到閱讀本國語文的速度，那是我們所不能答的問題。

(丁)對於第四點，其答覆更見困難。各人的情形不同，時間負擔亦不同。不過我們對於下列三點，則意見一致，⊖每學期教師所擔任課目有三科者，其負擔則是太重而且有些教師所擔任科目還在三科以上。⊖每位教師的每日時間表是分割的如此細碎，假期又如此之短，並且尚有許多職務（例如評定學位考試及入學考試之試卷），因而很難有長時間不受阻擾，集中精力於其學術工作。⊖在今後幾年中，大學在建立其整個之物質、行政及學術方面的結構組織時，全體教職員之負擔，將會更形加重。所以我

們的結論是，對於以上所提的問題，雖然在一般情形之下是有例外的，其答案仍然是「是的」。在下列諸節內我們建議幾項經過討論的補救方法。

**C10.** 講演：

(甲)講演的次數應當減少。作講演的教師們應隨時自問其講演是否適合實際需要。特別是，應當竭力注意圖書館內是否具備必需之書籍與刊物。並且，學生們是否已有所指定之教科書（參閱節十五）。這樣，至少可以免得教師要藉講演為學生們說明那一冊他們所不能得到的書之內容。

(乙)教師應當為學生指定課外閱讀及擬定問題使學生在事先思考；在講演時發問，並在講演後作筆寫工作及參加小組討論以鼓勵學生們在教師講演時更積極地參加討論。凡學生筆記明白清楚者，通常是聽講積極注意的象徵，不過如何作筆記，很難制訂定則。對於一年級的學生應當給以指導，若能時時校閱其筆記，或令其寫一個講演的提要。作為一種練習，那都是有幫助的。助教們可以幫助教師作這些事，一如他們幫助教師作其他的事。在聘任助教時，即應注意他們此種工作。

(丙)教師們不止要自問其所講授的教材是否真正是必需的，並且是否有起「刺激和振奮」學生們的作用（參閱附錄甲節一乙），他們的講授教材應當能配合他們的全盤課程計劃，包括閱讀、寫作和導師小組教學。

(丁)現時某些課目隔年輪流開設以便兩個不同年級的學生可一同參加聽講。這種辦法應當盡量鼓勵，以減輕教師們的講演負擔。等到三院都遷到馬料水後，那時所製訂的一項有協調性院際教學詳細計劃當更可以減輕教學負擔。

**C11.** 導師小組教學

(甲)小組教學或個別教學通常認為最有效的教學方法。學習自行思考是一個心理的及道德的問題，也就是一個智力的問題。勸導學生自己思考，消除其不敢自行冒險之恐怖，使其脫離依賴「權威」之心理，——這項職務，不只是需要蘇格拉底式的衝擊，以推動其在智力方面之悟性，在教師們方面亦需要持着一項牧人式的關心愛護，以獲得其信任。我們同意校長所言，這些事項，特別是在一年級時，必須辦到；小組人數愈少愈好，然後教師及學生才能彼此相知，從開始時，即建立了那相互合作及信任之基礎。學生整個事業之大部分的成功都有賴於那基礎的建立。

(乙)然而，最大困難在於缺乏時間。依照教師學生一與十的比例，則導師教學或是因班太大或次數過少而無大用處。這項問題，不獨是本大學如此，世界各大學因其領域之急遽擴展，需要教師日多，這問題也日見嚴重。我們只能建議下列各辦法：

⊖減少講演次數（參閱節10甲及丁）。

⊖利用聽視儀器及其他輔助工具。



③聘任助教及實驗室助教主持導師教學。

西聘任畢業生之作研究工作者在其研究工作開始後，為兼任助教。

(丙)導師教學小組並非萬靈仙丹，不能自動地解決一切的教學困難。其方式各有不同：由一個或兩個學生批評其他學生的文論；退還並討論其寫作；由小組共同討論一個學生之文論；小組共同討論一課題或一著作。每一方式在教師及學生雙方都需要小心考慮及準備。

(丁)訂製學系的課程，須富有伸縮性，以便鼓勵教師們之願意從事試驗者，試辦各式導師小組教學。我們建議對於青年教師們在其教學事業初開始時，當切實指導他們，幫助他們，教以如何主持導師小組教學（參閱節20）。

(戊)各學系之課程不同，倘若建議一個固定之導師教學次數，殊無意義。不過我們主張在一二年級時，每星期常給學生若干小組教學，每小組之理想的人數，不當超過六人。在三四年級，大部分教學總是在小組舉行者，並且到那時，學生們應已與其教師們相熟識，而且，亦已成熟，能以非正式之形式，隨時向教師們請益。

(己)我們再建議組織系際小組，由一系以上之教師們及學生們組織之。其討論之題材，有時可能是完全普通性的，而為幾系的學生們所共同感到興趣者，例如，當代之廣告技術；有時一項題材只有兩系的學生們對之會有專門興趣者，例如，物理系學生及宗教知識系學生們可以討論當代宇宙學說對於宗教信仰之影響。在這種情形下，可能使學生們於專門致力本學系研究之外，奮發起來，感覺到可以向其他學系學些知識，同時也可以給其他學系以他們所得的知識。

**C12.** 寫作。三學院各學系辦法各異。我們的印象，則是寫作不夠多。所謂寫作，不只是從講演及書本抄寫而來的知識，而是學生們自己思考而得者。改正寫作自然又加增了教師們工作，關於這點我們要請參考我們在節九丁及節二十二所說的話。我們認為每一學生每學期應指定寫幾篇作文，其中之一篇或兩篇其題目應當是超出本學系之範圍者。這類作文，或者，可由各系與英文或中文系共同訂定，作為他們的正式課程。

**C13.** 協調。我們不當視講演，導師小組教學，寫作等等只是那些不相關連而可以單獨運用的工具。一位好教師，是要按其用途，將他們連在一起運用的。運用那些工具，需要仔細考慮和佈置，然後才能相互為用，彼此加強發展。其主要目標，則在謀學生的進步。

**C14.** 考試。我們在九甲及乙節內曾提到這些學生們在中學及其在大學的四年中都是經過了太多的考試。倘若考試在教育制度中過份為認重要，就會鼓勵學生過份從事於死記正確的答案。在今日的世界中，我們認考試為一不可免的不良制度，因為考試成為學生們的最後推動力量，使他的努力達到學業上之嚴格標準。考題之方式，尤其是大學入學考試，需要改正，用來測驗思考能

力。而不是記憶的能力。將考試分成兩個或兩個以上之階段，則有一項好處，那便是，學生們無須溫習那些他們所不再需死記的事項。但這是一複雜而重要的問題，我們沒有時間來詳盡地討論。我們甚望大學教務會能將整個考試制度，從大學入學考試，以迄畢業考試，加以澈底調查，作為他們儘先辦理工作的一種。

**C15.** 缺乏書籍。多數教師們認為圖書館內書籍不夠。

而學生們無力購買或不願購買所指定之課本（參閱附錄甲、節十六）這事自然是一個影響大學整個功用的問題。我們建議下列各項：

(甲)撥給更多款項作為圖書館購書之用。重要課本，每本尤須多備數本。

(乙)複印文章摘要及刊物的文章。

(丙)將外國書籍刊物文章譯為中文。

(丁)以補助津貼或減輕職務方式鼓勵教師們從事著作課本及翻譯工作。

(戊)設定學生購書津貼辦法。

(己)設立書店。

我們也主張大學儘速聘任一位圖書館長及若干助理人員以便配合各學院圖書館的服務工作並籌劃設立中央圖書館。

**C16.** 教學輔助工具。三學院語言實驗室採用最新設備，相當成功。各英文系對於增進輔助工具之功效，顯然費了一番心血。但是，從另一方面看來，除了對於影片及錄音帶，和地理學所用的地圖及模型以及各自然科學實驗室的通常設備，間或使用外，其他方面，很少有利用輔助工具者。參考其他國內所得的成就，說明了輔助工具不止使教學增加生氣，並且節省教師的時間。所以，我們建議應當設一委員會來研究教學輔助工具之整個問題（無線電、錄音帶、影片、電視等等），並且查詢有無捐助之可能來源，來源不必限於本地（例如美國新聞處及英國文化會）也可以來自國外各地。當然，我們要特別注意於鼓勵本地產品。圖書館當是這些工具的保管者，那麼，該委員會最好由圖書館委員會主辦，但其中多數委員應為教師兼任。

**C17.** 語言困難。關於英語教學問題，我們的建議見於本報告書通才教育部分（參閱節二十七）。在此，我們想到中文閱讀以及英文閱讀的速度問題；是否在一所實際上兩種語言並用的大學內讀書，學生們閱讀速度會因而減緩。閱讀速度減緩，無疑的，要延礙一般學生們的學業。關於這項問題的調查，我們曾得到互相矛盾的答案。然而我們認為這件事有其重要性而值得研究的。我們建議大學對於這事應當加以調查。

**C18.** 教導學生們學習的方法。每一院各有其一項入學輔導的計劃，各學系也視教導新生們關於學習方法為其責任。若干學系對於這個問題曾費不少時間，也經過許多考慮。我們覺得我們只能建議所有的學系應當有系



統地照舊進行這類的教導工作，有時利用測驗以加強效能，尤其是在一年級時，下列各項問題應予以注意：

(甲) 如何使用圖書館，熟習圖書館手續及圖書分類，如何使用參考書等等。

(乙) 如何在講演及導師教學時寫筆記。

(丙) 如何讀書，如何略過不讀某段，如何筆記。

(丁) 利用機器輔助，這當然包括語言及自然科學實驗室之設備。

(戊) 如何發展讀書的正常習慣，如何才是工作合理的時間、如何留出閒時作休息運動之用。

**C19. 轉易學系。**在本報告書之第三部分，關於通才教育者，(參閱節二十六丁及附錄甲節九)，我們談到使學生容易從一系轉入另一系之利，尤其是在一年級終了之時。這是為一年級學生們設訂共同普通科目主要優點之一。因為在這時，學生們已在大學讀書，自比在中學時更見成熟而有經驗，不止對於選擇學系更見精明，並且在這時轉系者與其他學生們的程度都是相同的。

**C20. 利用假期。**我們建議各種假期應當加長。但即使仍舊不改，我們相信如果教導學生們如何善用其假期，對於他們是有益的。有些教師們已經如此地做了。我們建議這辦法應當有系統地實施。我們以為，學生們雖然應當致力於其本系內的學業，在假期內，則應當側重於如何擴大學生們興趣之範圍。這可以採用下列各辦法：

(甲) 閱讀各學生主要興趣以外一般性之好書本。

(乙) 舉行研究計劃，或舉辦實地調查工作。

(丙) 旅行、體力勞作、工業實習工作(大學之職業介紹委員會或人事秘書應與本地工業及社會事業機構設法安排實習機會)。

**C21. 對於學生們的一般監導。**我們確信大多數教師們竭其心力，在學業上及一般生活上，勸導學生，並幫助學生。在附錄甲我們提到教師們不能常有充分時間接見學生們(參閱節六)並且學生也猶豫不往謁見其教師們(參閱十三)。除了現行辦法之外，我們也不能再建議其他方案。至於不屬學業諸問題，例如金錢及家庭方面之煩惱，亟能妨礙學生的學業進步。所以我們要請各學院及各學系應當時常將師生會談及一般性監導之手續加以檢討。

**C22. 時間問題。**我們請參閱節九丁。一位大學教師需要盡好幾種的職責：教授學生，領導及勸導他們作研究工作；考慮所教授之內容及其方法，並研究如何改進；還有多種行政及委員會工作。此外，社會還要請其參加公衆工作，這差不多也成為其職責之一項。而且，我們曾經指出，在最近之將來，正當大學之形成時期，教師在時間方面所受的剝奪，將會更見劇烈。所以我們作下列建議：

(甲) 放寬教師對學生之比例。關於這事的論據，我們覺得富爾敦委員會，當其主張應有大於一對八之比例時，

已經很剝切地說明了(參閱富爾敦報告書139)。

(乙) 更長的假期。我們再請參閱本報告書節九丁的意見。尤其是在一個長的暑假中，教師們可以有一較長而不間斷的時間，專心於閱讀及研究。

(丙) 減少課程。每一學系應當嚴密審查其所開設的課目中是否若干可以合併，若干可以刪裁。我們的意見，每一教師每學期所擔任之課目不應超過兩個以上。

(丁) 院際教學。參閱節十丁。

(戊) 減少講演次數。參閱節十甲。

(己) 加添文員協助工作，使教師們不必浪費其時間於自己打字、複印，等等工作。現今，幾於每一學系內之初級教師均需作系內大部分之文員職務。

**C23. 教學方法之研究。**我們深深了解關於此事我們只是作了浮掠的表面工作。但我們相信這事對於大學是異常之重要，應當不斷地予以檢討。所以我們提供兩項一般性的建議：

(甲) 教育學系成立後，應以不斷研究大學教學方法及其試驗作為其全部職責之一項。此外，為了該系能明瞭大學之日常工作起見，該系之教師們應參加大學有關學系之教學作為該學系之兼任教師。

(乙) 在附錄甲(節六)我們曾提到教學方法仍須有許多非正式的討論。我們建議，不止是所有的學系應定期討論教學方法，並且在所有的教師們之間，亦應有更多的非正式討論，例如在教職員俱樂部中討論是。

**C24. 訓練畢業生。**我們作這項建議時，頗為猶豫，因為我們深知大學教師願意自行擬訂其本人的訓練方法。然而，多年來業經公認中小學教員們都需要一番訓練，我們不能不感覺到大學中青年教师們可能經過一番更有系統的輔導後，其得益將較其目前的辦法為大。所以我們建議：

(甲) 對於研究生之同時担任若干教學職務者，應有正式的輔導。

(乙) 應由教育學系與其他學系合作為他們組織討論小組，時或有些講演。這類組織低級教師們亦應參加。

### 第三部分 通才教育

**C25. 某種形式的通才教育，對於中文大學學生們是有益的，其理由如下：**

(甲) 由於今日世界之複雜性質，教育有其基本存在意義，在求其廣，而不求其狹。組織之繁雜，大多數職務上所需專門而聰明的技能之程度，每項事業皆欲追求進步而與此願望俱來之不斷的改變，以及各門知識根本上之彼此互相倚存——這些因素，都說明了我們的將來的領導人物，必須在他們專門技能之外，還要有其他學問。他們自當有專門的知識，但此外，還要知道在他們的本行之外發生了什麼問題，願意向其他各學科學習，並且願意與其

## 附 錄（甲）

他學科合作；對於新技術準備予以評價，並在證明其長處後採用之；專心一志致力於其本行工作而輔之以虛心；明智地了解其本門工作是有賴於他人之工作（參閱附錄乙我們意見之解釋及舉例）。

（乙）社會現狀變遷迅速，使人很難預料將來之需要是如何。一個狹隘的研究範圍，對於其他學科方面發生的事項茫然無所知，可能使學生們不適合於將來他們要在那裏謀生的一個世界。

（丙）在香港一如在其他工業社會一樣，工業雇主們，頗有跡象，寧願雇用一位具有良好通才教育的學生而不願雇用一位只擁有狹隘的專門教育的學生。因為這些有通才教育的學生容易學習他們職位上所必需的技能。

（丁）學生們讀完一年級的通才教育課目後，才開始選定其學位學科。在那時，他們比在中學時將更有能力來作明智的選擇。

**C26.** 就理想而言，學生們在一年級時所讀之共同課目應包括三部分；人文科學、社會科學，及自然科學。講演將成為該科目之一部分，但其主要教學方法，則為導師小組教學，由學生方面自己閱讀寫作作為補充。依照這種路線而編排的一年級全面科目，將會影響到使現行各項學位學科要重加改組。我們曾經費了不少時間討論各種方案，但未能達到結論，主要的是因為我們感覺到各學院尚未能實施這一個步驟。然而，好像是，一個全面性的科目若祇限於自然科學時，困難或可較少。自然科學本身有其共同基礎，尤其在物理化學之間，並且，在美國及英國，很多的大學及中學內已有許多現成可行的經驗指點我們，所以我們建議理學院應當擬定一項理學院所有一年級學生們的共同自然科學課目的方案，分段進行，其第一階段則應儘速開始。雖然我們不主張為目前所有的一年級學生們開設一項共同課程，然而，我們建議，對於這個理想大學教務會應當加以考慮，其細則應當儘速制訂。

**C27.** 語言之學習，不當認作通才教育課目之一部分，因為那是「工具」科目，其要點完全在實際運用該語言之能力。至於語文作為文學的欣賞，則屬於人文科學內文學課目之一部分。中文及英文之測驗應當在一二年級每年開學後之第一個月內舉行，不可再晚。所有學生們，經其主管學系提名者，皆可參加。凡測驗及格者，得在該年內免修語言課目。大學不妨在秋季始業前，暑假期中，組織嚴格語言訓練。其最終目的在使學生來到大學時只須攻讀一項語言。我們希望新亞書院對於為新生而設的學期前一個月的英語課目，能早日公佈其評價結果。

**C28.** 我們並建議所有學生們在大學的後三年內，一部分時間應當用在某種的通才教育。至於該課目的組織、內容及考試則當由各學院負責擬定。

本委員會曾向三學院教師們送致調查表一份，臚列問題，請其答覆。下面是將所收到的答覆做成提要。大家也許可以預料到，答案是不一致的。本提要不敢說能夠充分代表廣泛不同的意見。

### 第一部分 講演及其他教學方法

#### 1. 講演之功用如左：

甲、指出一科目或一理論之基本事項，說明其「重要部分」。

乙、引起學生之興趣而加以誘導（尤其是指出講授者本人對於各問題之如何處理辦法）。

丙、介紹最新材料（尤其是散見於各學術刊物者）。

丁、批評、討論，並評定所指定各讀物的內容。

戊、說明對於一科目的如何處理方法。

2. 在大多數學系內，講演為最重要的教學方法，講演時常與指定之讀物及講演後之討論小組配合而行。學生們依照指導，預讀參考書，並作筆記。至於分發提要及審定學生們的筆記，則意見參商。有些教師們令學生默寫，或分發提要，有些教師們則間或審查學生們的筆記，而有些教師們則在原則上完全聽任學生們自己處理。大體上，一般意見認為講演範圍不必須包括全部課程綱要，但考題則應當問及講演所未涉及的項目。可是在某些學系，尤其是在社會及自然科學各學系，由於缺乏必需的教科書及刊物之故，講演不得不包括全部課程綱要。

3. 少數學系利用小組討論作為其主要教學工具，但大多數則用在講演後作為輔助之用。小組討論及研究班討論正在試辦，尤其是在四年級。

4. 只有一學院的英文系，依照學生的程度，將其分為三組，用不同方法教授各組。此外，對於學生入學時的參差程度及能力很少採用不同的監導及教學方法。差不多所有各學系，當其排定師生會見時，或查閱學生考試成績時（參閱節七），對於程度較差的學生，則多給些會見時間，對於新生，則予以更多的監督。

5. 除了偶而利用活動影片及映片以及語言實驗室中例行採用的錄音帶外，甚少學系在教學上利用視聽或其他輔助工具。

### 第二部份 教師

6. 關於教師對學生們的責任，大多數教師們都採寬廣的看法。他們認為他們的責任不止是對於學生們的學業進步要予以監督，盡其所能來幫助他們，並且對於學

生們在教學時間以外的生活問題也要關心，願意和他們商談、勸導他們、幫助他們。所有的學院都希望教師們指定若干「辦公時間」使學生們知道他們甚麼時候能在那裏來聽學生所欲談之事，可是教師們之間有一種普遍的感想，以為他們沒有足夠時間對學生們盡其全責，更不用說有時間來對改善教學方法作有系統的思考。關於教學方法，彼此間似乎有過很多非正式的討論及交換意見，但只有一二學系，在正式系務會議時，定期討論這個問題。大多數新來的助教及實驗助教都曾受到一些關於如何準備實驗室工作等等的指導。

7. 至於教學之組織，每系成員平均分任教學負擔。惟一的分別則是，通常的辦法，由較有經驗的教師們負責一年級學生的課程。
8. 有些學系的工作，尤其是自然科學的學系，由於教師的位置乏人担任而受到阻礙。惟一應急的辦法則是任用本地兼任講師、助教、實驗助教、及國外之客座教師。

### 第三部份 學生

9. 大多數教師們以為學生們在一年級終了時應當許其轉系，不需多讀一年。在那時不轉，過後轉系則須多讀第五年。有些學系特別指出，學生在某一系之失敗可能不是由於缺乏能力，而是由於選擇學科之錯誤，以為對於因第二項原因而轉系的學生不應加以懲罰（例如，撤消其已得之補助金）。
10. 教師們不認為在目前情況下，學生們的上課負擔過分沉重，以為只要有了改善的設備和更好程度的學生後，正式教學時間或可減少而有益。
11. 對於新生們，都教以學習方法（作筆記，用書籍及學術刊物等等）。關於這些知識是在其上課時予以指導。很少的學系採有條理的辦法來辦理（參閱下第十四節）。
12. 有些學系鼓勵學生們在假期中從事攻讀，為他們定出閱讀或其他工作的課程。有些學系並且對這類工作還加以考試。但多數學系堅信學生們在假期中應當自由活動，也有若干學系認為學生們應當至少用假期中一部份的時間作學業以外的工作。
13. 雖然教師們願意接見學生，而事實上，很少學生自行前來向教師請教關於學業以外的事項。

### 第四部份 圖書館

14. 每一學院對於新生都正式教以怎樣能夠有效地利用圖書館之備。有時，由其本系教師指導，有時由圖書館職員指導。
15. 教師們有一致的信念，認為學生應當有直接在圖書館書架上取書之利便。
16. 由於圖書館內書籍不足，及學生們無力購買或不願購買指定之教科書，因而引起不少的教學問題。

## 附 錄（乙）

我們一位同事宣稱：我們的畢業生倘要能夠適應香港本地工商業之需要，則必須具備下列的技能：

- 「㊟能提出合理的問題及有效底參加課室討論，研究班及各種會議。
- ㊟對於自行發現而未有明確定義的問題，能夠從事調查，對於問題能下適當定義，能證明有關事實，能用其想像力擬出交替解決的方法，並能用判斷力，對於某特殊問題選擇其最好的解決方法。
- ㊟中文及英文能有效地運用自如，如
  - 甲、在會談討論中，能明白地表達其思想且有說服力；
  - 乙、能作陳述並主持會議及聚會；
  - 丙、能準備技術性報告，包羅多種情況者；
  - 丁、能書寫事務信件；
  - 戊、能繙譯技術性文章，尤其是由英文譯成中文；
  - 己、能作摘要及提要。
- ㊟能設計、裝配、保養，及修理實驗室及其他為實驗及應用的設備。
- ㊟能利用圖書館之設備，自己找到大學課程中所未曾學到之知識。」

並非所有的教師們都同意這些技能都真由大學來教導，然而我們覺得，無論如何，這是一項有價值的習題，我們要自問，是否這些品質應當在我們現行的教育制度之下培養出來。

一九六四年九月六日

本期因付印倉卒，譯文誤謬之處在所  
未免，尚希讀者予以鑒原。

編者識

# REPORT TO THE VICE-CHANCELLOR ON TEACHING METHODS

*by Professor A. G. LEHMANN and Dr. J. V. LOACH*

## CONTENTS

### Acknowledgements

- Section 1: Introduction
- Section 2: Definitions
- Section 3: Problems of language
- Section 4: Lectures
- Section 5: Small-group teaching
- Section 6: Examinations
- Section 7: General studies
- Section 8: Steps to be taken in the immediate future

## ACKNOWLEDGEMENTS

We should like first to thank the Vice-Chancellor of the Chinese University of Hong Kong for inviting us to give our views and to help his University at this most interesting stage of its development; and the authorities of the University and the Department of Technical Co-operation for making it possible for us to visit Hong Kong for this purpose.

We have visited each of the three Foundation Colleges more than once and we have met members of the staffs of the Colleges and of the University on numerous occasions; they have very generously welcomed us at both formal and informal meetings and have all been very patient with our many questions and enquiries. In addition, we were greatly assisted by the work already undertaken and the facts and ideas already collected together by the Committee on Teaching Methods under the chairmanship of President C.T. Yung. This Committee's Report gave not only invaluable information as to the present position in

the three Colleges, but made evident some of the special problems of the teachers and some of the special needs of the students. For all this it is difficult adequately to express our appreciation; we can only say we are grateful for the privileges and courtesy extended to us.

Our work and our stay in Hong Kong were made more enjoyable by the thoughtfulness and willing help of the administrative officers of the Chinese University and of the Colleges; and numerous persons in Hong Kong, not associated with the University, also contributed to the building up of a broad picture of problems of higher education in the community; we should like to thank them all most warmly.

## Section I: Introduction

**L1.1** We were honoured by the invitation of the Vice-Chancellor of the Chinese University of Hong Kong, Dr. Choh-Ming Li, to advise upon teaching methods in this recently established University. In his letter to us, Dr. Li wrote of his wish to obtain advice for the University on

“reconstituting the whole teaching system which would adapt the best features of the British, American and other systems to our needs”. (see note)

**L1.2** The Chinese University was established by bringing together in a federal-type institution, the three Foundation Colleges, Chung Chi College, New Asia College and the United College of Hong Kong, each of which contained a substantial body of

**Note:** The best features of the Chinese traditional system of teaching will be taken into account by the Chinese University when the two advisers' recommendations are considered for implementation.

knowledge about various teaching methods and about their effectiveness in the respective Colleges. Together, having regard to the differing traditions of the three Colleges, they provide a very wide range of experience.

**L1.3** A review of this knowledge and experience and an illuminating account of its application and of many of the associated problems were provided in the Report (dated 4th September, 1964) made to the Vice-Chancellor by The Teaching Methods Committee. This Committee was appointed by Dr. Li in March 1964, with the Pro-Vice-Chancellor, President C.T. Yung as Chairman and a membership drawn from all the Colleges, to prepare a Report that it was hoped would serve as a basis for further discussions with us. For this Report and for the full discussions that we have had with members of the Committee we are indeed grateful; without them we should have wished to pursue many enquiries that could not have been completed in the time at our disposal. As it was, we were greatly assisted by the Committee's summarised results of the questionnaires that had evoked careful and thoughtful responses in the Colleges.

**L1.4** The Committee on Teaching Methods did much more than collect information about experience and present practice; it asked some fundamental questions about teaching at university level. In its report there are many constructive suggestions for increasing the value to the students in the Colleges of their courses and the teaching and for increasing the extent to which they avail themselves of the opportunities both formal and informal that are open to them to promote their education and development in the widest sense. We refer below to many of these points and though we may not agree with some of the proposals the Committee put forward, we could not fail to be impressed by the Committee's work and by the breadth of their review which covered all aspects of undergraduate study.

**L1.5** The University is at an important and difficult stage of its development. Each of the Colleges has its own traditions and has worked out its own methods — and is naturally anxious to retain these; and yet each must in some measure shift nearer to the others so that there may in due course be many common courses — not for the sake of uniformity but so that all students in a subject may benefit for the learning and scholarship of experts in the Colleges. Absence of any common ground or of some similarity of approach will make it exceptionally and unnecessarily difficult to bring students from the three Colleges together in a *university* course. These difficulties will arise more particularly when two of the most valuable teaching methods are associated in a course — the lecture and small-group teaching. The lecturer himself will not be able to take all the seminars or tutorials in the Colleges — possibly not even in one College —

that derive from or are related to the series of lectures that he is giving. Unless there is agreement about the ground to be covered and some co-ordination of 'attack', the value of the small-group teaching will be only fractional.

**L1.6** It is partly with these considerations in mind that we have included a section on Boards of Studies. Provision for these was made in the Constitution of the University and there is important work for them to undertake. The Senate has freedom to define their areas of responsibility (Statute 11.4(s)) and one of their principal functions in the immediate future will be to provide an opportunity for bringing together teachers of the same subject in the three Colleges and for discussing syllabuses and examinations.

**L1.7** A student coming to spend some years in a university may have any one of several purposes in mind —

(a) to prepare for a career that he has already decided upon and for which he is therefore seeking factual knowledge and training and skill in using it;

(b) to prepare for some career that he has not yet selected but for which he thinks the mental training of a university course will be useful;

(c) to continue study at a higher level than is generally possible outside a university in a subject or group of subjects that interests him and in which he has already shown some ability;

and many students will be influenced consciously or subconsciously by more than one of these as well as by other factors. In every case however, one of the most valuable things the student can gain is the capacity to use his mind, to order and review facts, to make logical deductions, to examine arguments and to formulate and express his thoughts and ideas. It might be possible to gain these qualities by reading or hearing other men's expositions of their subjects; but this can never be so effective as for the student himself to have to do these things and with guidance and correction to learn to do them well. Learning to do this may well be more difficult for students in whose cultural background great stress is laid on memorising; but this, we believe makes this side of teaching more particularly important in the Chinese University and we have therefore given special emphasis to it in what follows.

## Section 2: Definitions

**L2.1** The question of terminology is a constant problem in the field of teaching methods; we wish therefore to define at this point a small number of uniform expressions which are made use of in this report; these definitions, even if they are not subsequently useful to colleagues, will reduce ambiguity in the following pages.



**L2.2 (i) Programme.** We use this word to mean the whole plan of studies laid down in a given year for a student to follow — e.g., the third-year programme in, say, Sociology at Chung Chi College, listed on pages 112 of its Calendar for 1964-65, comprises 34 units, covering various subjects.

**(ii) Course.** We reserve this word for a component of a programme to which a code number is allotted in the Calendars — e.g., in the United College Calendar, page 131, the “History of Chinese Civilisation (Second Year)”, coded “Hist. 201.” Each course is made up of several teaching periods a week for either a whole year or part of a year.

**(iii) Contact-hour.** Includes every period of a student’s work in which he is formally under instruction or guidance from a teacher.

**(iv) Lecture.** A monologue by the teacher, expository in nature, in a period of which only a small part, if any, can be allotted to questions from the student; and delivered to an audience of any size at all.

**(v) Discussion period or small-group teaching period.** Any form of teaching which is not a lecture, apart from certain specific kinds of teaching period listed separately below under (vi) and (vii). It must also be limited in size. We have had experience in certain European universities, of taking part in “discussion periods” in which up to eighty students and several teachers were present; it is clear that in a class of that size, only very few of those present can participate actively, while the remainder may or may not benefit; the universities in question are themselves anxious about such classes. We shall take it as a principle that no discussion period, or class other than a lecture, should normally contain more than twenty students, whatever its nature; some of them may, by the nature of the work, contain fewer.

**(vi) Written exercise class.** A period during which the student works at exercises designed to strengthen or confirm his command of material already expounded to him, or in periodic informal tests in any subject to which such work is appropriate.

**(vii) Laboratory or practical class.** A period, varying in length from subject to subject, in which students perform assigned tasks with or without prepared equipment, normally in the presence of teachers or demonstrators who can discuss the work with them as it progresses. The size of class is limited only by space available and the ratio of students to staff and demonstrators present.

**(viii) Seminar.** A discussion class under the control of a teacher in which at successive meetings a different student (or students) delivers a paper or report on a series of topics which form part of the syllabus of a course. Since it is desirable that all students should prepare each week to be able to discuss actively the subject of the report and not simply listen to the teacher’s criticisms, the maximum size for a seminar

would be no greater than that suggested under (v) above.

**(ix) Tutorial.** A period to which the student comes having done a substantial amount of work in a form — essay, written exercises, problems — which the teacher can discuss with him and criticise. The tutorial is normally one of a series, is conducted by the same teacher, and may either be related to a lecture course or not. It may be conducted by a teacher with either one or more students at the same time; but if numbers rise above five, the difference between tutorial and seminar becomes obscure.

**(x) “Subject-centred” and “student-centred”.** These terms denote relative emphasis, since all undergraduate teaching is directed to students, and is teaching of a subject. However, some forms of small-group teaching (particularly tutorials) are concerned chiefly with the problems encountered by, and the intellectual development of, the individual student himself; on the other hand, while all lectures should have in mind the listeners to whom they are addressed, many of them, especially the more advanced ones, are of value mainly for their exemplary quality and excellence as a treatment of the subject. As numbers rise in a tutorial, it becomes obviously more difficult for the student’s individual problems to be dealt with; a seminar is more subject-centred than a small tutorial or one or two.

We shall devote a later section in far more detail to small-group teaching; all forms come under one or other of the above headings.

### Section 3: Problems of Language

#### Introductory

**L3.1** We were most impressed with the helpfulness of colleagues in outlining to us the situation in this field as they see it developing. Clearly, the problems of language have been considered very carefully; and if the report of the Committee on Teaching Methods mentions difficulties which remain, this is because these problems are in themselves very complex, and because the difficulties are of a kind which are met with in universities all over the world and are not peculiar to Hong Kong. If we could point to any country where we know them to have been fully resolved, we should certainly do so; but even in multi-lingual communities like Switzerland they are apt to be encountered in the universities, and we have borne in mind a variety of other situations among which the situation in Hong Kong is not exceptional.

**L3.2** The problems are complex because the following factors have to be taken into account:—

**(i)** Problems arise in different ways according to courses of studies being considered.

**(ii)** They are affected by the student’s earlier



training in school and in some measure also by his social background.

(iii) They have to be faced at different stages of the student's course; but in particular in the first year of study, at a time when the student has to deal with other problems of adaptation to new tasks, etc., and may not yet fully appreciate the use which he will have to make at a later stage of languages other than his mother tongue.

**L3.3** It is a matter for congratulation that the Chinese University has, as we note, given so much thought to the subject, and especially that it has been able to lay down aims for language work in the first two years of studies. As we see them, the aims fall into two distinct groups: (i) "tools of work" related to academic studies at all stages. (ii) attainments required of graduates of the University in order that they may play a full and effective part in the life of the community when they terminate their higher education. Of these two objectives, the latter is common to all students; the former varies in detail according to disciplines (compare the amount of time spent on studying a single item of advanced mathematical symbolism on one hand with the reading of texts in a library subject, say history, on the other hand).

We assume therefore that aim (i) must be to a good extent fulfilled during the first two years of study, and fully attained by further familiarity in the following years, and in any case as quickly as possible to enable students to have access to published material in English which is not available in translation. Aim (ii) should be achieved by the end of four years; but it is unlikely that when a fourth-year student of, say, a physical science is fully occupied in the subject of his choice he will be able to give a great deal of his private time to advancing the standards reached by systematic study in his first two years.

**L3.4** As regards objective (ii), a further point is much in the minds of university teachers all over the world at the present time: namely, the real command of the mother-tongue. It is of the nature of higher education that it makes continuous demands on students to improve the precision and effectiveness with which they express themselves, whether in writing or by speech, and whether they are natural scientists, or social scientists, or students of the liberal arts. This increased command can be developed only if two conditions are present—good examples to observe, and opportunity to practise. The student who first attempts to express himself with precision and effectiveness at the time of an examination will fail to do so, even though his teacher has given him good examples, unless he has had earlier opportunity and incentive to improve his skills; this applies equally to the arts or to the treatment of a topic in economic studies or in natural sciences. The experience of many universities in the U.S.A., in France, and in other countries

where the deficiencies of students have been discussed, makes it clear that only by repeated written and oral work can this command be gained. In Britain, scientific departments tend increasingly to require students, in the final examination, to write an *essay* on a general scientific subject, as a means of ensuring that scientists and technologists are able to communicate effectively; this test is often prepared for by practice during the years of study.

The deficiencies of students in writing or speaking with ease and precision have in many countries been blamed on the secondary school. But whether or not this blame is justified, there is no doubt that work demanded in higher education is of such a standard, and requires such a degree of intellectual maturity, that there is a responsibility on universities to ensure that this particular tool of work becomes progressively sharper and more effective, whatever the standard of the student on entry. For it is only by dealing with exacting intellectual tasks that the student will encounter the challenge to use his mother-tongue in a more precise and mature manner.

This topic is not without its bearing on teaching methods, and we return to it in a later section. The remainder of this section is devoted to problems of languages other than the mother-tongue.

### Particular Problems

**L3.5** The Committee on Teaching Methods has considered the problems which arise from the need for students whose mother tongue is Cantonese to communicate, or at least to follow lectures effectively, in Mandarin. It is heartening to learn that the Committee is reasonably confident that the task is one which students can take in their stride in their first year at the University. It would hardly be expected that the visitor without expert knowledge on this matter should presume to offer views. The situation is analagous, but not identical, to that in many parts of Europe (Alsace, Slovakia, Ukraine), except of course in the matter of calligraphy; and we are not surprised to learn that the problems have been overcome, and that a gratifying situation results for Chinese studies in the University, in respect of objectives (i) and (ii) mentioned in paragraph 3 above.

**L3.6** The problem as regards English is of course of a different kind. It is to be borne in mind, once again, regarding the nature of university studies that while institutions have close ties with, and duties towards, the soil on which they stand they are also members of a world-wide community devoted to the pursuit of knowledge, and that a book or paper published elsewhere in another tongue may be of immediate use in teaching or urgently needed in research. Quite apart from this, in addition to serving as a door into the world community of learning the discipline of learning a foreign language is valuable in itself as part of general education; this is recognised in university

regulations and syllabuses all over the world. Throughout Eastern Europe, for example, students in all faculties will have studied Russian in middle schools and are required over the first three years of their course at a university to reach a high standard in Russian, both written and spoken; in addition, for three years they must *all* learn a *second* "world language" (English, French, Spanish or German) for purposes connected with their studies ("tool of work"), and pass university examinations at a good standard in oral comprehension and written work. This creates demands on their abilities and their working-time which are no lighter than those faced by students at the Chinese University: it would be idle to pretend that the problems raised in this way have been fully solved. In Britain there has been much discussion in recent years of the need to provide language studies of a more satisfactory kind for students who are not aiming to be specialised linguists; in particular, recourse is had to language centres with recording equipment.

**L3.7** The keynote in all these situations is the need to start with an unambiguous job-specification. The Committee on Teaching Methods has very properly had this need in mind.

(i) *Reading Speed.* For the teaching of English over two years as a tool of work, one of the chief elements of the job specification is the Reading Speed to be aimed at by the end of two years. In a third and fourth year library subject where a high proportion of the material, both primary sources and secondary criticism, may be in English, we should expect a proper objective to be around 40 pages an hour. If this cannot be reached by any but a minority of students, the academic results will fall short of what is hoped for; then either the course must be changed radically, or a large proportion of the secondary material must be translated and made available in that form. We are aware that this latter expedient would result for some teachers in a heavy extra burden in preparation of teaching material. Nevertheless, if the problem exists, it must be solved by one means or the other; and we believe that its solution would help to overcome in part a weakness emphasised by the Committee, namely that students are over-prone to rely on their own lecture-notes and do not read enough for themselves. It would, evidently, be a retrograde step to accept slow reading-speeds as an inescapable circumstance and not require the student to read for himself the articles and books that had been chosen as part of the course, if these are essential. In some cases, to be sure, it might turn out that a course could be actually improved by the removal from it of some topics, prescribed texts, or recommended reading which are not strictly essential to a thorough grasp of the core of the discipline.

We recommend that an enquiry should be made, subject by subject, into the reading-speeds implied by the third and fourth year courses at present offered,

and that, if the information disclosed diverges too far from the average of what can be expected of students, those concerned should consider means to remove the anomaly.

(ii) *Further Study of language teaching.* Foreign language teaching has in the present age become a highly professional field, in which much research is conducted, both to establish systematic knowledge about particular tongues and to compare different ways in which this knowledge can be utilised for the benefit of different groups of learners. The "language laboratory" greatly increases the resources of the able teacher, and also the student's opportunity to further his comprehension and develop his mastery of a language very different in structure from his own. Difficulties which were great a generation ago can be more rapidly overcome today, though language learning remains an exercise in which thorough work alone will bring success. It remains a fact that "language laboratories" are in themselves no more than rather specialised channels of communication; to get good results from them it is essential that they be used for good teaching, and this means expert teachers who know what use can be made of them.

What remains a matter for discussion and experiment is the pedagogical use made of material selected as vital by expert linguistic analysis. Here we are of the opinion that there is still room for experiment, and if possible *controlled* experiment with matched groups: with a view to seeing, for example, in respect of the average student entering the University, what are the most satisfactory ways to distribute his work over a period of time, what types of exercise — and of what frequency — produce acceptable grades in comprehension tests, and similarly in respect of reading speeds. We were impressed to find that the Foundation Colleges had, each in its own way, given attention already to these matters; it appears to us that the educational research side, to bring its fullest harvest, could well be carried on to its next stage by an inter-collegiate group which would be in a position to exchange and compare the existing experience of all the Colleges. Although this would be a matter in which a future Department or Institute of Education would naturally take an interest, we believe that this kind of investigation should be undertaken as quickly as possible by those at present engaged in teaching languages. In any event, we consider it *essential* that under present arrangements each college should have on its staff at least one linguistic specialist whose duties would include supervision of the course work in English which is conducted by the college; and that he should continue experiments in the most effectual way of using the college language laboratories. At the present time, much experiment is in progress in many countries, often with very good results; but it is not possible to designate any one "method" as the best and it would be premature to assume that the most suitable methods have already been perfected.

At the time of our visit, it had not yet been possible to evaluate fully the experimental pre-session course introduced by New Asia College. This venture is similar to others with which we are familiar, and suggests a promising line of development, though it demands money and manpower. We consider that further work on these lines would be well justified and we fully endorse the view of the Committee on Teaching Methods (paragraph 27) that pre-session language course of an intensive kind could be organised in the vacation before the autumn term. We consider that, subject to the evaluation of the New Asia experiment, the expenses involved by such courses should be willingly faced.

(iii) *Subject-slanted language work.* It might also be for consideration whether it is feasible to bring into the reading material of second and indeed first-year courses passages relating quite directly to topics in the subjects in which the students hope to major. That such a slanting can stimulate and give a sense of purpose to a student in his language work is beyond dispute, though it must be understood here that it is solely for the sake of the language work that such passages are brought into the course, and in order to help prepare the student to use the language as a tool of work. In other words, the "job-specification" criterion is prominent here, as elsewhere in this section. There is no question of language-teaching being used specifically to reinforce or extend the course-work required by the syllabuses of other subjects.

We advance this proposal *for consideration*, since it raises technical questions of feasibility; we have heard, from those concerned with teaching, of the difficulties they have faced in similar experiments. It would, among other things, be difficult to group students according to their intended majors, since they are already grouped according to their standards: sets of subject-slanted passages cannot therefore easily be used for each subject. But an attempt might be made to have a proportion of the reading material slanted in alternative directions during the second year of the course, according to faculty interest, and to similarly include in the second year language examination a choice of passages which students would select according to their orientation.

## Section 4: Lectures

**L4.1** The most common form of instruction in all faculties is the Lecture. A considerable body of opinion exists on the uses, merits, and demerits of this form of teaching and we may at the start briefly outline certain agreed points under those three headings.

### L4.2 *Uses*

1. To introduce and map out a subject, especially to students quite unfamiliar with it. It is an opportunity for the teacher to give the new student — and

this may be almost equally true in some subjects at the beginning of each later year's work — a conspectus of the subject and a statement of the approach that will be used followed by basic outlines, without which small-group teaching of any kind (except the didactic) will be largely ineffectual. Where there is some body of knowledge that must be brought before the student at some stage in a course — and this is usually early in the course — the lecture can be used with great advantage. In addition to the values already mentioned, lectures can give the student an initial momentum in a subject that could only otherwise be gained by extensive reading; and some initial momentum is essential if the student is to be able to take part in and to be in a position to gain substantially from small group teaching.

2. To present material too complex or too scattered for it to be easily gathered by students (especially but by no means only in natural sciences), criticising or defending opinions that are reviewed.

3. To remedy the lack of satisfactory printed matter; or overcome the confusion which can arise in the student's mind when there is too much.

4. To demonstrate techniques of exposition or criticism of the highest quality, free from interruption.

### L4.3 *Advantages of the formal lecture.*

(i) The inspiring teacher can infect his students with his own enthusiasm or scholarly qualities and more generally his "approach".

(ii) Economy of time and manpower: the larger the audience, the better.

(iii) A lecture can embody, where appropriate, the most up-to-date views or data, especially at advanced standards.

(iv) A lecture-course can be more easily altered than any other form of systematic mass-communication. It can be modified to take account of surrounding circumstances (work in laboratories, the resources of a library or exhibition, other lectures, recent publications or events): it can always be freshly and specifically geared to the occasion on which it is delivered, sometimes with startling and memorable effect. It can — and should — be frequently revised.

(v) A student can train himself to note in his own words the substance of the lecture.

### L4.4 *Disadvantages.*

(i) The biggest drawback of lectures, if used as the sole medium of instruction, is that it is not easy to devise an effective means of knowing how well students (either as a class or individually) are mastering the arguments, topics, techniques, or information imparted. The communication is in one direction — from teacher to pupil. But the only way of detecting an unexpected failure of communication is when a student discloses his difficulties. Within the lecture period itself

palliatives of a sort can be devised. The last five minutes of an hour can be given up to questions — but the bigger the class the less likely it is that a student will be tempted to reveal his difficulties; also, these difficulties may not be the same as those experienced by other students. Alternatively, if the lecturer remains in the room for five minutes at the end of the lecture (if only to clean the blackboard) students can be encouraged to come forward with their difficulties. Again, the lecturer may break off his argument to test the comprehension of a given member of the audience by a question; but this method is seldom valuable to the student and it has the disadvantage of interrupting concentration on a sequence of presentation. In some countries (e.g. the U.S.A.) students are ready to interrupt with questions at almost any moment; but the questions may seem to be trivial, and if numerous they will prevent the lecturer from covering substantial parts of his course. Again, it is possible to set examinations or other tests to find out whether the students have mastered the contents of the course; but this is normally too late for remedial action to be fully effective. Finally it is possible for some lecturers to sense from their audience whether an argument is being followed or not, and if not, then to go back and elaborate it. This not only destroys the sequence of exposition but may in some cases be unsuccessful; also not all lecturers possess this intuitive sense. The problem throughout is to devise a two-way communication in a situation that does not lend itself to this kind of “feedback”. There is in fact no fully satisfactory solution to the problem other than the provision of a quite different form of teaching period, more informal, perhaps slower in pace, whether in laboratory, seminar, examples class, other discussion period, or tutorial.

(ii) A further serious drawback of lectures as a sole form of instruction is that they allow no scope for *activity* on the part of the student other than attentive following of the speaker’s argument and the taking of notes. If nothing else is sought but the power of attentive listening this would not matter; even then, unfortunately, the means of obtaining information about the degree of comprehension are unsatisfactory in themselves and often daunting to the teacher. For they can only consist of the setting of tests or the handing-in and checking of lecture-notes, an arduous duty and — for the student — not a very helpful one. If on the other hand, importance is attached to disciplined forms of active participation by students, then lectures by themselves are unable to assist in developing this activity. As we remark in Section I, we adopt on this matter broadly the same position as that set out in Appendix B of the Report of the Committee on Teaching Methods. It has much relevance to the question what place should the lecture occupy in undergraduate teaching.

(iii) Yet another drawback of a programme based largely on lectures is of a psychological character; in

the course of a heavy day’s programme of lectures, it is impossible for students to avoid becoming tired, inattentive, and generally unable to devote a fresh mind to their work.

(iv) There is a further aspect to a heavy lecture course: namely, the need for the teacher to deliver more lectures than he could normally be expected to give with maximum effectiveness. An ill-prepared lecture (the result of too heavy a time-table) not only discourages students but also demoralises the teacher himself, pushes him towards slovenly standards (however excellent his standards may be at the outset) and causes him to regard his teaching as a drudgery, in place of the exciting and challenging experience which it should be, and which under more fortunate conditions it does in fact prove to be.

**L4.5** After this survey of the disadvantages of lectures as a form of teaching, it might be supposed that we regard them as an outmoded form of communication, at best an expedient which it has not been possible yet to abolish. But this is not in fact our view. On the contrary, we regard lectures as in some senses the most powerful tool in the armoury of the teacher. We attach great importance to the special merits and peculiar advantages of uninterrupted exposition, as these are listed above. But like all powerful instruments, the lecture must be used skilfully, not misused or over-used.

**L4.6** The success of any lecture course is not easily measured in an objective manner; the more advanced the character of the work, the more evident this becomes. In particular, if one of the chief merits of a lecture consists in its arousing interest in the subject, as well as understanding, and if this interest is expressed in the form of further reading or study by the pupil, it is clear that an important product of the good lecture—enthusiasm—can not be assessed quantitatively in any reliable way. The enthusiasm of the pupil is more easily aroused when the teacher himself is plainly enthusiastic about his topic, as well as competent to expound it. But for this situation to come about, it is not usually enough to trust to luck, or personality, or the subject itself. A lecture cannot be fully successful as a form of teaching (though it may otherwise be valuable) without attention to the following matters:

(i) The lecturer must himself be quite clear in his mind on what he can accomplish in the time at his disposal. A lecture or a course which is only half-completed cannot be regarded as satisfactory; it must be carefully planned as an entity.

(ii) Equally important, the student must know what is being undertaken, and must be kept fully aware not only of the *aims* but also of the *methods* of the lecture.

(iii) If there is need for illustrative materials (texts, diagrams, material written on a blackboard, references



to library books, manuals, etc.) then it is essential that these should be available at the time when they are required: nothing must be taken for granted by the lecturer. Anything less than the most scrupulous attention to details of this kind may be taken by the student to imply that he too may be less than scrupulous in working over the material or complying with the lecturer's requirements.

(iv) The lecturer must not assume that students are as knowledgeable as he is when it comes to making notes on what he has said. There can in our view be no general prescription for note-taking. Sometimes he may wish to dictate a formula, phrase, or passage, or cause it to be copied down exactly; sometimes he may consider it necessary to distribute notes or examples relating to part of his course; sometimes none of these things will be needed. But he should at all times have in mind a view of what the student may *suppose* him to be saying; and act in the light of his judgement. It is not enough to suppose one has given a lecture when one has spoken for a certain period of time on a topic. A lecture is an act of communication the merit of which lies in what has been received; and students, being by definition less experienced or learned than their teachers require an approach which is different from that which one would use in addressing an audience of people of equivalent experience to one's own. Each lecturer must decide for himself whether he is speaking (ideally) to the cleverest student in the class, or to the least advanced one, or to an imaginary average student.

**L4.7** If all these conditions are satisfied, it does not automatically follow that a lecture or lecture course will be outstandingly successful. We have heard evidence from colleagues, in certain cases, to the effect that their teaching would be more effective if they were involved in fewer courses. If this is indeed so, and their courses contain a large component of lecturing, then it may well be that some colleagues have difficulty in finding the time to make *each* of their lectures the important, unique and decisive event that it should ideally be. In a later section we suggest a general approach to the volume of lecturing which could result in an alleviation of this difficulty, at least in some cases (paragraph 5.13).

**L4.8** A further, and more personal, problem arises when one considers the topic of presentation. It is by no means obvious that the highest qualities of scholarship are invariably backed by high powers of public speaking; yet in dealing with a large class these powers can be extremely useful. A great scholar might quite easily not enjoy public speaking and would be no less an excellent university teacher. But it is essential that a minimum standard of delivery should be attained by all teachers without exception; otherwise an excellently prepared lecture may fail of its effect by the simple fact that some students do

not hear important parts of it. As numbers grow in the University, the reality of this matter may become more obvious than it is in the present stage of growth. It is however certain beyond all doubt that a lecturer, whose mode of delivery must always be a personal one, should not be asked to conform to some uniform manner or style. It is no less certain that a university is not primarily an academy of public oratory. Moreover, an experienced lecturer, even if he wished, may not find it easy to alter his delivery without adversely affecting the cogency of his manner of exposition. Nor is it clear in what way he could be helped, other than by being advised to be audible.

**L4.9** As compared with the experienced teacher, a beginner may however be given great assistance. He will, more often than not, attempt to include too much information in a lecture: it is easy to correct this. He may be new to lecturing, in which case he will appreciate advice on style of delivery. It is hard to say, however, who should give this advice. On the one hand it may be argued that only a specialist in his own field can criticise the organisation of the material he presents. On the other hand, the use of his voice is a matter on which great help can be derived in a very small time from a different kind of specialist: either a person with experience of producing — say wireless programmes or plays — or a person accustomed to giving advice on teaching in schools. In the interests not only of students but also of their teachers, the University might with advantage consider whether for all newly-appointed future lecturers it could make available on an optional basis a central service of advice and help, such that an experienced colleague could attend and subsequently criticise or discuss in a helpful way several of the first lectures delivered in a course. Such advice should not be left solely to senior members of departments, who have many other duties and are in any case less likely to be regarded as an anonymous counsellor by their junior colleague.

**L4.10** In the foregoing paragraphs we have confined ourselves very largely to generalities. We are aware that the number of lectures given varies very widely from course to course; that the character of a lecture varies very much according to the subject; that some Departments use techniques which are of no great relevance to others; and that the sizes of class also vary greatly. Having heard the opinions of many colleagues, we consider that an important general point should, if possible, be widely accepted — namely, that every lecture should always be regarded as having a specific teaching purpose, and not be given as a matter of routine; and that to this end not only should every lecturer consider very carefully his aims and his methods in respect of every hour he uses, but should also be free from an excessive *number* of lecturing periods. Only in this way can there be every chance of students deriving full benefit from this form of teaching.

## Section 5: Small-group teaching

**L5.1** Both the Report of the Fulton Commission (p. 98) and, more strongly, the Report of the Committee on Teaching Methods, emphasise the need for small-group teaching (the term used is "tutorials"), in particular in the student's early years of study. We in our turn wish strongly to endorse these recommendations; we begin by setting out our reasons, from which we deduce certain views on the kinds of teaching that may come under this heading.

**L5.2** We begin with students in their first two years. Evidence submitted to the Committee on teaching methods underlined that, given the young men and women arriving straight from school, it was not easy in many cases for the teacher to elicit an active response to his teaching. Reference was made to students' passive note-making and note-learning, to their unwillingness at any stage, early or late, to take an interest in matters outside the syllabus, and to their reluctance to undertake work not obviously of help in preparing for examinations. This state of things implies also a reluctance to think critically, or to develop habits of independent work which the graduate is expected to possess when he faces the tasks awaiting him after he leaves the University: qualities which (incidentally) the employer will also look for in him, and which are essential in postgraduate work. There is moreover an obvious relation between this problem and the whole challenge of general education. We have already touched on matters in which the problems facing the Chinese University are closely similar to those encountered in universities in many other countries. This problem is likewise encountered in most systems of higher education, and it has its roots in social and educational background features which have analogies in other countries. To be brief, there is wide agreement that the most effective remedy has been found in small-group teaching, in one form or another. Why? Because in a lecture, however good, it is possible for the student to remain a passive observer or note-taker: in a discussion, seminar or "tutorial" period, *properly conducted*, he is forced to be active; and his teacher, by proper selection of material, can both ensure that he attains knowledge of the factual or conceptual core of a topic and help him to acquire for himself a critical and constructive attitude to its use in fresh problems or fields. Both these attainments are essential; without the second, the first is but a wasting asset, since the frontiers of knowledge advance every day; without the first, the second is insecure or unreal.

**L5.3** But before we assume the problems in principle to be solved by small-group teaching, and proceed to detail, we would wish to consider further the double aspect just mentioned. It is possible to use an hour with a small group of students to find out whether each of them has really understood

a lecture or a set of readings connected with part of a course, to help them over their difficulties and to help them to continue their work in a more effective way. We will call this kind of work "coaching"; and we attach no unfavourable sense to the word. It is also possible to utilise such a period to make students think harder and further for themselves about the content of a lecture or readings. We might call this "coaxing". In each case, this teaching is student-centred; in consequence, the aim is to work at the level of the student, not far above his head; to utilise his or her ideas and knowledge, extending these where possible but not bewildering him by racing ahead of him; and so to build strong foundations, the ground floor before the next floor, and so on, at the student's best speed, and not faster.

**L5.4** There is a further and even more important preliminary point. Passivity can certainly be overcome to a large extent by discussion properly conducted in small groups. But equally important, perhaps more important for overcoming passivity, is the work which the student is required to do in preparation of the discussion-period. Now, much of the evidence submitted to the Committee, and also the report itself, (page 5, paragraph 11.b) referred to the difficulty of finding time for tutorials with a staff-student ratio of 1:10. We acknowledge the great importance of this point. Indeed, our efforts in this section are directed towards studying the problem of how to make the best use of scarce and precious manpower. But these efforts must at the start take full account of the principle, which we regard as self-evident, that the student should devote as much time to the preparation of the course as is needed to ensure the greatest usefulness of the teacher's effort and the fullest benefit to the student.

**L5.5** To illustrate our approach and the importance of this assumption, we may take a simple abstract example, in which ten students follow *only* one three-hour weekly course of lectures, doing two hours private study on each lecture. If one of the three weekly lectures is replaced by fortnightly tutorials with groups of five students (each group in alternate weeks), the teacher's number of contact hours remains the same. He must of necessity revise his syllabus, cut out some topics, retain essentials. We assume that in term-time he prepares each lecture, even on a familiar subject; some time is therefore saved in preparing lectures (say at least one hour a week) since they are fewer; but on the other hand additional time is needed each week (say two hours) if he demands written work from five of the students each week and corrects it thoroughly. Suppose then that the students are now asked to do two hours private work on each lecture, and that for a tutorial every fortnight they are each required to prepare work, taking (say) 12 hours, spread over the fortnight. The following data may be compared:

	<i>Old scheme</i>	<i>New scheme</i>
Staff-student ratio	1:10	1:10
Teacher's contact-hours	3 hours per week	3
Student's contact-hours	3 " " "	2½ (average)
Teacher's total work on course	6 " " "	7
Student's total work on course	90 " " "	125 (average)
Work ratio, staff-student	1:15	1:17.8 approx.

The important features of the change are disclosed by the last three lines, and especially the last line. It is true that in this model the teacher's total load in hours per week has increased by one; but for the same course the student's assignment has increased by much more. The staff-student ratio is the same; the ratio of *staff - work* to *student-work* is actually improved. In other words, better use is being made of scarce and valuable manpower. Moreover, the kind of work now done may be assumed to be helping to solve the problem of passivity.

**L5.6** We have given space to this over-simplified model in order to make clear one main principle underlying our view of small-group teaching: namely, that the introduction of it where it does not already exist need not be hindered, in the case of reasonably small classes, by a staff-student ratio which is considered insufficient for existing needs. The important ratio is that of staff-work to student-work; and the basis on which the planning of courses can proceed in the most realistic way is this ratio rather than the very abstract (and for some purposes misleading) ratio of staff to students, whether in a given course or in the University as a whole.

**L5.7** We now consider the problems which arise from the need to consider small-group teaching in the context of existing or projected courses and programmes. The model set out in the previous paragraph is schematic and abstract, as we have said. Thus it assumes that all lectures require an equal amount of preparation during the teaching session, whereas some may in practice have been fully prepared in advance. It assumes small classes. It envisages only one kind of small-group teaching, and assumes that small-group teaching is to be conducted in tutorial groups of five students. And it assumes a situation in which students follow a programme by attending one course only. The last assumption is clearly unrealistic, the others may or may not be.

**L5.8** In reality, all programmes in the three colleges comprise a varying number of courses, or units: total contact hours allocated to these component courses vary from 16 to about 33 per week. We understand that as a working principle it is common to expect students to devote two hours to private study for every contact hour (except in laboratories and other practical work, for which the private work will vary according to the nature of the course); we may deduct six hours practicals from these figures for scientists,

and find that in theory students may be expected to be doing between 32 and 54 hours private study a week, making a weekly total of 54 to 87 hours in all. Our enquiries have not enabled us to form a detailed and firm view as to whether the working principle (two hours private study/contact hour) is closely adhered to; but we infer from the written evidence and from our own investigations that even if it is, the character of private studies is in a significant proportion of cases markedly affected by the difficulties referred to in paragraph 5.2 above, — that is, that their character tends towards unconstructive memorising of notes and class-material rather than enlargement of critical capacities. This is indeed hardly surprising in the case of those students whose academic working-week approaches 90 hours.

**L5.9** We do not believe that students should normally be required or expected to spend 90 hours a week on strictly course studies, let alone more; we are of the opinion that such a requirement extended over a long period diminishes the possibility of real intellectual development and rules out the possibility of the student having time and energy to read around or outside his subject or further his general education in an active way. It is thus clear that in a programme of 33 contact-hours, to increase the "student-work": staff-work" ratio would be in our view of no value whatever, even if this resulted from the introduction of small-group teaching. If the benefits of small-group teaching are to be secured, it is essential that the demands of a programme should be limited in such a way as to give a student time and opportunity to work on parts of the programme, not necessarily at leisure, but without a heavy load of note-memorising to be coped with at the same time throughout every day and evening of the term.

It is open to question whether in a given fortnight or week students can with benefit undertake more than one major assignment of private work for a tutorial period. The answer will depend on the year of the programme, on the nature of the subjects, and in particular on whether the programme includes laboratory courses or other practical work (e.g. in Fine Arts). But in any event we do not think that more than three such assignments can or should ever be carried on simultaneously; and we incline to the view that a realistic maximum would be two. In the first year it is likely that one fortnightly hour is as much as should be attempted, in order that this new and unfamiliar work should receive the student's full attention (and also receive the most thorough supervision by the teacher). If this is accepted, it follows that at a given moment a first-year student cannot undertake substantial private work for small-group teaching in more than one subject; and that a second-year student can by the same means deepen his critical understanding of only part of the whole programme. We see no disadvantages in this limitation.



**L5.11** We are of the opinion that every student in his first year should, no matter what his programme, have at least one tutorial a fortnight in one subject or course; in this we strongly endorse the view of the Committee on Teaching Methods (para. 11(a) and (e)). It is for consideration whether the subject in which this is done should remain the same for the whole year, or should change after one term. We consider that the subject in which the student expects to major should at the outset be treated in this way (even if other students following the same course but not expecting to major in it have tutorials in other subjects, namely those in which *they* expect to major). In this way, the difficulty of providing small-group teaching for large first-year classes may be very largely overcome. In certain fields — e.g. mathematics — it might well be that written essay assignments were inappropriate; in others — e.g. natural sciences — it might be that reports on reading assignments (as referred to by the Committee on Teaching Methods) were preferred to essays. We should not wish to dogmatise on this matter. Similarly, though we have in para. 5.3 referred to tutorial groups of five, we do not wish to propose any standard pattern for small group work. As a group increases in size, the proportion of active participants in discussion is apt to fall, and the teacher's task in conducting a discussion becomes more difficult; for this reason we consider that *five* should be a maximum and *four* a workable size of tutorial group, at any rate in the first two years of study. Again, a scheme of weekly tutorial groups with half the students preparing work each fortnight, but attending discussion of work by the other half of the group in the intermediate weeks, might be favoured in some subjects; while weekly preparation of work, especially where only a few students are following a course, may in certain courses be feasible and desired. The essential, not to be lost sight of, is that each student should, under careful supervision, be exposed to a teaching process which either coaches him or coaxes him, or both. Furthermore, that this process should be a continuing one, in which a series of "tutorials" is conducted for at least a term over a set of topics in a given field. This is especially important in the first year at the University. It enables a teacher to get to know the student's weaknesses or aptitude; it helps the student to find out what the teacher is really aiming to get from him.

**L5.12** In the second year of studies, it would be possible for the same approach to be made to the teaching of both the student's intended major subject and probably one other subject, chosen perhaps in the light of the programme's requirements seen as a whole, or the College's policies or preferences.

**L5.13** Slightly different considerations apply in the third and fourth years, in which also small-group teaching should have its place alongside

formal lectures and laboratory teaching. It is clear that these two years are seen as forming in some sense a unity, bounded at each end by examinations: that the coherence of courses in a programme is greater; that students are by then more mature; and that classes are in most cases smaller. It should be possible, and it is desirable, that in each programme of library subjects, and in the natural sciences also, three or four parts of a student's programme in each year should be the object of systematic study in small groups (perhaps two in each term). In the final year, students should be sufficiently competent in the techniques of exposition and discussion to participate in seminars, organised to cover parts of a programme; if they cannot do so at this stage, some of the purposes for which a University exists will not have been achieved. In the social studies particularly, we would emphasise the importance of seminars as a means to two distinct ends: (i) the thorough mastery of theory in its application to exemplary material, and (ii) the bringing together of different angles of approach in dealing with concrete examples — e.g., economics and sociology. The same observations apply in varying ways to the study of history, and also of literature and language. For the second of these purposes, it is clear that seminars are best conducted jointly by members from each discipline. Finally, it is assumed that in programmes which include a small individual research-type project, individual tutorials will take place from time to time as part of the supervision of such work.

**L5.14** We are assuming throughout that small-group teaching is undertaken on a College basis in all years. This of course raised again the question of staffing, to which we shall revert; but it appears to us that the advantages of such a basis outweigh the disadvantages. The staff know their students, and are more easily accessible; they know the resources of the College Libraries; they might be expected to be the natural "allies" of their students in the task of preparing for University examinations, as distinct from examinations conducted on a college basis. These are merits not lightly to be set aside.

**L5.15** The necessary corollary of introducing small-group teaching in *all four years* (in one form or another) is a reduction in the student's teaching load. First, in the number of hours of formal instruction. We have assumed that from 28 to 30 weeks are in effect available each year for teaching (after deduction of public holidays and so forth). We recommend that in every case *without exception* in which a course at present requires three hours' formal lectures a week, it should be an aim of policy to attempt to reduce these three hours to two; and that every course of two hours a week formal lecturing should *without exception* be examined with a view to seeing how it could be reduced to one hour a week. We consider this measure absolutely essential. Without it, we see no certainty that the fundamental attitude of

students to the learning process can be changed. Some of the time freed in this way, *but not all*, should be used by both staff and students for the small-group teaching discussed above.

**L5.16** The courses offered in the Chinese University are already very numerous, and range through many disciplines. The general statements which follow in this paragraph will therefore apply with varying degrees of relevance to a given course. What applies to all courses, however, is our impression that in framing programmes and syllabuses, the University has demonstrated its high sense of academic standards, and the determination that its students shall not only acquire the unique education which its position in the world allows it to provide but also in that process achieve standards in line with those of the best that the world family of Universities can display. We should wish to add, nevertheless, that in our view certain syllabuses, especially in the first two years, seem on paper to be extremely heavy. It would be improper for us to list examples of courses which, in varying measure, appear to us in this light; we can at least say that the programmes in the natural sciences are not principally in our minds. By "heavy" we mean covering at first sight an unusually extensive amount of material (this of course is a different thing from the rigour of scholarly standards). If, for example, a survey course, whether in a highly abstract field such as philosophy or a relatively factual one such as history, extends over an unduly broad range of material, it is quite certain that no student will do more than memorise his lecture-notes, and it is by no means certain that he will appreciate at this stage the broad sweep of thought to which the lecturer may personally attach importance. Certain subjects, in a world of rapidly expanding knowledge, may in fact be difficult to teach—organic chemistry is one—without much learning of facts by the student: others are less awkward from this point of view. Now, one very important feature of small-group teaching—whether by tutorial of some sort or by seminar—is that it cannot *in any way* be used as an effective means of imparting encyclopaedic knowledge. The weekly or fortnightly small-group class can only adequately examine one problem, or part of a problem, or topic, or text, in the space of an hour or two; that is to say, perhaps a dozen such topics can be covered in a term. The approach is therefore bound to be highly selective; and it is essential that central and suggestive topics should be chosen, and that it should be impossible to make up for indiscriminate or thoughtless selection by multiplying the number of topics. On the other hand it is quite certain that an hour's discussion in a tutorial can be used to strengthen a general understanding of principles in a way that nothing else can and that a student completing a series of such discussions is thereafter much better placed to work by himself at those other topics or parts of the subject which have not been covered with

his teacher. There is every reason why the same considerations should be held in mind when reducing the number of lectures delivered in a course. We have already stated our views on the merits of the formal lecture; these merits become the more important as the number of lectures is reduced to what is essential. It is certain that a lecturer, if he knows he will be talking before a class for up to 90 hours in a year, will wish to give his students a thorough and full presentation of a subject and all its ramifications. The text of his lectures may be long enough to fill two or three large books; and will certainly serve to furnish notes for almost any contingency; its very thoroughness may discourage the student from seeking further views for himself in the library or by his own reasoning powers. It is a sound principle that lecturers should have less time than they would ideally wish for—fifty minutes instead of an hour, forty hours instead of ninety, and so on. Under this kind of pressure, they must think out their subject very carefully and forego the ambition to convey to students additional information which (however interesting) should be sought in the Library, made available in other ways, or sacrificed for the time being.

**L5.17** No undergraduate course, however taught, can be comprehensive. All courses should aim therefore to illuminate the core of a discipline and illustrate the style of approach demanded by that discipline. When once it is seen that comprehensiveness is a mirage, then it is easier to determine the limits of a course by reference to this inner core, avoid unduly heavy syllabuses, and reduce the likelihood that the student, in despair of ever being able to "cover the course", will take refuge in his notes alone.

**L5.18** It goes without saying that no syllabus should appear in a Calendar unless it is the intention of those concerned that the course, as taught, shall conform to it. Few things are so destructive of a student's seriousness of purpose as the supposition, however unfounded, that one syllabus appears in the official handbook, but that a different and a more manageable one is followed in the classroom.

**L5.19** The point has been put to the Committee on Teaching Methods, and developed in our conversations, that the chief obstacles to the introduction of "tutorials" are the scarcity of teaching staff and the large size of classes, especially those for first year courses. We believe that these obstacles can be largely surmounted if the proposals outlined above are implemented; namely:

(i) that the number of formal lectures given, especially in arts and social studies courses, should be substantially reduced;

(ii) that the content of courses should be correspondingly pruned, so that students—including those in the first year—are dealing with fundamentals and never with encyclopaedic surveys;

(iii) that in the first year students should attend fortnightly tutorials in small groups, in connexion with one course in any given term, and preferably for at least one term in the subject in which they hope to major;

(iv) that in the second year they should continue in this way, with the addition of one or perhaps two other fortnightly or weekly tutorial classes, each running for perhaps one term, in appropriate subjects;

(v) that tutorials in any case should be concerned with the discussion or exploration in depth of topics which fall within the field of the lectures given in that course, rather than new material.

**L5.20** We have studied the statistics of student numbers, set out by courses, for admission to the Colleges in 1964-5 and 1965-6, so far as known. In a proportion of cases the introduction of small-group teaching along the lines of the simplified model in paragraph 4 above would be possible without further modification—that is to say, in those subjects for which entries in a College are of the order of 10. A single teacher responsible for a course could in this case undertake all the tutorial teaching without help from colleagues. Where possible, we recommend this should be done. An advantage of this arrangement is that the teacher is much better able to assess the effectiveness of his own lecture course when he is also dealing with work done by students in that field.

**L5.21** But what of a College entry of say 20 or 30 for a given subject? (These are the most unfavourable orders of magnitude at present likely to be met.) The lecturer may not relish the thought that he might be called upon to give not one, but three discussion periods a week in place of one of his weekly lecture periods. We see, incidentally, no reason why he should not shoulder such duties if he wished to, assuming that his other commitments are not too onerous and that he has not also similar duties in connexion with another course. Ordinarily however we should not wish to encourage recourse to such an expedient, and we wish to make clear our reasons why we do not favour it. If a teacher already has full commitments in other courses, the additional hours of teaching (and, in many cases, correction of work) are likely to reduce his efficiency, and interfere seriously with research. More important, however, is the fact that if he is teaching in this way up to fifteen students a week, say, or thirty in all, in groups of perhaps five, as well as other small groups, he will not be able to give sufficient thought to each individual case.

**L5.22** To face this particular problem, we prefer to go back to our fundamental thesis of the ratio of staff-work to student-work. If this ratio is important and valid in a simplified abstract model

of one course, it is all the more so in the case of the whole population of students and the whole population of staff concerned with the courses for a given subject in any one College. And if, globally, the ratio is greatly improved without substantially adding to the total weekly hours worked by the students, then it may be confidently expected that the staff working load will not be significantly increased. Indeed, if the lecture courses are reduced as we recommend, there is reason to believe that the load, measured in hours, will remain very nearly unchanged. All that will change is the relative proportion of time given to lecturing as against other forms of instruction.

**L5.23** Not all courses, it will be observed, would on our proposals have tutorials incorporated in them; but all might be reduced, either from 3 to 2 hours a week or from 2 hours to 1 hour. That is to say, there would be teachers whose weekly total of contact hours would actually fall, as a result of their courses not including tutorials. In any given Department therefore there would be staff who in theory were freed by these measures to assist colleagues in providing small-group teaching when particular classes are large enough to need this. We say “in theory”, because in practice a Department provides teaching for a certain number of branches of a discipline, and these are often undertaken by specialists; not every member of a Department may feel himself qualified to give assistance in a field in which he has not worked. We would offer two observations here: first, that first-and second-year work is at relatively elementary levels; and secondly, that tutorial work is to be looked on as student-centred—the inspiration for the course should come from the lecturer, but the business of the tutorial is to advance, as we have said, at the student's best speed, which is not that of the lecturer. This being so, it should on our estimate be in every case possible for the Head of the Department so to arrange the teaching duties of the Department that colleagues can render assistance in small-group teaching, especially at first and second-year level, where it is essential. It should moreover be possible to secure further help along the lines already suggested by the Committee on Teaching Methods (paragraph 11(b)(iii)).

**L5.24** We appreciate that in advancing this solution to the problem of numbers we are advocating a measure that may, especially in first and second year courses, involve some departure from the principle that one teacher has sole responsibility for teaching a given course. There is much to commend such a departure. On the one hand the lecturer still retains responsibility for the orientation and framework of the course. On the other hand, it is valuable that a teacher should not be cut off from direct dealings with students engaged on other aspects of their work, and from some insight into the intellectual and learning problems that arise there. It is desirable too that

different members of a Department should not be isolated from one another behind the walls of their particular subjects.

**L5.25** Finally, we consider it highly desirable that all suitable staff should be involved in this work, regardless of seniority. Training the beginner's mind is in many ways the most crucial part of undergraduate teaching; it is certainly not the least honourable. For many centuries it has been the practice in Scotland for the Head of the Department to address himself principally to first-year and to final year students. On the success or otherwise of first-year teaching, in particular, depends the quality of work in subsequent years, as well as the satisfaction that comes of teaching a responsive and keen class of students. If this principle is accepted, then we see no reason why any member of the academic staff need be concerned at any one time with the small-group teaching of more than 15 students in the first and second years together. The average over all teachers in the University will of course be lower. Only in quite exceptional circumstances should the University and the Colleges allow the figure to rise above 15, and then only as a temporary measure.

**L5.26** In concluding this chapter, we feel it is appropriate to speak once more of a topic whose importance to our argument will already have been detected: namely, the private work done by students. It appears that in none of the Colleges is it possible to give a very clear picture of the situation. We have been made aware of the background difficulties of some students; we have been informed of the habits of others for whom College lecture rooms are left open until late into the night for private work. The position is complicated by the differences that presumably exist between the life of a student living at home and one housed in a dormitory. In countries where extensive and repeated surveys have been conducted to find out, among other things, private study habits, use of leisure, habits of buying books, personal budget, use of vacations or other routine sociological data, the results have in many cases proved of great value to University authorities. They may on occasion confirm commonsense beliefs or assumptions; they may also correct or even refute them. It would be of use in framing policy on teaching and other matters, and perhaps also of general interest to educationalists, if it were possible to acquire firm and precise information on some of the points just enumerated. It would be for the University to consider whether, and how, such an enquiry should be made, and whether for example an existing Department or future Institute could undertake it. At all events, something more thorough and therefore more objective than the impressions of even experienced university staff would be of great assistance, if the University wished to give systematic and continuing attention to the problems of teaching methods.

## Section 6: Examinations

**L6.1** A discussion of teaching methods is liable to be seriously incomplete if no mention is made of examinations; for the relations between a student's work and the tests that are made of it at various stages are plain for all to see. A degree is not normally awarded by a University unless its recipient has first given satisfactory evidence of fitness through an examination. We regard examinations as an essential part of the undergraduate courses in the University. They serve two primary purposes:

(a) They cause the student to carry out an intellectual "stock taking" and they enable both him and his teachers to assess the effectiveness of the study (of various kinds) that he is undertaking; and at the same time they enable teachers to find out what progress each student is making both in learning and in intellectual development;

(b) They provide a test of the value of the end product of the course on a basis that assures the worth in comparison with those of other Universities of any qualification awarded.

All students are to some extent influenced in their attitude to teaching by the very practical wish to pass examinations — or at least not to fail them — in order to gain eventually a degree. Syllabus requirements are often expressed in terms of topics that will be examined on. Above all, the character of an examination can have a very marked effect — for good or for evil — on the character of teaching and on its success.

**L6.2** Taking the last point first, we can exemplify it in five ways.

(i) If an examination paper, year after year, is known to be likely to contain mainly questions which require nothing but purely factual answers, diligent candidates will learn many facts which they hope will be asked for, but they will disregard a teacher's encouragement to think critically or constructively in the subject.

(ii) If the text contains mainly questions which demand critical or constructive treatment, diligent candidates will, on the other hand, be more ready to respond to encouragement to approach their coursework in this way.

(iii) If an examination paper contains only questions which can be answered by candidates who have memorised their lecture-notes the students will be apt to be content with memorised lecture notes.

(iv) If, on the other hand, examinations are known to contain compulsory questions on topics strictly within the syllabus, but if at the same time the lecture-course is known not to cover the whole syllabus but only, say, the greater part of it, then a proportion of students will (given the time and the means) prepare themselves unaided on material in the remaining part of the course; and if it is part of the intention of the



teacher that students should learn to work for themselves, it is possible that such a convention in the examination paper will help him somewhat to achieve this aim.

(v) If, finally, an examination paper contains compulsory or unavoidable questions which are based neither on part of the advertised syllabus, nor on material which has in fact been studied in the course, nor even on a convention made evident in previous years — if in short an important part of an examination cannot be prepared for in any way, then it is certain that weaker students will become demoralised and that their confidence in themselves and in their teachers will be impaired, because they are unable to know what is being asked of them.

**L6.3** These examples may be regarded as self-evident. A number of points flow from them. First, and most clearly, it is important that the drawing-up of examination papers should be treated as a very serious duty, which will reflect decisions taken on teaching policy; it should not be considered a secondary matter or dealt with at a late stage in the academic year. It is desirable that, in all subjects, attention should be paid to the effectiveness of the tests as a means of assessing the candidate's grasp of a subject and the quality of his mind, *and also* to the effect of the examination on the attitude of the students to their work for this examination in subsequent years.

**L6.4** It is important that, save only in exceptional circumstances, examiners, if they happen to be the same teachers who have conducted the courses, should *not* be content to set papers containing only questions which could be satisfactorily answered by a diligent candidate who has done no more than learn his lecture notes. We are aware that this is a hard doctrine; but it is not an unduly idealistic one. We justify it on the following grounds. In an earlier section we distinguished between “coaxing” and “coaching”; we should like now to distinguish between “coaching” and “cramming”. In “coaching” a student, the aim is to lead him to understand a subject, grasp the concepts involved, acquire confidence in their proper application to relevant concrete examples and acquire familiarity with the central core of material or facts or operations. In “cramming” the aim is solely to put the student in a position to pass the next examination, whether or not he really understands the subject. Information and techniques are fed into him without regard to the digestion of principles. Examinations conceived in a certain spirit and framed in a certain way can, in almost any discipline, encourage this “cramming” approach by both teacher and student. When this happens, the teacher is no longer serving the cause of education, and the student, if he is momentarily pleased at having passed, is on the long view being done a serious disservice.

There is no more certain way of leading students to regard teaching as “cramming” than to allow them

to believe that they have done all they need to do when they have memorised their lecture notes or the contents of a handbook regarded uncritically as “true”. We do not wish to belittle the value of lecture-notes or of handbooks; clearly they are important in various ways. We are concerned rather with the spirit in which the student approaches their use, and we assert that the form sometimes taken by examinations can be decisively harmful in the matter.

**L6.5** From this it follows that the features noted under (i) and (iii) in paragraph 2 above are prejudicial to good teaching. Feature (ii) is highly desirable as a reinforcement of “coaxing” (the best students) and “coaching” (the less strong); and feature (iv) is a means of reducing excessive reliance by the student on other people's effort. But it must be insisted that the features can only be satisfactorily introduced as and when effect is given to our recommendations, under paragraphs 5.15 and 5.16 on the *quantity* of material included in a given course. If the positive role played by the examiner in the teaching process is enhanced, it must be noted that with this responsibility must go an increased burden of work, particularly in the task of framing questions which, without eliciting a mere repetition of topics selectively studied, nevertheless enables a student to bring to bear upon the questions he treats the fundamental insights and techniques which he has acquired in the following of the course.

**L6.6** In what goes before, we have assumed a system of examination, in which, from force of circumstances, the teacher and the examiner are one and the same person. There are in principle two major alternative ways of conducting examinations: (i) a system in which each course, broadly, is examined by the teacher who has conducted it, working perhaps alongside colleagues in the same discipline or College or Department, (ii) a system in which examinations are conducted, quite impersonally or even anonymously by a board of examiners quite distinct from (though not necessarily excluding) the various teachers of the courses. Both systems have advantages and disadvantages, which it would be a long task to enumerate: we shall in what follows mention only those which are relevant. We are in any case concerned here with the resources open to the University and its colleges. We may distinguish, to begin with, between degree examinations coming in the later part of the student's career and the earlier examinations in particular the first and second year examinations.

**L6.7** As regards first and second year examinations, we assume that the Colleges are responsible for all the work of students, that they set and will normally continue to set the papers which test the progress of students, and that to do this they will draw mainly on their own resources. It seems clear therefore that Departments must be responsible for

furnishing examiners, (but not necessarily exclusively) from among those members who have been effectively in charge of courses; and that their deliberations will be on a basis which makes it inevitable that the candidates will be well known to them. Under these circumstances, there should be no difficulties in ensuring that the form of each examination paper will be closely determined by what the staff is aiming to achieve through lectures and small-group teaching; in a word, that the examination is designed as a powerful teaching aid, used judiciously and carefully. At the same time it is desirable that as a general rule there should be a broad parity between comparable courses in different colleges: this applies to examinations also. The most suitable organ for ensuring this is a Board of Studies.

**L6.8** When we turn to examinations more directly related to the standards expected of a candidate for a degree, several other considerations must be borne in mind. The degree awarded is a University degree, and the standing and prestige of the University as a whole is involved. It will not be possible to continue for an indefinite time with arrangements whereby a College teaches and examines in virtually complete independence for its third and fourth year courses: if only because the development of laboratory subjects will impose the need to share some at least of the more costly equipment, resources, laboratories, and specialist instruction. It is possible on the one hand to envisage a College preparing its students for examinations in subjects not usually taken by students in other Colleges; on the other hand it is normal to assume there will be growing areas in which each College will be teaching its students along very similar lines, or along lines which tend to become similar. The day may not be far off, it may be assumed, when University lectures as such will be provided by specialists whom it would be common sense to make equally available to students from all Colleges.

**L6.9** In this rapidly evolving situation, we consider it a matter of urgency that the procedures for degree examinations should be considered afresh. There are two main considerations to be borne in mind. One is the standing of the University and its responsibility for standards and equity. The other is the function of the examinations as auxiliaries intimately related to teaching, (whether University or college teaching). In our view there need be no conflict between these two things. The latter consideration is internal to the University, while the former concerns its dealing with society and with other learned institutions, and for this reason calls for procedures in which external examiners should play an important part. But if there are boards of University examiners for degree examinations (third and fourth year courses), these will include members of the academic staff who would also we presume be members of Boards of Studies, which should of course be concerned with courses and programmes. There need thus be no

failure of communication. If there are to be Boards of Studies to discuss courses and co-ordinate work in given fields of teaching, we may suppose also that in submitting course proposals to the Senate the Boards would include in their proposals general specifications concerning the examinations that would form part of the courses. It is for the Senate to decide major lines of academic policy, and — we hope — for the Boards of Studies to embody these lines in the development of programmes and courses; it is then for examiners to give executive effect at the proper time to the decisions arrived at in these ways.

**L6.10** We agree with the view expressed by the Committee on Teaching Methods (para. 14) that it should be an urgent duty of the Senate to consider arrangements for examinations; we consider that the first task here should be to perfect a system of University degree examination boards initially dealing with existing courses. Such a system should have two main features:

- (i) flexibility, by which special College initiatives and preferences can be catered for;
- (ii) a common general approach to standards and forms of examination (both written and other).

The second of these features is at the present time the more important, though it may require less emphasis when the Colleges are brought physically nearer together on one campus site.

**L6.11** In particular we would suggest that great benefit can be derived from as much participation as possible by external examiners. We are not in a position to make suggestions as to how they should operate, except to say that they should deal with, and confront simultaneously, all the examiners of the University in a given subject or subject-group; and have access to any or all examination scripts; and that they should have in mind University standards as well as College traditions. We consider that no effort or reasonable expense should be spared to make it possible, particularly in these early years, for external examiners to operate as fully and effectively as possible, and without undue pressure of time.

**L6.12** Moreover, if it is accepted that examinations can help the teaching process and should not be allowed to frustrate it, it would follow that the Senate's deliberations on this subject cannot well be carried on without reference to the teaching courses to which the examinations relate. It would be possible, but in our view undesirable, to devise an examination system in the abstract, and then to invite those concerned to find ways of preparing (coaching or cramming) students for it. We would hope the Senate might prefer to see the matter approached in the opposite way — that is, to begin with academic courses, their general aims and specific ends, and proceed thence to the examinations which serve these ends. This can best be done, we consider, through setting up



Boards of Studies with assigned tasks remitted to them by the Senate. The general procedural principles common to all subjects — e.g., timing of examinations, duties of external examiners and so forth — should be laid down by the Senate, as also the formal conventions and procedures by which the University's general interests as a whole are safeguarded; for the rest, we would suggest that the detail of examinations — number, length and scope of papers, level of difficulty, incidence of examinations in the various programmes and so on — should be considered as an integral part of the search for optimum teaching methods.

**L6.13** For small-group teaching in particular, college responsibility is desirable. For formal lectures, College responsibility should without doubt continue in those subjects in which a College is unique or specially placed. But from the moment that the Colleges are brought close together on their new site, a new situation arises in respect of those areas in which University lectures become prominent. It will then be increasingly necessary that the syllabus for a course should be drawn up with the greatest care — not only in the interests of the students, but also to make it possible in non-laboratory subjects for small-group teaching by Colleges to make the most effective and relevant contribution. If this is done, there need be little or no real loss of the helpful relationship between examinations and courses which may already characterise the more intimate arrangements of the first and second year. If a carefully drawn-up syllabus helps to avoid a gap between University lectures and College small-group teaching, it will also serve as a sufficient link between these elements of teaching and the examination which terminates the course. In laboratory subjects, where advanced practical work can be organised on a University basis, there need be even less risk of the examination becoming a hindrance rather than a help to good teaching.

**L6.14** If examination results are the basis for the award of a University degree, then it follows that the examinations are themselves an object of University responsibility. University Boards of examiners must therefore exist to consider results; and it is logical that such boards should also have the task of initiating and approving the papers to be set, whether or not a given paper has been devised by an examiner in connexion with the needs of a course taught only in one College. It is for the University to decide on what basis examination boards should operate; whether they should group examiners in a whole Faculty, or in smaller appropriate groupings (e.g. physical sciences) but under all such arrangements it is to be assumed that every college department will be represented. Our concern at the present moment is not with these questions (though they are of great importance) so much as with the bearing of examinations on the principles to be applied in the organisation of and the work of teaching.

## Section 7: General Studies

**L7.1** The report of the Committee on Teaching Methods included an important section (paragraphs 25 to 28) on this subject; and although our business is primarily with teaching methods — it may at this point be appropriate to comment on the matters raised in those paragraphs. Our discussions with colleagues over this matter have not been uniformly extensive; but we have heard various points of view advanced, in addition to those touched on by the Committee on Teaching Methods.

**L7.2** In the first place, we wish to state our view that programmes whether of one or of two years which extend over Humanities, Social Studies, and Natural Sciences are in no way exempt from the problems that arise in a programme based on — say General History of China, Introduction to Philosophy, Logic and Sociology, or on Mathematics, Physics and Chemistry. Indeed, it must be apparent that certain problems arise under all circumstances when a wide range of subjects is studied simultaneously. In what follows, we refer mainly to the idea of common courses in Humanities, Social Studies and Natural Sciences, rather than to the more limited proposal mentioned by the Committee in respect of Physics and Chemistry.

**L7.3** The first problem is, very simply, one of limitation of student time. If it is possible, in any programme, for a student to acquire a critical understanding of the real core of the disciplines he is concerned with, even if the range of examples or material he works at is limited, then that programme is effective. If this is not possible, then the student will fall back on memorising his notes and cramming for examinations; he will not respond to the teacher's wish to instil in him a lively and constructive interest in a subject for its own sake, and he will respond even less to the challenge over a broader or more "general" field. We have drawn attention to the need for care in existing programmes. The fact that a programme is made up in a different way, directed to an ideal of general studies, and comprises courses in Arts, Social Studies and Natural Sciences, makes no difference. A development of this kind, therefore, is as liable as any other to lead to disappointing standards and results if the quantity of material in the course is so great that a reasonable load of work is exceeded.

**L7.4** If students, on coming to the University, have in their last years at school been studying a wide range of Arts and Natural Science subjects without specialisation, it is easier for them to continue with a wide programme of General Studies in their early years than if they have at school concentrated on one set of topics to the detriment of others: in the latter case they will have to undertake a larger amount of quite unfamiliar work at an elementary level, at a

moment when they should also be occupied with adjusting to new approaches at more advanced stages of familiar fields. If therefore the University were to decide on a far-reaching policy of general studies, it should be prepared to put all possible pressure on secondary school authorities to co-operate in making its task easier by developing a broader pattern of schoolwork.

**L7.5** We have suggested above (paragraph 5.2) that to assist the adjustment to a more mature and critical approach needed in University studies, small-group teaching is of value. We have also suggested that for it to give its best results there should not be too much of it going on at the same time in the programme of any given student. Moreover, if the ratio of staff teaching time to student working time is depressed through uneconomic multiplication of small-group teaching periods, the strain on staff becomes noticeable. For General Studies, therefore, the question arises in acute form, whether small group teaching should be concentrated on the student's new fields of study (e.g., on Arts or Social Studies subjects for those with a scientific bent), or not; if not, there is the likelihood that the new field of studies might be pursued by students in the way which the Committee on Teaching Methods has deprecated.

**L7.6** We note the view of the Committee on Teaching Methods (paragraph 26) where it anticipates this difficulty by suggesting that "the chief method of teaching would be small tutorial groups backed by reading and written work on the part of the students." It will be apparent that if such teaching is not related to fairly substantial amounts of student work, it will place an unusually heavy load on staff; if it is so related in a number of subjects simultaneously, the risk arises that students will be faced with an excessively heavy burden of work. There is thus a dilemma here; we should not wish to dogmatise over the ways in which it might be faced.

**L7.7** It remains true that there is no intrinsic impossibility in presenting students with a broad programme of work ranging over several Faculties or disciplines. If the teaching problems of the kind we have mentioned can be overcome, the results are appreciable. It will be borne in mind that if the content of each course is made as selective as it ought to be (paragraph 7.3. above), the student on completion of his studies is likely to be less well placed to embark at once on research than he would otherwise be; this has been the experience of several Universities in different countries. The matter can be remedied by extra time, teaching, and attention at the post-graduate stage; and this would in our view be one of the implications of introducing an extensive system of General Studies courses. It may well be found, also, that certain "scientific" subjects are particularly well suited for study alongside certain

"non-scientific" courses (e.g., Zoology and Psychology). In general, Mathematics, Physics and Chemistry may offer greater problems than biological subjects if worthwhile standards (i.e. not those of the schoolroom) are to be aimed at for University students with an Arts bias.

**L7.8** We may, then, summarise as follows the points for consideration on General Studies, so far as they relate to Teaching Methods:

(i) If the attempt to offer a broad range of subjects leads to heavy timetables of lectures for students, the scheme may be impressive on paper but there is a likelihood that difficulties will be encountered in the quality of student work.

(ii) There is a risk that programmes may be unduly heavy in an attempt to reach good standards. It would be wise to have in mind from the outset (as indeed for any programme of studies) a maximum number of weekly hours of instruction; preferably less than 20, including practical work.

(iii) Small-group teaching, likewise, should be the object of great care in planning. If one danger is too many lectures (i.e. courses that are too ambitious) a similar danger is to be faced in over-provision of tutorials.

(iv) The University should have regard to the secondary school preparation of its students, and, if it resolves on major developments in General Studies, attempt to secure the co-operation of schools and, so far as is possible, the adaptation of schools examination syllabuses, though this may take time.

(v) The effect of General Studies on intending researchers (who in many cases are almost by definition specialists) should not be overlooked.

## Section 8: Steps to be Taken in the Immediate Future

**L8.1** It would be difficult to lay down a programme for action by the University without usurping functions which are properly those of the University itself; furthermore, our investigations have not up to the present been sufficiently extensive for us to enter at this point into great detail. We have however made a number of suggestions in this report, on a variety of different topics, and if these are to be of use, even as a basis for further deliberations, it may be appropriate to indicate here what are the points to which in our view the University might first devote attention.

**L8.2** We have made it clear that, in our view, methods of teaching are inseparable from the content of courses. We recommend therefore that in each College and department, consideration should be given to three things:

(i) Reduction of the content of courses, with a

view to creating a basis on which students will be more readily able to work constructively on topics arising from the course-topics presented in lectures. In particular, there must be great selectiveness in the choice of topics for treatment in a course.

(ii) Reduction, except in rare cases, of the number of lectures given.

(iii) Setting up along the lines suggested, of small-group teaching for *all* students in the first and second years (the most difficult and on the face of things the least attractive phase of student work — but by far the most important). This will involve a certain amount of consultation between departments to avoid providing *too much* small-group teaching. The results of these operations should be put into effect in the year 1965-6.

**L8.3** In agreement with the Committee on Teaching Methods, we recommend that the Senate should at an early moment give consideration to the question of examinations; and that in the degree examinations (or examinations for third and fourth year courses) provision should be made for the most extensive possible participation by the external examiners, so that they may be able to give the fullest assistance, if called upon to do so, in considering further developments in this matter.

**L8.4** The development of language teaching techniques along the lines we have noted should continue without interruption:

(i) experiments on methods of improving use of laboratories;

(ii) enquiry to elicit the hard facts about reading speeds at present;

(iii) further study of the New Asia College pre-session course and possible development;

(iv) provision for, or maintenance of, expert staffing in each college;

(v) consultation between these teachers.

**L8.5** Following on from the suggestions made in paragraph 8.2 above, it would be highly appropriate that in the following year, namely 1966-7 small-group teaching in the third and fourth years should be thoroughly scrutinised by colleges, for all courses in all Faculties. Though urgent, this measure can take its turn after the more pressing matter of first and second year work has been dealt with thoroughly; also, it will be convenient to face the issues involved as a whole at a time when questions of inter-college teaching become important through the imminence of the move to Ma-Liu-Shui. In the meanwhile, there is of course much to be gained by College Departments at once developing seminar work for fourth-year students where appropriate, and small-group teaching for courses other than first or second year courses, as and when revised syllabuses give further point to this more selective approach.

**L8.6** The need for full consideration to be given to these points and for advantage to be gained from all the experience of the college teachers leads us to write about Board of Studies and the tasks before them. These Boards were envisaged by the Fulton Commission (paras. 115-117) as the discussion grounds where consideration would be given to existing courses and schedules or programmes of study and where proposals for new courses could be brought forward and their place in relation to existing courses and programmes worked out.

**L8.7** At first the Boards would have, as a part of their duty and responsibility to the University, to review existing courses and the programmes of which they are constituent parts; this would have several purposes including:

(a) providing for equivalence (not uniformity) of the courses and programmes in the three Colleges. This we regard as important — it will lead to members of staff in subjects learning more about what is done in the other Colleges and why it is done; and if inter-collegiate teaching is to become a reality it is essential that courses shall be closely equivalent in academic demands (lectures, tutorials, preparative study, written work) on the students' time, so that there will not be danger of some courses becoming overloaded and others known (and possibly therefore attractive) as "soft options";

(b) the avoidance of unnecessary duplication in parts (large or small) of courses; for some lectures in a course — not necessarily for all — students from more than one College might join up, while the relevant tutorial and written work could still be dealt with in the separate colleges.

**L8.8** The Boards of Studies will be the groups to which proposals for new courses can be brought forward whether by the Director of University Studies in the subject or by any Head of Department or member of staff who feels that it is appropriate and opportune to do so. We have in mind that the appointment of a member of staff to a college department may mean that an expert, a scholar or a researcher in a particular field becomes available to talk about his special interest; the potentialities of this should be made available at least to the two senior years of students (in all the Colleges) by considering whether his specialism might be offered as one of a group of options in one of the more advanced courses either through a series (not necessarily extending over a whole year) of lectures or through discussion classes of some kind.

**L8.9** There is another point about the syllabuses and discussions about these in the Boards of Studies. We do not know how it is expected that the syllabus and examination position will develop. Presumably the examination papers are essentially the same for students from all three Colleges; they

may have to offer a wider range of choice of question than is usual in other Universities, at any rate at first, in order to meet the present diversity of approach in the Colleges. But we are clear that to continue with any arrangement that is in effect three examinations assessed by three sets of internal examiners and one external examiner will bring increasing potentialities for complaints of inequity and will not lead to the sense of being within the University (both to students and to teachers) that is, we believe, essential to its coherent development. The Senate will no doubt consider this problem and will, we expect, decide on a basic scheme to guide Boards of Studies in dealing with these matters. A simple university syllabus, which is made known to the student so that he knows what the minimum breadth and range of his reading and study *must* be, need not inhibit the individual approach that may characterise — and may bring great inspirational value to — a college teacher's plans for his students' work. Diversity between the Colleges can bring strength to the University and, especially through inter-collegiate teaching, enrichment to its educational work.

**L8.10** The Fulton Commission did not recommend the formation of university departments, since it preferred to avoid the possibility of inhibiting the development of new areas of study that might be neglected because they fell outside departmental boundaries or impinged upon two-or-more-departments. The University was therefore envisaged as being dependent upon Boards of Studies to bring the teachers together and to give them a sense of joint responsibility.

**L8.11** We assume that each Board will include the teachers in the subject or subjects or area of studies, together with some others from related subjects or areas, e.g. the Board for Physics would include one — or perhaps two — who were interested in the provision of the teaching in mathematics that is essential for physicists; the Board for Biology would include not only botanists and zoologists but also a biological chemist, a physiologist etc. The present Statutes might exclude some of the teachers of relevant ancillary subjects who are Assistant Lecturers and it may be advisable to consider whether they should be invited to attend meetings of the relevant Boards.

**L8.12** The Board of Studies in English should, we think, set up a Committee of those specially concerned with and experienced in English Language Teaching Methods. The three Colleges have a common but not the less daunting task of bringing all their entrants, mostly from the Chinese Middle Schools with a limited knowledge and understanding of English, to a stage where they have a facility in the language that enables them to use text-books, to follow lectures and to take part in discussions in English. This is a separate problem from the teaching of English Literature and involves radically different methods. Each College has and is now using its Language Laboratory and those taking part in this work should come together to compare their methods and share their experience.

February, 1965.

# 賴曼、羅池教學方法報告書

## 目 錄

致謝聲明	44
第一章 導言	44
第二章 定義	45
第三章 語言問題	46
第四章 講演	47
第五章 小組教學	49
第六章 考試	54
第七章 通才教育	56
第八章 最近將來應採之步驟	57

## 致 謝 聲 明

我們首先要向香港中文大學校長致謝，感謝他邀請我們陳述我們的意見，並要我們對於該大學發展中最有意義的階段加以幫助；我們還要謝謝大學當局及英國政府技術合作部，使我們能夠成行。

我們訪問過大學三所基本學院不止一次，在許多次場合中，我們會見了大學及各學院教職員，無論在正式或非正式的聚會上都蒙他們盛情款接，並耐心解答我們所提出許多問題及查詢。此外，容啓東副校長所主持的教學方法委員會的工作和其所搜集的資料及意見，也給我們很大的幫助。該委員會的報告書不止對於三學院的現狀有最寶貴的說明，並且指出教師們中若干特殊問題及學生方面若干特殊需要。對於這些，我們無法充分地表達我們的謝意，我們只能說對於我們所獲得的一切便利及所受到的禮遇都是十分感謝的。

由於中文大學及各學院行政人員周至而踴躍的幫助，使我們在港工作和逗留期間，更感愉快，還有許多大學外的香港人士，亦曾幫助我們，使能對於香港高等教育諸問題得到廣泛的了解，我們一併向他們衷心致謝。

## 第一章 導言

**L1.1** 我們深感榮幸承蒙香港中文大學校長李卓敏博士邀請前來，為最近成立的中文大學提供關於教學方法的意見。在他致我們的信裏，李博士希望我們研究下列的問題：

「重新建立全盤教學制度，擷取英、美，以及其他制度之長以適應我們的需要。」【註】

**L1.2** 中文大學是由三所基本學院（崇基、新亞、聯合）所組成的一所聯合性的大學。各該學院對於其本院各項教學方法及其效能都深有認識。由於三學院不同的傳統，故能提供很廣泛的不同經驗。

**L1.3** 關於這些知識及經驗的檢討，以及實施時的情形和有關各問題，已由教學方法委員會在一九六四年九月向校長提出的報告書中予以陳述。這個委員會是於一九六四年三月經李博士指派成立，由副校長容啓東任主席，並自三學院中選任若干委員，負責擬具報告，作為和我們討論的基礎。我們能參閱該報告書並得與該委員會各委員詳細討論各點，我們十分感激。倘若沒有此項機會，則我們勢必須自己多作調查，這在我們旅居期限內所不能完成的。該委員會向各學院發出各項問題所得到審慎而有意義的答覆，其提要給予我們很大的幫助。

**L1.4** 教學方法委員會不止就經驗及現行方法方面搜集材料，並且對大學教學提出若干基本問題。在該報告書中，關於如何使課目和教學方法更能裨益各學院學生，以及如何使他們能夠利用各種機會來促進他們一般教育和發展，曾作了許多建設性的建議。我們在後文還要提到那些建議。我們雖然對該委員會所提出的若干意見不盡同意，然而該委員會的努力，於大學教學問題各方面所作的廣泛探討，使我們深為感佩。

【註】中國傳統之教學優點將於兩專家建議方案提出討論時予以補充。



**L1.5** 該大學現正處在其發展過程中一個重要而艱困的階段。每一學院各有其自己的傳統並依循其自己的方法，自然深願繼續保留其固有的方式。然而每一學院又必須在某些程度上遷就其他學院，此舉並非求同，而是旨在於相當時期內可開設若干共同講授課程。俾在某一學科上，所有學生都能領畧各學院專家學識的益處。如果缺乏任何共同點或類似的處理方式，則集合三院學生於一項大學的共同課程之下時將會遇到異常而不必要的困難。倘若講演和小組教學這兩項最有價值的教學方法同時在一個課程內應用時，這些困難將會更大。講授者本人自不能在各學院中擔任一切與其講演有關的研究班及小組教學工作，有時甚至即在一學院中也未能這樣擔任，除非各學院對於課程講習範圍和「研究方式」能有協調，則小組教學的價值只是稀微的。

**L1.6** 由於這些考慮，所以我們有一章談到大學系務會。在大學組織法內曾提到系務會的組織，該系務會確有重要工作可作。大學教務會有權規定大學系務會的責任（規程11.4(S)），其主要職責之一，為在最近將來設法召集三學院中同一科目的教師共同討論有關課程綱要及考試事宜。

**L1.7** 一個學生花了幾年時間在大學攻讀，可能有下列任一項之理由：

（甲）為其預定的職業作準備，求得實際知識與訓練以及如何運用其所學的技能。

（乙）尚未選定職業，但認大學給予他的智力訓練對他是有益的。

（丙）對於某一科目或某些科目感到興趣，他在那些科目內已經表現了能力，除在大學繼續攻讀以外，無法再求深造。

許多學生有意識地或無意識地受上述理由或其他理由的影響。無論如何，學生求學所得中最有價值之事物，乃是如何運用其智能來檢討事實，作合乎邏輯的推斷，明辨證據，以及整理和表達自己的思想。雖然由閱讀和聆聽他人關於各科目的講解，也許能造就上列諸特質，但究不如由學生本人在指導之下，自行學習那樣來得有效。

學習做這些工作，可能對於在文化背景一向偏重記誦的學生是困難的，因此我們相信這一方面的教學問題在中文大學尤為重要，所以我們對這一點此後將特別注意。

## 第二章 定義

**L2.1** 名詞在教學方法裏，時常成為問題，所以我們在此將本報告書內所用的若干名詞加以界說。這些界說可能對於貴校各位同事將無所用，但至少在本報告書內可以免除誤會。

**L2.2** （甲）課程：我們用這個名詞指某一年內為學生所制定的全盤教學計劃，舉例來說，譬如，崇基學院社會學第三年課程計劃，在一九六四年迄一九六五年

見校歷頁112所載者，包括各項科目一共有卅四個學分。

（乙）課目：我們用這個名詞指全年課程中之各個別部份，該部份在校歷中附有號碼——例如在聯合校歷頁131「中國文化史（二年級）」，編號「歷201」。每一課目在全年或半年中每週規定若干授課時間。

（丙）直接教導時間：包括學生正式在教師講授或指導下之每次時間。

（丁）講演：教師的單獨講演，屬述解性者。在講演中，有時只有小部分時間可備學生發問之用，有時無之。其聽眾或多或少。

（戊）討論時間或小組教學時間：指任何非講演式之教學，除後文所列入（己）及（庚）項某種特殊教學時間外，這種教學，人數須有限制。我們在若干歐洲各大學內，曾有討論時間內將近八十個學生及好幾位教師一同參加的經驗。很明顯地，在那樣的場合裏，只有少數人能夠積極參加討論，其餘的不一定都能得到益處。我們所指的那些大學，他們自己對這樣的集會也感到焦慮。所以我們認為，原則上，在討論時間或在非講演式的教學時，無論其性質為何，其學生人數都不應超過二十人以上，有些科目，按其研究性質，其人數或須更少。

（己）筆寫練習班：指在某時間內學生的寫作練習，使他們對於已為他們解說的材料，加強熟習運用，或指對於任一科目在適當時間內所予之測驗。

（庚）實驗室或實驗班：指學生在某一時間內，利用已備或未備好的儀器，進行指定的工作，是項工作通常在教師或導師當場指點下進行。其時間長短，因科目而不同，班內人數當以地方面積並依學生與教師比率為準而定。

（辛）研究班：指在教師監督下的一個討論班。在歷次聚會中由各別學生按課目綱要中所規定之題目提出若干論文或報告。所有學生每星期不止是聆聽教師的批評而已，須充分預備來積極討論所報告的題目。其人數最大的限度，不當比（戊）項所建議者為多。

（壬）導師教學：指在某一段時間內，學生先行做好工作如論文、習題、問題等，使教師能夠就之與作討論或批評。這項工作大體是一連串的，由同一教師指導，有時與講演相關，但有時亦不關連。導師教學由一位教師與一位學生或者與數位學生同時舉行均無不可，但若數目超過五人，則研究班與導師教學之區分將模糊不清。

（癸）「科目中心」及「學生中心」：這兩名詞表示側重方面的相對程度，因為所有大學本科的教學都是為學生而設，也為了教授一個科目而設。然而，有些小組教學（特別是導師教學）主要是關於學生個人所遭遇的問題及其智識上發展的問題；在另一方面，固然所有講演都應針對其聽眾，然而若干演講，尤其是高深科目者，其主要價值則在其處理科目方面有其特色與專長。導師教學其人數如果增多了，便明顯地很難處理每一個學生的單獨問題。研究班比導師教學較適合於以「科目為中心」。



我們在後面將另列一章詳論小組教學，以上各項將均再提及。

### 第三章 語言問題

#### 導 言

**L3.1** 我們十分感謝各位同仁將他們所見到的語言問題一一告知我們。顯然，這些問題已是經過詳細考慮；如果教學方法委員會報告書還提到有困難，那是因為這些問題本來是很複雜的。這種困難在全世界大學內都有的，並不限於香港。倘若我們知道有一國家已經解決了這些問題，我們一定會將他指出。然而，甚至通行多種語言的國家如瑞士，在他的大學內，也有這類的問題，並且我們注意到多種情況的存在，而香港並非例外。

**L3.2** 問題之所以複雜，因為我們要考慮下列各項因素：

（甲）不同的課程有不同的問題。

（乙）學生以往在中小學時所受的訓練，以及在某種程度下其社會背景的影響。

（丙）在學生學程上不同階段的問題，尤其是在第一年級。在那時候，學生要同時應付如何適應新工作的各種問題，並且在這時他或者尚不能完全了解在其本國語言外他種語言的用處。

**L3.3** 中文大學對於語言問題，早經熟加考慮，並已為最初兩年之語言工作定出目標，這是值得慶賀。就我們所見到者，這項目標有兩個個別部分：（甲）工作的工具，此與各階段之學術研究皆有關係。（乙）大學畢業生必須達到的水準，使他們在完成高級教育後能充分而有效地參加社會生活。這兩項目標中，第二項對於所有的學生是相同的。第一項在細節上，則視學科而異。（試一比較用在研讀一項高深數學符號之使用，與在圖書館中讀一讀本，如歷史者之時間。）

我們假定第一項目標必須大致上在頭兩年內完成，於後兩年再加以熟習；無論如何，使學生能夠儘速閱讀無譯本之英文資料。第二項則須於四年終了時完成，但恐怕一個四年級生，例如自然科學的學生，當其專心致力於其所選定之學科時，勢必不能抽出多的時間來提高他頭兩年課程中研讀所得之程度。

**L3.4** 關於第二項，在現時世界大學教師心目中者，還有一問題，那就是，本國語的真正運用能力。高等教育的本質，就是不斷地要求學生，無論在寫作或言談，不論其為自然科學家、社會科學家、或文學家，都能時時將表達思想能力加以改善，使能準確而有效。這種能力只能在兩種情形之下得到發展——有好榜樣供觀摩，有機會作練習。一個學生直到考試時才想起要準確而有效地表達自己，縱使他的教師曾經給了他一些好例子，他仍必將失敗，除非他事前曾有增進技能的機會，並受到鼓勵去做。這個原則對於文科或研究經濟科目或自然科學者，一律適用。在美國、法國以及其他國家的許多大學內。也曾討論

到學生這種的缺點，所得到的經驗，是只有由筆述口述的重複的練習，才能取得運用語言的能力。在英國自然科學諸學系，為了使科學家及技術專家們能作有效的表達，規定學生在最後考試時，寫一篇關於一個普通科學题目的論文。採用這個辦法愈來愈多，這種測驗，在各學年中均有練習，作為準備。

學生寫說不能流利準確這個缺點，在許多國家內都詬過於中學。不管這種責備對與不對，毫無疑問，高等教育所要求者，却是如此一個水準，需要這樣程度的智力成就。不論該學生入學時之程度如何，將這項工作工具加強淬礪，使更為有效，應是大學的責任。這只有在處理困難的智力問題時，學生面對着一個考驗，才感到能夠以更準確而熟練的方法來運用其本國語言的必要。

這個問題，當然與教學方法有關，我們此後還要再行論及。本章其餘部分將專門討論本國語言外其他語言的問題。

#### 特殊問題

**L3.5** 教學方法委員會曾考慮到關於學生們其本來語言是用粵語，如何能使他們無困難地用國語通談，或者，至少能聽國語講演各問題。這個問題該委員會相信，在學生入學第一年內可以不費大力而解決，這是可以令人興奮的。

對於該問題沒有特殊知識的客人，自然不當冒昧發表意見。這種情形，和歐洲許多地方如阿勒撒斯 (Alsace) 斯羅瓦克 (Slovakia) 烏克蘭 (Ukraine)，大畧相似，但也不完全相同。當然在書寫的文字方面不會一樣。我們對於該問題之已告解決，並對上述第三段中之（甲）及（乙）兩目標在中文方面已經有了一個滿意的情況。並不感到驚奇。

**L3.6** 關於英文的一些問題自然不同。我們要記着，一間大學，雖然是與所在地之地方有密切關連，而且對之負有責任，然而大學也是世界社會中之成員，其目的在追尋知識，在世界另一角落，用另外一種語言所出版的一本書籍或一篇論文，可能是在大學教學方面即可應用，或為研究時所迫切需要者。此外，學習一種外國語言，不止是一扇門，使我們自此可走進世界學術社會，並且牠本身也是一種有價值的通才教育。這是為世界各大學章程及其課程綱要所公認的。例如在東歐，各學科學生在中學時已經學習俄文，並且規定在頭三年中，無論寫說方面都要達到高級程度。此外，所有學生為了所習學科的關係（工作工具）都要攻讀第二種「世界性語言」（如英、法、西班牙、德）三年，並且在通談寫作方面都要經大學考試合格而認為有良好程度才成。這些學校對於學生在能力上及工作時間上所要求的條件，並不比中文大學學生所面臨者為輕。當然，我們不是說在這方面所發生的問題已經得到完全解決。在英國，近年來時常討論到如何能為那些志向不在作語言專家的學生們設計一項更完善的研習語言方法，特別是利用附有錄音設備之語言訓練中心。

**L3.7** 處理這些情況，其要點，在開始時便要認定一個明確的目的。這一點，教學方法委員會很適當地已經想到了。

（甲）閱讀速度：爲了作爲工作工具而教授英文兩年，其目的中要點之一，便是在兩年終了時能達到所要求的閱讀速度。在第三、四年時利用圖書館學習的學科中，其所用材料，無論原始資料以及論述的著作，可能大部分都是英文的。我們希望達到之合理標準，是每小時閱讀四十面左右。倘若只有一小部分學生能做到，則我們便不能達到所希冀的水準。那麼，課目便須大行修改，或者大部分資料須要譯成中文備用。我們深知譯述工作將會替若干教師在其預備教材時帶來繁重的額外負擔。然而，若果有這項問題存在，則必須想一種方法來解決。我們相信這個問題如得到解決，便可以克服了該委員會所強調的缺點之一部分，所謂缺點就是指學生們過於倚賴聽講的筆記，而不肯自己多多閱讀參考書籍。若是我們認爲閱讀速度之遲緩，是不可避免的，而不強調學生們須自行閱讀教師爲他們所選定的課外參考及必讀的書籍及文章，則我們顯然採了後退的步驟。當然在某些情形之下，倘若刪去若干講授項目及指定之課本，或參考書籍之對於該科目核心問題的透澈了解上並無必要者，也許對於該課目之教學本身反而有所改進。

我們建議，應當就現設三四年級的課目，逐科調查所需要的閱讀速度，倘若發現實情較所要求於一般學生者距離太大，那麼，有關方面便要尋求補救方法，予以糾正。

（乙）語言教學的深入研究：在今日，教授外國語言已成了一項極專門的學問，並已有許多研究工作在進行中，目的在爲某些語言建立了有系統的知識，並比較各種方法以便應用於各類程度的學生使能均得其益。有了「語言實驗室」，幹練的教師們教授法大爲增進，學生們對於了解運用與其土語結構不同之語言的機會也大爲增加。雖然語言的學習仍是一項練習，只有靠徹底工作方能成功。幾十年前的重大困難，到了今日，已能較快地克服了。當然「語言實驗室」本身也不過是較爲專門的傳授途徑，要想從語言實驗室得到好結果，必須能利用他作爲良好的教學方法，那就是說，只有專家教師們才知道如何利用。

還有要討論和試驗的，是在教學時如何利用那些經語言專家分析所選出並經其認爲極要的教材。我們以爲這項試驗尚有舉辦的價值，倘若做到的話最好計劃分組的控制試驗，來尋求下列答案：例如對於入學的一般學生分配其在一定時間內的工作，什麼是最圓滿的方法、怎樣的練習、多少次數，方能使他們所參加的了解測驗達到合格程度。關於閱讀速度，也可作類似試驗。我們很高興各基本學院已經各用自己的方法，來注意這些事項。我們以爲如想取得最佳效果，這一項教育研究還可進一步利用院際組織，來交換及比較彼此的經驗。雖然這項研究，日後的教育學

院或學系自然而然會有興趣來辦的。我們相信這種研究在現在從事於教授語言的教師們應當儘速進行。無論如何，我們認爲，在現行制度下，每一學院至少必須有一位語言學專家，其責任包括監督該院所有英文課程，並且應當不斷地用極有效的方法來利用語言實驗室。現在許多國家都正進行這一類實驗並且常常得到良好結果，但還不能確定某一種「方法」爲最好者，如果認爲最完善的方法業已完成，則未免言之過早。

對於新亞書院所採試驗性的學期前之課程，在我們來訪的時期，尚不能完全估定其價值。這種試辦和我們所熟習之其他試驗相類似，雖然要化些財力及人力，但這是一項有前途的發展。我們認爲向這方面繼續工作是合理的。我們完全贊同教學方法委員會的意見（節二十七）學期前專修語言課程應當在秋季始業前的假期中舉行。我們認爲關於這項課程的費用，學校應當樂於承擔。當然一切還要看新亞實驗的評價而定。

（丙）選就科目語言的工作：我們應否在第二年級，甚或第一年級語言課程誦讀教材中，攙雜着與學生所擬主修科目的有關章節，這一點也值得考慮。這種選就，在語言科目中無疑地可以刺激學生使他在語言工作之外還持有藉此以達其願望之感覺，但大家應了解這是完全爲了學習語言才讀這些教材，學生有了這種準備，才能夠運用該語言作爲他的工作工具。這就是說，「工作規範」，這一效標，在此，一如其在本章他處，同樣明顯。語言教學無疑可加強或拓展學生對於綱要所規定課目之工作能力。

我們提出這項建議來供大家考慮，因爲這牽涉到技術上可行與否的問題。我們曾聽教師們說到他們在這類試驗中所遇到的一些困難，其中之一爲按照學生志願主修科目分組的困難，因爲學生們已經按照程度而分組，那麼選就科目所擬定的各套材料便不易於用在每一科目方面。不過我們可以試驗在二年級時，依照學科性質，將一部份材料輪流攙入於各方面讀物中。同樣地，在二年級語言考試中也包可括各種選讀材料，以便學生就其所習選答。

## 第四章 講演

**L4.1** 講演爲所有學科最普通的教學方法。關於這種教學方法之功用及長短，已經有了很多意見，我們不妨就公認各點。簡單地分爲三項來說。

### L4.2 功用

（甲）爲初學者介紹科目入門，並說明科目內容綱要，這是教師給予新學生一個機會，使他們明瞭某一科目的概要併向他們說明，此後如何進行研習，然後提供一個課程大綱。（某些科目，縱是較高年級的學生，在其始業時，也會需要這樣的機會。）倘若沒有這項工作，則任一小組教學（除了訓教式者外）大體將是無效的。在課目的某些階段上，——常常在其進行初期——，爲了須向

學生灌輸某些知識時，講演是有很大的效用。除上述功能外，講演還能在初期激發學生研讀一項科目的興趣。這項激發，如無講演，就只能由廣博閱讀中求得之。如果要學生能參加學習併能充分地從小組教學得益，這些初期激發力是必須的。

(乙)遇有太複雜或太散漫的材料，為學生所不易搜集者（尤其是自然科學，但並不限於自然科學而已），代為講述並檢討各項批判或贊同的意見。

(丙)缺乏滿意的刊物時為作補救，或者為祛除學生們因有關書刊龐雜而引起思想上之混亂。

(丁)為解說或評論上之最高技巧示範，該項解說評論不當受干擾中斷者。

#### L4.3 正式講演的長處

(甲)一位良師能用他的熱情或其學者風度以及「研究方法」來感染他的學生。

(乙)節省時間和人力，聽眾愈多則愈合算。

(丙)講演，在適當情形下，能包羅最新學說或材料，尤其是高級程度者。

(丁)講演課目較其它任何系統性之對眾傳導方式易於隨時修改。其修改可以關顧到周圍情況（實驗室工作，圖書館或展覽會的材料，其他講演，近日出版品或其他事），也常常可以將講辭重新組織以適應宣講時的特別情況，有時能產生可驚可念的效果。講演可以常常修訂，而且也應當如此。

(戊)學生可以練習用自己的辭句記錄講演的內容。

#### L4.4 短處

(甲)講演最大的缺點就是如果用為惟一的教學方式，很難想出一個有效的方法來審查學生（就一班而言，或個別而言）對於所灌輸的論點，項目，技術，或事實到底能掌握了多少。因為這項知識的傳授是單方面的，即是——由教師到學生，在這種方法中未能預見的失敗，要到學生表現出他的困難時才能發覺。在講演時間內也有一種輕微補助方法可以採用。在講演一小時中留出最後五分鐘作為學生提出問題之用，但是班愈大則學生愈不願揭露其困難，並且一個學生的困難不會和其他學生所感覺到者一樣。另一方法，為教師於講演終了後，在室內停留五分鐘（縱然僅是擦淨黑板），學生可能受鼓勵而前來談訴其困難。再一方法，教師也可以中斷他的講述而用發問方式來測驗聽眾中若干人的了解程度，但是這辦法對於學生無甚裨益，且在一貫的講述中有擾亂思考集中之弊。在某些國家（例如美國）學生是隨時可以打斷講演而提出問題，但那些問題可能是瑣碎的，如果提出問題衆多，將會阻礙教師使之不能講完其課目中之若干主要部份。再一方法，也可用考試或其他測驗以查探學生是否掌握了課目的內容，但是這種方法通常是已經太遲，不能使補救的方法完全生效。最後，有些教師可能感覺到其聽眾尚未能領略其論議，便從頭闡述。但這不止毀了解說的連貫性，有時也

并不成功，而且并非所有的教師都有這種直覺性的感覺。其全盤問題是在如何求得一種兩面交流的方法來處理在那灌輸中所不易得到的「反應」。事實上這個問題不可能得到完全圓滿的解決，除非在實驗室、研究班、示範班、其他討論時間或導師教學，採取另一種較為親切的教授法，雖然其進展可能是較緩的。

(乙)以講演為惟一教學方式之另一嚴重缺點是學生除了用心聽教師的論議及筆記外，不能有其他參加工作的餘地。如果只要學生用心聽講之外別無他求，那也就無所謂；不過，不幸的是，要想知道學生了解的程度為如何，這種方法本身是不滿意的，並且對於教師也是異常艱難。因為教師除了出題考試，或審查筆記外，別無他途，雖然在教師方面已盡了艱苦職責，對於學生却無多大裨益。倘若教學着重學生積極參加，那麼講演本身對於這項發展工作便不能有所幫助。我們在第一章中曾經說過，關於這問題大體上我們採取與教學委員會報告書內附錄乙項相同的態度。這一點對於講演在大學本科教學中究應佔怎樣地位的問題，有很大關係。

(丙)在課程中，以講演為主要教學方法還有一種心理上的不良效果。學生在整天繁重的講演程序下，必然弄到身心交疲不能萃精會神，專心工作。

(丁)在繁重的講演程序下，尚有一項問題：那就是，需要教師所作講演的次數往往要比他通常所能擬作有效之講演為多。一個草率預備的講演（由於過份繁重課程表的結果）不止是使學生失望，亦使教師本人墮志喪氣，其結果使他漸趨散漫無章（縱然初時他曾懸有良好的標準），看教學味同嚼蠟；而在正常情形之下，此項工作本應是一個有興趣的而富有刺激性的經驗。

L4.5 在討論了講演教學方式之缺點後，人們或者以為我們認講演是一種過時的教學方法，充其量，亦只為權宜之計，而為現時所尚不能廢棄者。事實上，這并不是我們的看法。相反地，我們認為講演在某些意義上却是教師武庫中最有力量的工具。在上文我們對於不間斷解說之特長及優點，曾經提到是很重要的，但是講演一如其他强有力的工具，要巧妙地來運用，不可誤用，也不可濫用。

L4.6 任何一個講演的課程，其成功為如何，不容易用客觀的方法來衡量。講演課程之程度愈高則愈難衡定。特別是，如果某一講演，他的一個主要長處不止是能使聽眾了解，並且激發學生們對於那科目的興趣。誘令他們加緊閱讀和研求，則顯然的這種熱烈情緒便是這好講演的一項重要產品。然而這是無從用任何可靠的度量來衡定的。如果教師本人對於該科目確懷有愛好之情，並對講解能勝任愉快，則學生之熱烈情緒較為容易激引起來。但欲求達到這個情況純靠着幸運，人格，風度，或科目本身，經常是不夠的。講演作為一種教學的方式，除非注意到下列事項，不能完全成功（雖然在其他方面也許有其價

值)。

(甲)講授者本人心中對於在所可能運用的時間內能作到者是什麼,應當先有明確目標。一項講演或一講演課目,應當經過全盤統籌,若只是半完成者,不能認為滿意。

(乙)同樣重要的是,學生應當知道所作的是甚麼,且必須使他們完全明瞭演講之目的和所採取之方法。

(丙)倘若需用說明材料(文字、圖解、黑板上書寫的材料、圖書館內的參考書籍、課本等等)時,則在需要時間,必須齊備。講授者不可漫不經心以為一切都無問題。這些細節,任何一項如不細心照料,將使學生認為他們也一樣地可以對於那些材料或講授者的指示無須細心處理。

(丁)講授者不當以為學生們在筆記他的講演時,都已和他本人一樣的知識。就我們所知,關於作任何筆記并無通則,有時教師要學生們默寫下來公式,辭句,或一段文字,或要他們準確地照抄;有時他認為課目中一部份的註解或例釋有印發給他們的必要;有時上述等等都無需要。但他心裏隨時要注意到學生可能忖度他是說了什麼,而照他的判斷行事。一個教師對於一個題目講說了若干時間,不能算是已經講授過了。講演是一種灌輸的工作,其效果視對方所接受的多少為衡。學生們,顧名思義,其經驗及學識較教師們為差,對他們講演,自然要和與講者有同等經驗的聽眾不同。每一教師應當自行決定他究應以班上最聰明的學生(最理想的情形),或程度較遜者,抑或一種假想中的中資學生為對象。

**L4.7** 就算所有這些情形都能圓滿地作到,講演或講演課目並不一定會特別成功。我們曾聽到同僚的證言,大致說倘若他們負擔少些課程,在某些情形下,他們的教學可能更為有效。倘真如此,而他們的課目中真是須作很多的講演時,則這些同僚們可能沒有充份時間準備,將他們的每一講演成功一個卓越、重要、精采而有效的節目,一如其理想者然。在後面一章,對於多量講演一般性的處理辦法,我們有一建議,至少在某些情形下或可輕減這項困難。(節五、十三、)

**L4.8** 當我們研究到講演技能這個項目,便牽涉一項個人方面的問題。凡是學識修養優秀者並不一定會有高度公開演說的才能;然而在應付一個人數眾多的講班、這種才能却是極有用的。一位偉大學者很可能對於公開演講不感興趣。但仍不失為一位良好大學教師。然而,所有大學教師毫無例外地都應當具有最低標準的講演技能,這是需要的。否則一篇經過完善準備的演詞,可能為了有的學生不曾聽到其中的一些重要部份而失去其功效。當大學學生人數增加時,這種情況將更形顯著。誠然,一位講演者的宣講方式一定是各從其個性的。我們不能要求他遵循劃一的方式或格調。同樣明顯的,一個大學根本上不是一個公開演說的訓練所。並且,一位有經驗的講演者縱使他願意遵循,也不容易改變他的宣講方式,甚且對於他的講解方式的說服力,反而產生了壞影響。究竟何種方

法對他有助,頗不明瞭,只有勸他設法使聽眾能聽到其演詞而已。

**L4.9** 若和一位有經驗的教師相比較,對於一位新進教師我們却可給他大大的幫助。新進教師往往竭力在他的講辭內包括了太多的材料,這點是很容易糾正的。他可能是初任講授之職,那麼關於宣講方式他會欣然接受勸告。但誰可勸告呢?這很難說。在一方面,可以說只有和那人所講學科的同行專家方能有資格去批評他所講述材料的組織。另一方面,關於運用聲音的問題,則可以從另一種專家在短時間內得到大大的幫助,例如熟諳演出者——如主持無線電節目者或戲劇者,或有經驗而經常指導如何教學者是。為了學生和教師們的利益起見,大學可以考慮是否為所有將來新聘教師,設定一個中央輔導處,由有經驗的同僚參聽頭幾次的演講,事後予以善意的批評或討論。這種輔導不應完全交給學系中的高級教師辦理,因為他們有許多其他責任,並且低級同僚對於他們的話不會看作和隱名的勸告者一樣。

**L4.10** 在以上各節,我們所討論者,大體上限於一般性的原則。我們知道,講演的次數,各課目相差很多,講演性質也根據科目而大不相同,某些學系所採用的技術與他系無涉,每班人數也差別很大。在聽了許多位同僚的意見後,我們覺得其間有一個重要共同之點,如果可能,似乎應當普遍接受。那就是,每一個講演應當有其特定的教學目的,而不是例行虛應的故事。為了達到這個目的,每一位講授者不祇應當仔細地考慮到在每一點鐘內他的目的何在,和要用什麼方法來達此目的,並且也不當有太多演講時數。只有這樣,學生才有機會從這種教學方式下得到充份的益處。

## 第五章 小組教學

**L5.1** 富爾敦委員會的報告書(頁98)及教學方法委員會報告書都強調小組教學的需要,尤其是在學生初入學的頭幾年中。教學方法委員對於這點更為着重,所用的名辭為「導師教學」,我們同樣也是十分贊同這項建議,我們請先說明一些理由,然後從那些理由中,再論及關於這項各種教學方式上的若干意見。

**L5.2** 我們先從學生們在頭兩學年時說起。教學方法委員會得到若干證據特別證明,凡是初從中學直接升學的青年男女,在許多情況下,教師不容易引起他們對於教學的積極反應。報告書并提到學生們只作被動式的講演筆記及閱讀筆記,并且說到他們在任何階段下,無論早期後期,都不願對於課程綱領外任何研究工作感有興趣,除非顯然有助於預備考試者外,他們也不願從事於任何工作。這種情況也說明了學生們缺乏批判性的思考,或獨立發展工作的習慣。這種習慣當畢業生離開學校,面對那些等待他的工作時所應具有的,也是他的未來雇主所希望於



他的，亦為他在大學研究院工作時所需要的能力。而且，這個問題和通才教育的全面問題也有明顯關係。我們曾經指出，中文大學所面對的若干問題與其他許多國家各大學相類似。本問題同樣地發生於許多高等教育制度之中。問題本身根源於社會和教育的背景，而這些背景在許多國家都有相似之處。簡單說來，一般的意見認為各式的小組教學實為最有效的補救辦法。為什麼呢？因為在一個講演內，無論是多麼好，學生仍是一個被動的旁觀者或筆記者。可是在討論班，或研究班或導師教學時間，如果指導得宜，學生便不能不積極參加。他的教師審慎選擇材料之後，一面可以使學生掌握題目之事實和概念的要點，一面可以幫助學生養成批判性及建設性的態度，用來應付新問題或新的學科。這兩項成就都是必要的，知識領域，逐日擴大，沒有第二項，則第一項只是消耗資產；沒有第一項，則第二項便空虛而不實在。

**L5.3** 在我們原則上假定各項問題由小組教學解決而沒有繼續研究細則之先，我們要進而考慮到剛才所說的兩項成就。我們可以利用一小時的時間來和小組學生相處，研究每一學生對於講演或指定讀物是否真能了解，幫助他們解決困難，教他們使用更有效的方法來進行學習。這種工作我們名之曰「教練」，這個名辭并不含有菲薄之意。同樣地也可以利用這個時間，使學生們自己對於講演或讀物深思熟考。這項方法，可以叫做「誘導」。在這兩種情形下，其教學方法是以學生為中心，因而，其目的是針對學生的程度而工作，不超過他們的智力所及之範圍，利用他們的觀念及知識，在可能時予以擴展，但不要跑在前頭太遠，而使他們迷惑。如此，才能夠建立鞏固基礎，按照最合學生程度依次遞進，不可過速。

**L5.4** 還有一個更重要的事項。小組教學辦理得宜，大體上的確可以克服被動性的態度。與克服被動性同等重要或更為重要者，就是學生為了準備討論所應作的工作問題。就教學方法委員會所提供的材料，以及該報告中（頁5節11.6）所提者，教師與學生人數之比率，為一與十，很難有時間來從事小組教學，我們承認這個問題的嚴重性。在本章中，我們是要致力於研究如何善用這些稀少而珍貴之人力。但在我們開始討論之先，必須認定一項無待說明的原則，那就是，學生應當盡量利用其時間來準備其課程，使教師之努力達到最大效果，學生自己也得到充份的益處。

**L5.5** 為說明我們對本問題的處理方法，和我們所假定者之重要。我們要舉一個簡單而抽象的例子：十個學生只聽一項每週三小時的講演；又為了每小時講演，尚須自行研讀兩小時。倘若這三小時的講演中，一小時改為雙週一次之五人小組教學（每星期聚會一次，該十人分成兩組，輪流參加），如此，則教師用以與學生接觸的時間仍舊。不過。他必須修改課程綱要，刪去某些項目，保留其主要者。我們假定在學期中他對於其講演，縱屬熟

諳的題目，也要作一番預備。如此，他便可以省出一些預備講演的時間（至少每星期一小時），因為講演的次數少了。但是在另一方面，倘若他每星期指定五個學生做筆寫工作，又要仔細地為他們改正，則每星期便須費多些時間（假定為兩小時）。現在假設學生對於每一講演，其指定自修為兩小時，那麼對於每雙週小組教學每一學生在兩週中便約須費十二小時工作時間，下表可以備作比較之用：

	舊制	新制
教師與學生比率	一比十	一比十
教師與學生接觸時間		
每週	三小時	三小時
學生與教師接觸時間		
每週	三小時	兩個半小時（平均數）
關於該課程教師全部工作		
每週	六小時	七小時
關於該課程學生全部工作		
每週	九十小時	一百廿五小時（平均數）
教師學生工作比率	一比十五	一比十七·八（平均數）

這項改變的特點在最後三行，尤其是末行中所表示的。在這表上，教師的每星期鐘點之全部負擔只是增加了一小時，但在該課目中，學生的指定工作則大為增加。教師與學生的比率仍舊，教師工作與學生工作比率實際上是改進了。換言之，對於稀少而珍貴的人力之運用，是改善了。而且，在新制下的工作可以說有助於解決學生被動性的問題。

**L5.6** 我們用了不少篇幅來解釋這個太於簡單的表格，其目的乃在說明我們對於小組教學意見中所持的一個主要原則，那就是，凡是未曾採用這項制度的地方，只要是合理的小組，不要因為教師學生的比率關係，認為教師數目不夠應付需要，而不採用。要緊的是教師工作和學生工作比率，推行這項制度是要實事求是地根據雙方工作的比率而非那十分抽象的（在某些情形下引起誤解的）教師學生人數比率，無論就一課目而言或就全校而言都是如此。

**L5.7** 我們現在來考慮小組教學之需要，和他與現行或在計劃中之課程課目間一些問題。我們曾經說過，前一節所列的表，僅是圖解式與抽象的。我們從而假定所有的講演，在學年中，都需要同量的時間準備，實則有些早已充分預備好了。又，所假定的一些小組，只是想像中的一種小組教學，並且假定小組教學採用學生五人一組的導師教練班。再假定此時學生所修課程，只聽講一課目而已。其最後的假定顯然與事實不符，其他各項也不一定盡合實際。

**L5.8** 實際上，三學院之全年課程包含各項課目或若干單位，師生接觸全部時間各課目不同，每週自十六小時至三十三小時不等。在實施之原則上，我們認為對於每一個直接教導時間學生們大概要花上兩小時來自修。（實驗室及其他實習工作不在其內，因其自修時間將依課目之不同而各異。）我們可為自然科學科目之學生減去六小時實驗工作，那麼，在理論上，學生們每週應自修三十二至五十四小時，總共每週工作時間則為五十四至八十七小時。就我們調查所得，不能使我們有一個詳細而確定的觀點來決定所擬推行之原則（每週一小時接觸時間配合兩小時自修），是否可以嚴格執行。但從書面證據，和我們自己調查所得，縱然不是十分精確，就一大部份的課目而言，學生自修性質顯然是受了第5.2節所提到的困難之影響——所謂困難，就是，自修情形偏於散漫，只是記誦筆記及教室材料，而非提高批判性的能力。在那些學生每週課程工作近九十小時者，這種現象是不足奇的。

**L5.9** 我們認為學生們每週單在課目上不應當花費九十小時的時間。至於在九十小時以上者，更不用說了。這種規定，長期下去，將使真正智力逐漸降低，遑言發展。學生不可能再有時間和精力從事閱讀課外或涉及科目之書籍，或對其通才教育作積極之推進。所以，很明顯的，在三十三小時直接教導時間的課程下，增加學生與教師工作之比率，在我們意見中，是無任何價值的，縱然其增加是由於採用小組教學而來者。如果要得到小組教學的益處，便須對於課程的要求加以限制，以便學生有時間和機會來參加該課程的部分工作，這並非為他們的休閒打算，乃是免除他們在一學期中晝夜不斷地應付繁重的記誦筆記之負擔。

究竟在每雙週或每週內，學生在小組教學期間所作的主要指定自修工作，而能獲得實益者，能否在一個以上，那是成問題的。其答案是要看那課程是屬於那一個年級，科目的性質如何，尤其是，那課程是否包括實驗室課目，或其他實習工作（例如美術）而定。但無論如何，我們認為同時不能有三個以上這一類的指定自修工作，而且也不應當如此。我們以為兩個則是最切實際的限度。在一年級時，大概只能試辦每雙週一小時，然後這項新鮮而不熟習的工作才可以獲得學生的充分注意（並受教師之徹底監督）。如果同意這個原則，則一年級學生，在某一期間內，為預備小組教學而作的充實自修工作，便不能夠在一科目以上。對於二年級學生可採用同一辦法。要他們對於課程中之某部份能加深其批判性的了解。關於這種限制，我們不見得有何流弊。

**L5.11** 我們以為每一學生在一年級時，無論其所修為何科，至少應該參加一科或一個課目的雙週導師教學，這裏，我們十分贊同教學方法委員會的意見（節11(a)及(c)）。至該科目之小組教學，是否應該全年繼續，抑或

一學期後便要更換，是可以斟酌的。我們覺得凡學生打算主修的科目，應當在開始時便要如此處理（其他學生讀該課者，縱然不打算主修該科目，而他們自己另有主修科目之導師教學者，也可以參加）。倘若採用這種方法，那麼舉辦一年級小組教學，其人數衆多之困難，便大體上解決了。在某些學科——例如數學——可能是不宜指定作論說的。其他學科，例如自然科學，指定作讀書報告可能較作論說為宜。我們不願在此點上加以武斷。同樣的，雖然我們在第5.3節中提到五人小組教學，并無意在小組教學工作上建議任何標準的格式，小組人數增加，則積極參加討論者的比例便會減少，教師領導討論的職責也就更困難了。為了這個緣故，我們認為五人應是小組教學的最大限度，而四人則是一個適於工作的數目。無論如何，在頭兩年中，都應如此。另一辦法，則是每週導師教學，將學生分成兩組，每隔二週，由一半學生預備工作，一半則出席參加討論，這種制度可能對某些學科較為適宜。至於每週預備參加討論之工作，尤其對於學生人數甚少之某些課目，可能是較為可行。其主要而不可忘記之點，是每一個學生應當在仔細監督之下，予以教導；訓練他，或誘導他，或二者併進。而且這種薰陶方法應繼續不斷，至少在一學期中，對於某一科目的一套題目，舉辦一系列的導師教學，這在大學一年級時尤為重要。這樣，教師可以知道學生的缺點或能力，學生可以明瞭到底教師要他們做到些什麼。

**L5.12** 在二年級時，可以用同樣方法來處理學生所志願主修的學科。如果依學校課程所規定，或依照學院政策，或其所著重點，需要學生選定另外一科目時，這個科目亦可用同樣方法來處理。

**L5.13** 到了三、四年級，則適用時稍稍不同。不過，小組教學仍應有其地位，可以和正式講演及實驗室教學并行不悖。很明顯的，在這兩年，由於考試關係劃出起迄，其課程統一性可以說漸漸地顯露出來，課程中各科目性質更見一致，學生到那時更成熟了，許多班上的人數更少了。在這時，凡屬利用圖書館學習的課程、以及自然科學方面，每年學生課程中三、四部份可能是，也應當是系統性小組教學的對象（也許每學期兩科）。在最後一年課程中，設有研究班，學生應能掌握解說及討論的技巧，來參加研究班的討論。倘若他們在這階段尚不能參加，那麼大學所以存在之一些目的即未達到。尤其是在社會科學方面。我們要強調研究班之重要，希望能從研究班達到兩項明顯目的：（甲）徹底掌握了關於應用於例範性材料的理論及（乙）對於具體的事例，如經濟學及社會學方面、能從不同角度來研究而得到總結。同樣的研究也可以適用於歷史，文學和語言。為了第二項目的，顯然地，這種研究班最好由各學科成員聯合舉行。最後，假定課程中有小規模的單獨研究計劃，那麼，個別小組教學就要隨時舉行，作為監督指導中一部份的工作。



**L5.14** 我們始終假定小組教學在所有的年級都是以學院為基礎而辦理的。這自然要引起人才問題，這一點，我們以後再說。不過我們覺得根據這樣的基礎來辦理，是利多於弊。教師深知他們的學生，也容易和他們接觸，他們熟知學院圖書館的藏書，在學生們預備參加大學考試時，這和學院的考試不同，他們可視作學生之當然「同盟者」。這些都是優點，不應當輕予棄置的。

**L5.15** 大學四年皆採用小組教學，無論何種形式，必須減少學生的受教時間。第一，關於正式授課時數，假定每年實際上有二十八至三十星期為教學之用（除去公眾假期等等），我們主張凡現時課目所規定每週正式講授時間為三小時者，應一律設法減為兩小時，每週正式講授二小時的課目應當一律加以審查，研究如何可以將他減為每週一小時。我們認為這種措施是絕對必要的，如果作不到，我們看不出有何把握能改變學生們對於學習方式的基本態度。在這上面所省出的若干時間（并非全部時間），應當由教師及學生用來作上面所討論過的小組教學。

**L5.16** 中文大學所開設的課目已經甚多，並且包括了許多學科。本節內所作一般性的討論，只能在不同程度下適用於某一課目。就所有的課目而言，我們覺得在制定方案及課程綱要方面，大學已表現出高度學術水準。並且對於學生不止要他們取得該大學在世界地位上所具的獨特教育而已，而且在教學上，也能和世界各大學最佳的成就相一致一點，也具有決心。不過我們要說，有些課程綱要，尤其是在頭兩年者，表面上似乎是特別的繁重。我們不應當將我們所見到那些個別課程列舉為例。我們至少可以說自然科學各系內的課程，大體上都不是我們所要談的對象。我們所謂「繁重」，是說表面上包括了異常廣泛材料（這當然有異於嚴格學術標準）。倘若，一個通論性的課程，無論其為極抽象者，如哲學；或有關於事實者，如歷史，其材料範圍，牽涉異常之廣，學生除了記誦講演筆記之外，一定不可能有更多作為。並且，在這個階段，學生不一定能了解那廣闊的思潮洪流，雖然講授者本人認為重要的。某些科目，在現今知識迅速發展之世界中，倘若學生不知許多事實，可能很難教授——有機化學就是其中一個例子。其他科目則不至如是困難。小組教學有一項甚為重要的特點——那就是，無論在何種導師教學班或研究班他絕不能用為灌輸百科全書性知識之有效工具。每週或每雙週小組學習班，在一小時或二小時內，只能充分地檢討一個問題或一個主題，或一著作的本文。那就是說，一學期中只能檢討諸如此類的十二個項目。因此題材必須嚴加選擇，以限於中心的及有提示性者為宜。若徒亂增項目的數量，是無所用的。另一方面，在導師教學一小時的討論無疑可以加強學生對於原則的了解，這遠非其他任何

方法所能及，學生完成了一系列這一類的討論之後，他對於其他課題或科目之某方面，雖然未經教師提及，也能把握自己工作。所以在我們減少課目的講演次數時，一定要記着上述各點。我們已經提過關於正式講演優點的意見。當講演次數減少至必需的限度時，這些優點更顯得重要。倘若講授者知道他一年內要對一班學生講演九十小時，無疑的他要為學生們將那個課程分門別類，作一個完備的講述。他的講演可能足夠成為兩本或三本厚書，並且必定替他們作好那些特殊問題的註解。由于完備的緣故，學生們反而懶於前往圖書館自己尋求新意見，或運用自己的思考能力。合理的原則是教師們所作講演的時間，應該比他們理想中所希望者為少——寧可只有五十分鐘而非一小時，寧可四十小時而非九十小時，如此類推。在這種約束下，他們對於所講的科目，必須細心考慮。凡學生們應當自己從圖書館尋求額外之知識，或可用其他方法取得者，或該項知識暫時可免提出者，都不必為他們全部講解，無論其如何有趣。

**L5.17** 大學本科課目，無論如何教授，不可能包括一切。所有的課目，應以闡明學科的核心問題，並說明該科應取何種研究方式為目的。一旦明白課目包括一切只是一種幻象，便容易看到要參照課目的核心問題來決定課目的範圍；並避免過分繁重之課程綱要，不要使學生有着失望心理，認為不可能「讀完該課程」，只有託庇於教師的講演筆記。

**L5.18** 凡課程綱要和教師原來要講的內容不符者，便不當應載在校歷，這點無待說明。最使學生的誠意受到損害者，莫過於他們發現校歷所載者是某一種課程綱要，而教室中所講者是另外一種較易的綱要。

**L5.19** 採取導師教學之主要障礙，就是教師人數少而學生人數多，尤其是在一年級時之課目為然。這項問題我們曾向教學方法委員提出，在後來談話中我們也曾加以發揮。我們相信倘若實行以上所說的建議，這些障礙，大體上，都能克服。那就是：

（甲）正式講演次數，尤其是關於文科及社會科學的課目，應當大量減少。

（乙）課目的內容應當刪減，使學生們——包括一年級的——認識基本原則，而不作百科全書式的涉獵。

（丙）在一年級時，學生們，在任一學期中，應當參加與一個課目有關之雙週小組導師教學。最好其中至少有一學期，他所參加者是和他所擬主修的科目有關。

（丁）在二年級時，仍當照樣做去，另外再增加一個或兩個適當科目之雙週或每週之小組導師教學，每種或可舉辦一學期。

（戊）小組導師教學，在任何情形下，應當限於課目講演範圍內的課題之討論或深度之研究而非講述新題材。

**L5.20** 我們曾經研究過一九六四迄六五年及一九六五年迄六六年入學新生按課目分布的統計數字。在若干課目，採用小組教學，依照前第四節所舉的簡例辦理是可能的，無須再加修改。那就是說，關於那些課目，學院所收的學生，都在十人範圍之內。教師負責那個課目者，很可以單獨主持所有的小組教學，不需要同僚的幫助。我們以為凡可能辦理的小組教學應該就辦。這種辦法的好處，是當教師督導與其所教的課目有關之學主作業時，他不難測定他自己講演的功效。

**L5.21** 但是如果某一科目的入學人數為二十或三十，將怎樣辦理呢？（這可能是今後所遇到的最難處理的問題）一位講授者本來只要作一小時的講演，現在要他主持不止一個而是每週三個討論時間時，他可能是不願意的。然而，我們要說的是，倘若他願意，同時假定他的其他職責不太繁重，並且他在另外課目上並無類似負擔，我們想不出有何理由他不當負這個責任。不過就常情而論，我們不願鼓勵採用這種應急的辦法。我們要說明所以不贊成的理由。倘若一位教師已經在其他課目上負了充分職責，增加教學時間（在多數情況下還須改正學生作業）會減低其效率，並且嚴重地阻擾其本人的研究工作。更重要的是倘若他如此做去，每週教導十五人，那就是每雙週共三十人，雖然每組不過五人或五人左右，他便不能對於每一學生的情形加以充分的注意。

**L5.22** 面對這個問題，我們要回到我們所說教師工作與學生工作之比率的基本理論。倘若那個比率在一個課目之簡化、抽象的例範是重要而正確，那麼，這個比例對一個學院中與該科目有關各課目之學生全體數字及教師全體數字也就更應該如此。倘若就全體而言，比率是大為改善了，而學生每星期之工作時間並不會大量增加。那麼教師的工作負擔相信也不會大增。誠然，倘若照我們所建議講演課目減少了，用時間來衡量，可以說教學的負擔大致不變，所改變的只是用在講演的時間和用在其他方法教學的時間上之相對的比例而已。

**L5.23** 我們要聲明，我們並不是建議所有的課目都要採用導師教學。我們只提議所有的講演時間都應當減少，從每星期三小時減為二小時或從二小時減為一小時，那就是說，有些教師因為他們的課目不附有小組教學。他們每週和學生們接觸時間其總數實際上減少了。任一學系中，在理論上，應該有些教師因採用此項辦法而減少工作。當某班學生人數過多而需要人手幫助時，他們可以幫助同僚主持小組教學。我們說「在理論上」者，因為實際上一個學系包括講授若干科目，而這些科目常是由專家擔任。學系中的教師並不是每個人都自覺能夠勝任幫助做他所未曾作過的工作。我們在此要提出兩項意見：⊖一二年級工作是比較粗淺的；⊖小組教學工作是以學生為中心的——關於課目上的啟發工作應當是來自講授者；可是導師教學的任務，正如我們前此所說，是應依照學生學習

之最大速度而進行，這和講授者無干。既然如此，照我們的估計，系主任對於每一課目都可以設法分配教學職責，使各同僚們對小組教學均能彼此幫助，尤其是在第一二年級階段，這階段也是最需要小組教學的時期。此外還可以依教學方法委員會所建議的辦法（節 11(b) 及 iii）得到其他幫助。

**L5.24** 我們承認為了解決人數問題，我們所主張的措施，尤其是關於第一二年級課程者，可能脫離了「一位教師單獨負責教授一個課目」的原則。這種變動有他的許多好處，一方面講授者仍然負介紹和編定該課目綱領的責任。在另一方面，一位教師對於學生們在其他方面的工作不應毫無所知，對其所引起的智力及學習上的問題也應有相當的了解。這對於教師是有其價值的，而且，在一學系中，各教師也不應當各自孤立，躲在他們個人所築的圍牆後面。

**L5.25** 最後，我們認為所有宜於這個任務的教師們，無論其地位資歷如何，都應當參加這一項工作。對於一個初學者應當如何訓練其思想，從多方面來說，是大學本科教學中最要緊的部分，並且也是十分光榮的部分。若干世紀以來，依照蘇格蘭的習慣，系主任大都要親自負責一年和最高年級學生的教學。所有以後各年級學生工作之品質如何以及是否能夠產生一批有成就而明敏的學生，使我們得到安慰，這一切都繫於一年級時教學成功與否。如果採納這個原則，我們想不出任一教師有何理由要顧慮到在任何時期中負責一二年級學生十五人以上之小組教學問題。就大學裏的教師而論，其平均數自然比這個要稍低。只有在例外情形下，大學及學院方許此數超過十五人，並且也只能作為暫時辦法。

**L5.26** 在結束本章前，我們覺得一個問題對我們所討論各點，有重要的關係，無妨再說一次，那就是關於學生們的自修工作問題。各學院對於這個問題的實際狀況似乎都不能作明確說明，我們聽到了關於若干學生們的困難背景，我們也聽說有些學生慣於在深夜開放學院教室來自修。這種情形由於居家和住校生活上之不更變複雜。在有些國家內，舉行過廣泛而重複的調查來研究個人讀書習慣，如何利用閒暇時間，購書的習慣是怎樣，私人預算，假期之利用以及其他普通社會調查事項。調查結果，往往對於大學當局有重大價值。有時可證實，否定或改正一般人之所信，或所假設者。無論如何，倘若方才所列舉各點能夠得到切實而準確的材料，對於制定教學方針及其他是有用的，對於教育家可能也具有意義。大學似乎可以考慮是否舉行這樣的調查，和應該如何調查，以及那一個部門，如現有某系或將來某研究所，能夠擔任這一項的工作。無論如何，倘若大學要想對於教學方法這個問題作有系統而不斷的注意，則完備而客觀的材料要比單純倚賴大學諸諳練教職員們之印象更為有用得多了。

## 第六章 考試

**L6.1** 關於討論教學方法，若不提到考試，將是大大的不完全的。因為學生的工作與在各階段中的考試，其關係是明見的。大學通常不會頒授學位，除非受領者先由考試證明其確能圓滿地合格。我們認為考試是大學本科學生學業中必要之一部份。考試具有兩個主要目的：

（甲）考試使學生對於自己學習所得作一番「清查存貨」的工作，並且使學生和教師們雙方都可以藉考試來測定學生所作的（各種）學習研究，其效果為如何。同時教師們也可由考試看出每一個學生在學識及智力發展上有了什麼進步。

（乙）考試乃是測驗所讀課目的成果，其測驗的標準，要能保證所頒給資格的價值，不下於其他大學。

所有學生對教學的態度，多多少少受了通過考試而取得學位的現實願望所影響，至少他們不希望考試失敗。課程綱要的項目通常是要測驗的。總之，考試對於教學的性質和成就之為好為壞有顯著的影響。

**L6.2** 先從末一項講起，我們可列舉五例：

（甲）如果一個考卷，年復一年，其主要命題只是要考生作純粹事實方面的答案，別無其他，則勤奮的學生們便將記誦許多事實，以備考問，不再理會教師的鼓勵對於該科目作任何批判性或建設性的思考。

（乙）如果考試所包含的問題主要地都需要批判性或建設性的思考來處理，則勤奮的學生們會加緊響應鼓勵，循着這個途徑來做他們的課程工作。

（丙）如果考卷中的問題，學生們只要記誦了他們的講演筆記，便能作答，則學生們定必以背誦講演筆記為已足。

（丁）如果在另一方面，大家都知道考卷中有若干必答的問題是絕對在課程綱要範圍之內，而同時亦知講演只是講述課程綱要中之大部分材料，而非包括其全部，那麼，一部分學生們，（倘若時間及便利，）對於該課程之剩餘部分將會不待協助而自己預備。倘若教師計劃中本來有意使學生這樣自行學習，那麼考試中這一種制度可以幫助教師達到目的。

（戊）最後，如果考卷所包含的那些「必答」或「不可免答」的問題中，有一部分課目，既不屬於公佈的綱要中任一部分，也不屬於課目中所學習過的材料，又不在往年考試慣行範圍之內，總而言之，這一個考試其主要部分，不能用任何方法來預備，那麼，成績較差的學生們，一定會感到失望，對於自己及教師們均失去信心，因為他們不能知道要求於他們的到底是什麼。

**L6.3** 這些例子可認為是不言而喻的。由於這些情況，就發生了許多問題。第一而最明顯的，就是擬定試題應常視為一很嚴重的責任，這是很重要的。試題反映

教學方針的決定，所以不應當視作次要事項，或等到學年末期再行處理。在所有的科目中，我們應當注意作為測定學生掌握科目的程度，和他的思想力的一種手段，考試之效能為如何？同時也要注意考試的效果可以影響學生對於其今後各年中預備是項考試工作的態度。

**L6.4** 還有一個重要之點：除非在例外情況之下，假使考試者，就是原來主持講授課程的教師，其所出的命題，如果一個勤勉的學生只要熟讀其講演筆記即可作答，不應當認為滿意。我們知道這是一項過於求全的主義，但也並非過分理想的。我們可以舉下列理由來說明。在前面我們曾區別「誘導」和「教練」之不同，現在我們要區別「教練」和「填塞」之各異。「教練」一個學生，其目的在引導他，使他能了解一個科目，掌握有關概念，遇到具體事例時，自己有信心運用適當方法來處理，對於一切材料事實及工作，也都能熟悉其核心問題。「填塞」之目的，則只要使學生在考試時能取得及格而已，至於其真正了解該科與否則所不問；於是，許多事實和技術都強逼他囫圇吞棗，不管他在原則方面，消化與否。不問何種學科，他的考試精神和方法，當其出發點是基於某種特殊觀念時，都會鼓勵教員及學生趨向於「填塞」教學方面。這種情況存在時，教師已不再是為教育事業而服務，學生在考試上縱然暫時欣然得到及格，但從遠處想，却受了嚴重損害。

如果讓學生們相信，只要記誦了他們的講演筆記或教科書的內容，可以無批判地接受其為「真理」，就算是做完了所應當做的工作，再沒有其他方式更比這個使學生確認教學就是「填塞」而已。我們無意貶抑講演筆記或教科書的價值。很明顯的講演筆記或教科書，在許多方面，是重要的。我們所關心者，乃是學生對於運用這些筆記和教科書的精神。我們所要聲明者，是考試所採取的方式有時會有決定性的害處。

**L6.5** 因此，前面第二節內甲、丙兩項所具特點都會妨害良好的教學。乙項則甚為可取，因為他能夠加強「誘導」（最佳的學生們）及（教練）（較次者）。丁項是減少學生過份倚賴他人努力的一項方法。不過我們所要堅持者，這些特點一定要在第5·15及5·16節我們所說關於課目材料數量調整的建議實行以後，方能圓滿地採用。如果主考者在教學過程中所作之積極職能增大了，我們要指出，他的工作負擔也跟着增加，尤其是在制訂考題之工作，不只要學生將所選習的項目重加申述，並且要他們運用他在讀該課程時所得到之見識與技術來處理當前的問題。

**L6.6** 以上所說的，我們是假定在某種考試制度下，由於環境的限制，教師和考試者同是一人。在原則上，則有兩種主要不同方法舉行考試：

（甲）每一課目完全由講授該課的教師考試，或者由同一學科或同系或同學院之同僚合作辦理。

(乙)考試由考試委員會主持，無個人關係，甚至考試者姓名，可不公開。這和教師主考不同（但也非排除教師參加）。兩種制度各有其利弊。一一列舉將不勝其繁。所以我們在下面只提出和我們有關係者來說。在這裏，我們所關心者只是大學及其學院所有之人手等問題。在開始討論以前，我們要辨別學業後期之學位考試和早期各項考試，特別是一二年級中的考試。

**L6.7** 關於第一二年級各項考試，我們假定各學院負責學生們所有的工作，擬定考題，並將繼續如此做來測驗學生的進步，大體上，各學院都是利用其固有人力等等來辦理這些事。顯然，各學系不能不負責從那些實際主持課目的教師們中委派考試委員（但並非外人不得參加）。他們對於試題的斟酌，不可避免地是以他們本所熟悉的考生為根據。在這種情形下，每一考卷的方式自無何困難都能切實依照教師們在講演及小組教學中所要求之目的而決定。換言之，考試這個方式，如果運用得恰當而謹慎，可以視作教學的有力輔助工具，就一般原則而言，各學院間相等的課程也應當有大體相同的標準，這種情形也應當適用於考試。要想保持這個準則，最適宜的處理機構就是大學系務會。

**L6.8** 當我們談到與畢業生直接有關之學位考試標準問題，我們要記着幾點：所頒授的學位是大學學位，牽涉到大學全體的地位及聲望。無限期地繼續由一學院在其實際完全獨立狀態下辦理三四年級課程的教學及考試，那是不可能的，因為即以實驗室科目而言，其發展將需要大家共同利用所有的貴重的設備，人力、物力、實驗室以及專家教導。我們可以想像到一個學院，在一方面，可主持辦理某一科目的考試，而這種科目普通為其他學院學生所不研讀者；但也可以假定，在另一方面，各學院在其日形發展中對於科目的講授範圍及方向，一定會漸趨一致。我們可以想到，不久大學講演將由專家主持，他的講演，就常理推測，各學院的學生都可參加。

**L6.9** 在這種進展迅速情形之下，我們認為學位考試程序應當趕緊從新考慮。我們要記着兩項要點。其一，是大學的地位及其維持各項標準與公正劃一的責任。其二，是考試的功用（無論其在大學或學院教學），乃是作為輔助教學工具。在我們的看法，二者之間不會有何衝突。第二項是大學內部事件，第一項則牽涉到大學和社會及其他學術機構的關係，因此，便要計劃如何使校外考試委員在這裏肩負起重要任務。但若是為了學位考試（三四年級各課目），大學已經沒有大學考試委員會，這個委員會自然會包括那些有關課目的教師們，他們，照我們想，一定也是大學系務會的成員，則彼此之間，一定不會有何隔閡。如果各系務會對於某些學科教學問題彼此討論取得協調，我們想他們會向大學教務會作若干關於課目上的建議，建議中也會包括考試範圍方面的一些問題。大學教務會決定教學之大致方針，我們希望大學系務會能秉承這些

方針來擬訂發展課程與課目的計劃。到了相當時期，由考試委員將這些決策付之實施。

**L6.10** 我們同意教學方法委員會所提的意見（節14）認為研究考試辦法乃是大學教務會當務之急。我們以為第一步工作應當是如何為現有各課目擬定一項大學學位考試委員會之完備制度，這個制度須有兩項主要特點：

（甲）有伸縮性，然後可以照顧到特殊的學院創造性及其所側重的方面。

（乙）關於考試的標準和方式（筆寫及其他）力求一致。第二項在眼前尤為重要，也許將來三個學院集中到一個校址上課時便可無須如此的注重。

**L6.11** 在可能範圍內，盡量使校外考試委員會參加工作則可取得重大的益處，這是我們所要特別建議的。我們不能夠具體建議他們應當如何工作，但可以說他們應當同時和大學某科或某組各考試人員交換意見，並可以審閱全部或任一考卷。他們心目中對於大學標準，和各學院的傳統也應當瞭然。我們認為大學應當設法使校外考試委員們能夠盡量而有效地執行其工作，不使受不必要時間上的限制，萬不可因貪圖節省合理的費用而不進行，尤其是在大學開辦的頭幾年。

**L6.12** 還有一點，如果承認考試能夠幫助教學但不當讓他們阻礙教學的工作，那麼，大學教務會考慮到這個問題時，就不能不研究到與考試有關的那些課程。抽象地先制定一套考試制度，然後請有關的人們自行設法（用教練或填塞）指導學生們參預這項考試，這當然也辦得到，但我們認為是不適合的。我們希望大學教務會能採取其他途徑來辦理，那就是，從課程中的課目開始，按其一般的目標和特殊目的，然後進而研究用以達到這些目的的考試。我們以為處理這事的最好辦法，莫如設立系務會，由大學教務會將這項工作委其辦理。所有各科目的一般程序，如：考試時期，校外考試委員的職責，正式集會及各種程序牽涉到如何保障大學的一般利益者，均由大學教務會制定。至於其他事項，我們建議凡關考試的細節——考試次數，和考卷的長短及範圍，難易程度，以及各項課程有關考試之問題等等——這些，都應當認為完善教學方法研究中之不可分離的部分。

**L6.13** 就小組教學而言，由學院來負責是最合宜的。關於正式講演，那些科目某一學院有其特長或特殊情形者，無疑地，仍應由其繼續負責。但是自三學院一同搬到新址之時起，大學講演將更見重要，這些情況便產生了新變化，在那時，課程綱領愈來愈需要十分細心製訂，這不止是為了學生們的利益，且可使各學院對其所辦的不屬於實驗室科目之小組教學，能有深切有效的貢獻。如果這一點是作到，那麼在一二年級時所做到為課目與考試建立互利之密切聯繫辦法，其效用將無如何散失。如果經過審慎制定的課程綱要，可以替大學講演和學院小組教學彌



縫其裂口，他便也足夠作為教學方法及結束課程的考試間之連鎖環節。關於實驗室科目，高級實驗工作既可依照大學基礎而組織，那麼，更不用怕考試有成為良好教學阻礙之危險而不為教學之輔助工具。

**L6.14** 如果考試結果是據以頒授大學的學位，那麼，考試本身就是大學責任的對象。所以必須有大學考試委員會來審定學業的結果；而且，任何一套之試卷無論是否由考試人根據某學院特殊課程之需要而擬定者，考試委員會也應當有創制和核准這些試卷之職權，這是合乎邏輯的。關於考試委員會如何運用其職權，他們是否應當依照學科或學院組織召集各考試委員會議抑或是分成更小而適當之組織（例如：自然科學）則當由大學決定。但在所有這些可能辦法中，我們應假定每一學院都有其學系代表在內。我們目前所關心者，不是這些問題，（雖然那也是極重要的，）而是考試對於教學組織和教學工作如何適用這些原則的問題。

## 第七章 通才教育

**L7.1** 教學方法委員會報告書有一重要部分（節25迄28）討論到這個問題，雖然我們的主要任務，是關於教學方法，但在此處也無妨討論教學方法委員會那些節內所談到的事項。我們和各同僚談論此項問題時，並不都是一樣詳盡；但我們在教學方法委員會所提及者之外還聽到有各種意見。

**L7.2** 首先，我們要說明我們對於課程的意見：無論是一年的或兩年的課程，凡關於人文科學、社會科學，以及自然科學者都不能脫離中國通史、哲學通論、邏輯及社會學，或數學、物理及化學等科課程所引起的各問題。誠然，當多項科目同時併習，其範圍牽涉甚廣時，某些問題在各種情形之下，一定都會發生，這是很明顯的。我們以後所要提到的，主要是關於人文科學、社會科學及自然科學的普通課程之意見，而非委員會所提有關物理化學較小範圍之建議。

**L7.3** 第一個問題，很簡單的，就是學生的時間問題。任何課程，若是能使學生對於所讀學科的真正核心問題得到批判性的了解，縱然他所研究問題的範疇或材料是有限度的，那課程算是得到結果。若是不能，那麼學生便要退而背誦講演筆記，並用填塞方法來匆匆應試，於是教師所期望灌注給他有關科目上的靈活而有建設性之知識他將不會起何響應，更不用說如何激起他從事更廣泛研究的興趣了。現行課程有仔細處理之必要，我們曾經提請注意。至於採取其他辦法來製訂課程，持着通才教育的理想，包括那些課目，如：人文學科、社會科學及自然科學，則並沒有什麼大關係，倘若課目中的教材，其數量超過了合理的負擔，則其發展，將和其他的發展一樣，會產生一個令人失望的標準及結果。

**L7.4** 如果進入大學的學生，曾經在中學最後數年中廣泛地修讀文科理科各項科目，而不是專修某科的，那麼，在他們進入大學初期，比較那些學生在中學時專修一些科目而不問其他者，容易於繼續通才教育的廣泛研習計劃。在另一種情形之下，那些在中學未修一些科目的學生便須負擔更多未熟習科目之初步工作，因在這一個時期正是他們忙於研究如何適用新法來應付那些已習科目之深造研究。如果大家對通才教育有一個久遠方針，就應當用一切可能的壓力，要求中學當局合作，以便大學新生教學工作可以較易展開。

**L7.5** 在前面（節五、二）我們曾經說過，為了幫助學生使能從事大學教育所需要之成熟而具有批判性的研習，小組教學是有價值的。我們也曾建議，要想使小組教學產生最佳的結果，每一學生課程中不應當有過多的小組教學同時進行。而且，倘若教師教學時間與學生工作時間的比率，由於小組教學時間濫加之故而減低時，則教師之吃力是很明顯的。所以就通才教育而言，異常麻煩的問題便發生了。是不是小組教學應當集中於學生所習的新科目方向呢（例如對於偏向理科學生集中其所習之文科或社會科學科目）？倘若不是，那麼這些新科目的學習方法將會走上了教學方法委員會所不贊成的途徑。

**L7.6** 教學方法委員會意見中（節26）曾提到這種困難，並建議「教學主要方法將採用導師小組教學，同時由學生自己閱讀筆寫作為補充。」這一點我們曾加以注意。但是，很明顯的，倘若這種教學大部分和學生工作無關，那麼，這份異常繁重的負擔便將加於教師身上。倘若這種教學同時對於學生所讀若干科目都有牽連的，那麼，學生的工作便有過份沉重之危險。因此成為僵局。我們不願武斷究竟如何應付。

**L7.7** 誠然，要想為學生訂定一項廣博的學習計劃，包羅數個學科數個學系，本質上並不是不可能的。如果能夠解決了我們所提到的教學問題，其結果是可觀的。我們要記着，若是每一科目的內容，能嚴加選擇（前面節七、三）則學生在完成該項學習時，便不能如其他學生之適合於進行深造研究工作，這在各國若干大學中已有其經驗。這種情形可在大學研究院階段採用額外時間、教導、和注意予以補救。我們認為這也是採用廣泛通才教育制度涵義之一。某些「理科」課目也可能特別適合於與某些「非理科」之課目同時研習（例如動物學及心理學）。一般而論，要想替那些偏重文科的大學生設定一個合理的標準（非中學程度），則數學、物理及化學之科目比生物科目有更大的問題。

**L7.8** 我們現在要將通才教育之教學方法提要說明如下，以備參考：

（甲）倘若企圖為學生排定一個繁重的講演課程表，包括範圍廣泛的科目，這個方案，在紙面上，可能是動人的，但在學生工作的品質方面將會遇到困難。



(乙)凡是企圖達到良好標準，其課程往往會有過分繁重的危險。所以應當自始即要記着（無論在任一課程計劃）每星期教學時間的最高數目，最好連同實習工作時間在內，不超過二十小時。

(丙)對於小組教學，一樣地要小心規劃。倘若太多講演（即是有些科目內容包括太廣）是一種危險，則規定過多的導師教學也有同樣的危險。

(丁)大學應當注意中學校如何為學生準備升學。倘若大學決意着重發展通才教育，便應當設法取得中學校的合作，並且儘可能使中學考試題材能夠配合此項目的，雖然這需要時間來辦理。

(戊)通才教育對於志願作學術研究者（在多種情形之下，就定義而言，他們差不多是專家了），其影響也不當漠視。

## 第八章 最近將來應採之步驟

**L8.1** 要想為大學寫出一個實施方案而不僭竊大學本身的固有職權，這是很難的。而且，我們的調查，直到如今，並不十分充分，不足以使我們在此談到細節。不過我們在這報告書內，關於多種不同項目，已作了若干建議，倘若是有用的，或者只是可用作繼續考慮的基礎，那麼，我們也無妨在這裏舉出幾點，在我們意見中所認為大學應當先加注意者。

**L8.2** 我們已明白指出，在我們的看法，教學方法是與課目內容分不開的。所以我們建議每一學院及學系，有三項要考慮之點：

(甲)削減課目內容，其目的在為學生建立一個基礎，使學生對講授題目中所引起的問題，都能作建設性的研究工作。特別是，對於講授的課題，必須作嚴密的選擇。

(乙)除了在罕有的情形外，刪減講演的次數。

(丙)照我們所建議的方法，為所有一二年級學生設立小組教學（這是最難的，而且在表面上，也是學生工作上，最無趣味的一面——但確是最重要的）。這就要牽涉到學系與學系之間彼此會商以免發生太多的小組教學。這些準備工作的結果應於一九六五至一九六六年度實行。

**L8.3** 我們同意教學方法委員會的意見，建議大學教務會應當儘早考慮考試問題。關於學位考試（或三四年級課程考試）應當規定校外考試委員儘量有機會普遍地參加，然後考試上遇有新發展而需要他們幫忙時，他們便能隨時充分協助。

**L8.4** 語言教學技術上之進展，應當照我們所提的方案繼續進行，不可間斷：

(甲)試驗如何利用語言實驗室來改善教學方法。

(乙)舉行調查來了解現時閱讀速度之實際狀況。

(丙)重新研究新亞學院的學期前課目辦法及其可能的发展。

(丁)在每一學院內維持或設置專家教師。

(戊)教師間會商。

**L8.5** 根據上面第 L8.2 節內所作的建議，在下一個年度，即是一九六六至一九六七年度，各學院應當徹底研究關於三四年級各學科中所有課目之小組教學情形。這事雖然十分急迫，但應當在一二年級更急迫的工作徹底完成之後，再行辦理。而且，等到大學遷到馬料水新校址後，院際教學問題將更見重要，到那時，討論那些牽涉大學全面的問題也更方便了。在那時候以前，倘若學院各學系在適當情形之下，即刻為四年級學生發展研究班工作，當課程綱要修訂之後容許更富選擇性的研習時，并替一二年級以外之課目舉辦小組教學，自然總是很有益的。

**L8.6** 為了要對上述各點加以詳細考慮，并且要從學院的教師們的經驗中取得益處。我們要轉而談到大學系務會及其職責。富爾敦委員會報告書（節115—117）認為大學系務會為一討論場所，在那裏可以檢討現行課目與課程表或研習計劃，如有因建議設立新課目而牽涉到各該新課目和現行課目課程之關係，也可以提出研究。

**L8.7** 在大學系務會的職務中，和他對大學的責任中，其一部分工作是首先要審核現行課目和各課目所組成之課程適當與否。這有好幾項的作用，包括：

(甲)使三學院課程中各課目程度相等（並非一律）。這一點我們認為是重要的——如此，纔會使各科教師們多知道些其他學院中正在作些什麼和為什麼這樣做。倘若院際教學成為事實，各院課目，在學業上，對於學生工作時間之要求（如講演、導師教學、預備的研習、寫作）必須能大致相等，方可避免有些課程過份繁重而有些課程成為「輕鬆的選科」因之而有引誘力之危險，這是必要的。

(乙)避免課目中不必要之重複部分（無論大小），因為課目中有些講演——不一定所有的講演——不止一學院的學生前來聆聽，至於有關之導師教學及寫作，仍可由各學院自行辦理。

**L8.8** 設立新課程的建議可由大學系主任或任何學院系主任或其教師，當其認為有必要時，得向大學系務會提出討論。在我們心目中，學院學系聘任教師可能就是一位專家、學者，或對於一門學問有專長的研究者，聘來主講他所專長之研究，這些益處至少要使（所有學院的）三四年級學生能夠分享。各學院可以考慮開辦高級課目作為選科之一項，或舉行一系列的講演（并非一定要持續全年之久）或某種討論班，來利用他的專門學識。

**L8.9** 關於課程綱要和大學系務會討論課程綱要問題中，尚有一個要點。我們不知道大學對於課程綱要及考試問題希望如何發展。所有三院學生之考試科目料想必是一律的。為了要適應目前各學院之不同研究方式起見，考題選擇的範圍恐怕要比其他各大學通常範圍較為寬大。無論如何，在初期是要如此辦理。但我們很清楚，無論採取任何辦法，實際上是審查三個考試，由三組校內考

試委員們擬定三種試題而由一個校外考試委員予以評定，這樣勢必引起日甚一日的不平怨懟，並且彼此之間將會失去「一家」之感（學生及教員都會如此），那種感覺，在大學團結發展中我們認為是必要的。大學教務會毫無疑問必會考慮到這個問題，我們希望，大學教務會能夠決定一項基本辦法，指示大學系務會如何處理這些問題。公布一個簡明大學課程綱要，使學生知道什麼是他的應當閱讀及研習最低限度與範圍，當無礙於學院教師為他的學生們工作上所擬定的獨特研習方法，這些獨特研習辦法有時會為學生帶來重大的啟發價值。學院間各異之特性可以增強大學之力量，加以院際教學，更使教學工作多采多姿。

**L8.10** 富爾敦委員會未曾提到如何組織大學學系，為的是避免有妨礙新部門發展之可能，那些部門有時是在某系界限之外，或者與兩個以上的系都有關係，因而反被遺忘。所以認為大學應當利用大學系務會集合各教師於一堂，使他們有共同負責之感。

**L8.11** 我們猜想大學每一系務會一定會包羅該系各科目教師或若干與該科目有關各科目之教師們以及其他有關科目之有關部門各教師，例如物理系務會將包羅一

位——或兩位——對於教授數學的問題有興趣者，因為數學對於物理學家是必要的；生物學系務會將包羅不止植物學家、動物學家，並且包羅生物化學家及生理學家等。現行規程可能未曾包括有關輔科之某些助理講師級之教師。我們以為是否應當請他們列席有關的系務會議，這是值得考慮的。

**L8.12** 我們覺得英文系務會應當設立一專門委員會由若干與英語教學方法特別有關而富有經驗者組織之。

三學院同有一項重要的工作，那就是要使所有入學新生都達到能讀英文教科書，聽英語講演，並參加英語討論的能力。這些學生大都是從中文中學畢業，其英文知識與了解至為有限。這點與教授英文文學問題完全不同，所以根本需要一些不同的方法來處理。每一學院已經各有語言實驗室，現正用此種實驗室來教授。凡參預這項工作的人們，應當彼此會同比較他們的方法來共享他們的經驗。

一九六五年二月

# SUMMARY OF TWO REPORTS WITH PARTICULAR REFERENCE TO STEPS TO BE TAKEN

## I. Programme for the Senate, Boards of Studies, Library Committee, and University Research

[ Figures in brackets refer to the relevant paragraphs in the and Loach Lehmann Report (L); the University Committee's Report (C) is not usually referred to except where it deals with matters which the and Loach Lehmann Report did not consider. ]

### A. Senate (including its committees and boards).

#### (1) Examinations:—

- (a) Provide for the extensive participation of the external examiners in the setting of examination papers. (L 6.11)
- (b) Consider how examinations should be organized so as to serve the purposes of the teaching courses. (L6.12)
- (c) Ensure that the examination paper is a genuine unity instead of being three sets of examinations in one paper. (L8.9)
- (d) Co-ordinate the preliminary examinations of the Colleges and ensure that they are designed as teaching aids. (L6,7)

(2) General Studies. Some decision must be reached about the recommendations in C Part III. Perhaps a special committees on this important subject should be set up.

(3) Provision of a central service of advice and help for young staff in their lecturing. (L4.9)

(4) Consideration of the membership of Boards of Study. (L8.11)

(5) Making transfer at end of first year easier. (C19)

(6) Advising students on how to use their vacations. (C20)

(7) Consideration of whether the present arrangement and length of terms is satisfactory. (C9(d) and 22(b))

(8) Consideration of how best to instruct students in methods of study. (C18)

(9) Provision for translation of material which students must read, if not available in Chinese. (L3-7 (i) and C15(c) & (d))

### B. Board of Studies

Boards of Studies will need to consider all aspects of the reports, especially those assigned to the Senates' sphere, but the following seem to be their particular responsibility:—

(1) Most essential, cutting down the number of lectures. (L5.15)

(2) Cutting down the number of courses and the amount of material covered in them. (L5.16)

(3) Introduction of tutorials, only one a fortnight in one subject or course in first year, two in second year. (L5.10 — 12) Not more than 5 students in a tutorial group. (See also C11(a)) Careful use of written work. (C12) Consideration of this for 1965-6. (L8.2 (iii))

(4) Cutting down the students' teaching load. (L5.15)

(5) Use of seminars in third and fourth years. (L5.13 and 8.5) Consideration of this to begin in 1966-7.

(6) Improving methods of lecturing. (L4.6)

(7) Providing for equivalence of the courses and programmes (L8.7(a)) and coordinating the lectures etc. (L8.7(b)) of the Colleges.

(8) Using several staff to run one course; not necessarily specialists for tutorials. (L5.23)

(9) Ensuring that Calendars contain an accurate account of the courses that are actually taught. (L5.18)

(10) Introducing interdepartmental tutorial groups (C11(f)) and written work. (C12)

### Board of Study for English Language and Literature

(1) Study how to increase students' reading speeds to 40 pages an hour. (L3.7(i))

(2) Further study of language teaching with controlled experiments and of use of laboratories. (L3.7(ii))

(3) Appointment of one linguistic expert in each college. (L3.7(ii))

(4) Study of possibility of subject-slanted language work. (L3.7(iii))

(5) Development of pre-sessional courses. (L3.7(ii) & C27)

(6) Exempting students who pass proficiency tests from taking further English study. (C27)

*Library Committee* to consider the recommendations listed in C15 to remedy lack of books.

(1) The provision of more money for the libraries to buy more books and in particular several copies of important textbooks;

(2) the mimeographing of extracts and articles;

(3) the translation of foreign books and articles into Chinese;

(4) the encouragement of staff, through grants and through relieving them of duties, to produce textbooks and translations;

(5) the provision of book grants to students, and

(6) the establishment of a book-store.

*Some University Body or the School of Education* must carry out research into:—

(1) Teaching aids. (C16)

(2) Slow reading in Chinese. (C17 & 27)

(3) Teaching Methods. (C23)

(4) The private work which students do. (L5.26)

## II. Programme for the Individual

*Actions to be taken by the individual teacher.*

(1) Read the reports.

(2) Take part in departmental discussions of curriculum revision.

(3) Revise the courses which he will teach:

(a) Reduce the number of topics to be dealt with in each course. (L8.2(i))

(b) Schedule fewer lecture hours. (L5.15 and 8.2(iii))

(c) Plan the small-group teaching to be done in each course. (L5.10, 5.11, and 8.2(iii))

(d) Reconsider text-book assignments and reading lists. (L3.7)

(e) Assign the written work to be done by the students to fit in with the lectures and the small group teaching. (L5.4 and C12 and 13)

(f) Set course examinations. (L6 and C14)

(4) Write new course descriptions for the Calendar. (L5.18)

(5) Encourage the students to work and think on their own. (L1.7)

(6) Submit book requests to Department Chairman for additions to College and University Libraries. (C10 (a) and 15)

(7) Cooperate with colleagues on inter-departmental activities. (C11(f))

(8) Take advantage of all opportunities to improve teaching technique. (L4.8 and L4.9)

## 大學教學法報告書結論及實施綱要

[括弧中數目字係指賴曼與盧池報告書(以下簡稱L)之段落;

中文大學教學方法委員會報告書(簡稱C)在本文內頗少引及,

祇於賴盧報告書有未曾提及而須加補充者始引證之。]

⊖大學教務會或其委員會或特別小組:

### 1 考試

①多邀請校外考試委員參加并擬定考試題目。

②考慮如何辦理考試以符合講授課程之目的 (L6.12)。

③務求試卷之和諧統一性以免一試卷中有三式題目 (L 8.9)。

④三成員學院之初級考試事宜,應聯繫辦理以期考

試能成為教學之補助辦法 (L 6.7)。

2 普通學科——中文大學教學委員會報告書第三段之提議須予酌定。此項重要問題似應成立一特別小組處理之。

3 設一中央輔導處協助新進教員講學 (L 4.9)。

4 考慮系務會之會員資格 (L 8.11)。

5 輔助一年級生轉系 (C 19)。

6 指導學生如何利用假期 (C 20)。

- 7 考慮目前學期分法及時間是否適宜(C 9(d);22(b))。
- 8 指導學生讀書方法 (C 18)。
- 9 如指定教材無中譯本，應設法為之繙譯 (L 3.7 與 C 15(c) & (d))。

大學系務會：此會須詳細研究報告書各方面問題，尤其注意有關大學教務會處理之範圍。以下各項則為該會自身之特別責任：

- 1 最主要者為減省教學鐘點 (L 5.15)。
- 2 減輕課程項目與內容 (L 5.16)。
- 3 介紹小組討論法。在第一年中只有一項科目或課程採此辦法，每兩週舉行一次；第二年中則可有兩項科目或課程採此辦法 (L 5.10-12)。每組學生不能超過五人 (C 11(a))。小心運用寫作 (C 12)。以上各點應考慮在一九六五至六六年度試行之 (L 8.2(iii))。
- 4 減輕學生學習份量 (L 5.15)。
- 5 於第三第四年級設立研究班 (L 4.6)。以上可於一九六六年至六七年試行之。
- 6 改善講授法 (L 4.6)。
- 7 審查三學院間相等之各課程 (L 8.7(a)) 推進學院講學聯繫 (L 8.7(b))。
- 8 利用教員數人負責一課程；無須專家指導小組討論 (L 5.23)。
- 9 審查大學年鑑中所列之課程是否與實際所講授者相符合 (L 5.8)。
- 10 設立學系間小組 (C 11(f)) 并研究寫作。

英國語文系系務會：

- 1 研究如何增進學生閱讀能力，使達每小時四十頁 (L 3.7(i))。
- 2 利用儀器及實驗室設備助長語言研究 (L 3.7(ii))。
- 3 每一學院聘定一語言學專家 (L 3.7(ii))。
- 4 考慮如何辦理「遷就學科」之語言學習辦法 (L 3.7(iii))。
- 5 設立學期前預習班 (L 3.7(ii), C 27)。
- 6 英文甄別試成績及格之學生可免讀英文 (C 27)。

圖書館委員會須考慮教學方法委員會報告書(C 15)內之建議，研究如何設法解決書本缺乏問題：

- 1 籌措更多資金以購置書籍，尤其注意重要教本應多備副本。
- 2 影印重要文件與摘要。
- 3 繙譯外國書籍及雜文成中文。
- 4 以減輕教學負擔及經濟補助辦法鼓勵教師從事教科書之著作與譯述。
- 5 設學生書籍補助費。
- 6 設立大學書店。

教育學院或其他機構須研究下列各項：

- 1 教學輔助用具 (C 16)。
- 2 中文閱讀緩慢問題 (C 17, C 27)。
- 3 教學法 (C 23)。
- 4 學生自修工作 (L 5.26)。

◎教師個人計劃：

- 1 詳閱兩份報告書。
- 2 對本系教學課程修改問題參加討論。
- 3 對自身講授課程作如下之修改：
  - ①刪減課程中所包括之主題 (L 8.2(i))；
  - ②減少所排定之講演時間 (L 5.15 及 L 8.2(iii))；
  - ③在每一個課程中設法實施小組教學方法 (L 5.10, L 5.11 and L 8.2(iii))；
  - ④重新考慮使用課本及指定閱讀書單 (L 3.7)；
  - ⑤指定學生寫作工作務使能配合講演及小組教學 (L 5.4 及 C 12, C 13)；
  - ⑥修訂各學科考試 (L 6 及 C 14)。
- 4 製訂大學年鑑內新課程簡介 (L 5-18)。
- 5 鼓勵學生自我工作及思考 (L 1-7)。
- 6 向系主任提出書院圖書館及大學圖書館應行增加之書籍 (C 10(a) 及 C 15)。
- 7 各系間各項相互活動，各同僚彼此合作 (C 11-f)。
- 8 盡量利用各種機會改良教學技巧 (C 4-8 及 L 4.9)。



# I N D E X

- Board(s) of Studies (大學系務會) L1.6, L6.7, L6.9, L6.12, L8.6, L8.8, L8.9, L8.10, L8.12
- Book(s) (書本) C9, C10, C11, C12, C15, C16, C18, C20, L3.6, L3.7
- Cantonese (廣東語) C8, L3.5
- Chinese University (中文大學) C25, L1.1, L1.7, L3.3, L3.6, L5.2, L5.16
- Chung Chi College (崇基書院) L1.2, L2.2
- Coaching (教練) L5.3, L5.11, L6.4, L6.5, L6.12
- Coaxing (誘導) L5.3, L5.11, L6.4, L6.5
- Contact-hour (接觸時間) L2.2, L5.5, L5.8, L5.9, L5.23
- Course(s) (課目) C9, C10, C22, C26, C27, C28, L1.4, L1.5, L1.7, L2.2, L3.2, L3.6, L3.7, L4.2, L4.4, L4.6, L4.7, L4.9, L4.10, L5.3, L5.4, L5.5, L5.6, L5.7, L5.8, L5.9, L5.11, L5.13, L5.15, L5.16, L5.17, L5.18, L5.19, L5.20, L5.21, L5.22, L5.23, L5.24, L6.1, L6.2, L6.3, L6.4, L6.5, L6.6, L6.7, L6.9, L6.12, L6.13, L6.14, L7.3, L7.8, L8.2, L8.5, L8.6, L8.7, L8.8
- common (共同課目) C19, C26, L1.5, L7.2
- content of (課目內容) L5.19, L7.7, L8.2
- first-year (第一年課目) L3.7, L8.5
- pre-sessional (學期前課目) L3.7, L8.4
- pre-sessional language (學期前語言課目) L3.7
- third and fourth year (第三年及第四年課目) L3.7, L6.8, L6.9
- Discussion (討論) C2, C4, C11, L1.3, L2.2, L3.6, L3.7, L5.2, L5.4, L5.11, L5.13, L5.16, L5.19, L6.1
- group (小組討論) C8, C10, C11, C24, L5.4, L5.19, L5.21 (See Teaching)
- period (討論課) L2.2, L4.4, L5.4, L5.21
- Education, Department (School) of (教育學院) C23, C24, L3.7
- Education, General (通才教育) C3, C17, C19, C25, C28, L3.6, L5.2, L5.9
- English (英文) C8, C9, C16, C17, C27, L3.3, L3.6, L3.7, L8.12
- Examination(s) (考試) C2, C8, C9, C14, C28, L1.6, L3.4, L3.6, L3.7, L4.4, L5.2, L5.13, L5.14, L6.1, L6.2, L6.3, L6.4, L6.6, L6.7, L6.8, L6.9, L6.10, L6.11, L6.12, L6.13, L6.14, L7.3, L7.8, L8.3, L8.9
- degree (學位) L6.6, L6.9, L6.10, L8.3
- paper(s) (考卷) L6.2, L6.3, L6.7, L8.9
- system (考試制度) C14, L6.6, L6.12
- External Examiners (校外考試委員) L6.9, L6.11, L6.12, L8.3, L8.9
- Fulton Commission (富爾敦委員會) L22, C5.1, L8.6, L8.10
- Intercollegiate (院際) C3, C10, C22, L3.7, L8.5, L8.7, L8.9
- Laboratory(ies) (實驗室) L2.2, L4.3, L4.4, L5.8, L5.10, L5.13, L6.8, L6.13, L8.4
- language (語言) C16, L3.7, L8.12
- natural science (自然科學) C16, C18
- Lecture(s) (講演) C7, C9, C10, C11, C12, C13, C18, C24, C26, L1.5, L2.2, L3.5, L4.1, L4.2, L4.3, L4.4, L4.5, L4.6, L4.7, L4.8, L4.9, L4.10, L5.2, L5.3, L5.5, L5.7, L5.16, L5.19, L6.7, L6.8, L6.13, L7.8, L8.2, L8.8, L8.12
- course (講演課目) L2.2, L4.3, L4.4, L4.6, L4.7, L5.20, L5.22, L6.2
- disadvantages of (講演短處) L4.4, L4.5
- formal (正式講演) L4.3, L5.13, L5.15, L5.16, L5.19, L6.13
- notes (講演筆記) L3.7, L4.4, L5.16, L6.2, L6.4
- period (講演時間) L4.4, L4.4, L4.10, L5.21
- reduction of (減少) C22, L5.15, L5.16
- Lecturer(s) (講演者) C10, L1.5, L4.4, L4.6, L4.8, L4.9, L4.10, L5.21, L5.23, L5.24
- Mandarin (國語) C8, L3.5
- New Asia College (新亞書院) C27, L1.2, L3.7, L8.4
- Programme(s) (課程) C2, C3, C10, C11, C18, C26, L2.2, L5.7, L5.8, L5.9, L5.10, L5.11, L5.12, L5.13, L5.15, L5.16, L6.9, L6.12, L7.2, L7.3, L7.4, L7.5, L7.7, L7.8, L8.1, L8.6, L8.7
- Reading speed (閱讀速度) L3.7, L8.4
- Research (研究) C7, C20, C22, C23, C24, L3.6, L3.7, L5.21, L7.7
- Science, Faculty of Natural (自然科學學科) C26, L3.4, L4.2, L5.11, L5.13, L5.6, L7.2, L7.3, L7.4
- Seminar(s) (研究班) C2, L1.5, L2.2, L4.4, L5.2, L5.13, L5.16, L8.5
- Senate (大學教務會) C14, C26, L1.6, L6.9, L6.10, L6.12, L8.3, L8.9
- Social Studies (社會研究) L7.2, L7.3, L7.5
- Staff-Student Ratio (教師學生比例) C11, L5.4, L5.5, L5.6
- Syllabus(es) (課程綱要) C2, L1.6, L2.2, L3.6, L3.7, L5.2, L5.5, L5.16, L5.17, L5.18, L6.1, L6.13, L7.8, L8.5, L8.9
- Teaching, small group (小組教學) C11, L1.5, L2.2, L4.2, L5.1, L5.2, L5.3, L5.6, L5.7, L5.9, L5.10, L5.11, L5.13, L5.14, L5.15, L5.16, L5.20, L5.23, L5.25, L6.7, L6.13, L7.5, L7.8, L8.2, L8.5 (See Discussion)
- Teaching Methods Committee (教學方法委員會) L1.3, L1.4, L3.1, L3.4, L3.5, L3.7, L4.4, L5.1, L5.4, L5.11, L5.19, L5.23, L6.10, L7.1, L7.5, L7.6, L8.3, L8.12
- Translation (翻譯) C15, L3.3, L3.7
- Tutorial (導師教學) C11, C18, L1.5, L2.2, L4.4, L5.1, L5.2, L5.4, L5.5, L5.10, L5.11, L5.13, L5.16, L5.19, L5.20, L5.23, L8.7
- groups (教導小組) C10, C11, C13, C26, L5.7, L5.11, L7.6
- United College (聯合書院) L1.2, L2.2
- Vice-Chancellor (校長) C1, C2, C11, L1.1, L1.3
- Written work (筆寫工作, 寫作) C10, C11, C12, C13, C26, L2.2, L3.4, L3.6, L5.5, L7.6, L8.7

*The University Bulletin* of The Chinese University of Hong Kong is published and distributed free by the University Editorial Board; it is meant primarily for the University faculty and staff, but copies are also sent to friends of the University.

MEMBERS OF THE UNIVERSITY EDITORIAL BOARD:

Mr. John T. S. Chen  
Mr. Steve S. C. Huang (Convenor)  
Dr. A. T. Roy,  
Mr. N. H. Young,

BULLETIN STAFF:

Editor—Mr. Steve S. C. Huang  
Associate Editor — Dr. C. C. Liang

COLLEGE CORRESPONDENTS:

Mr. Fang Hsin Hou (Chung Chi College)  
Mr. Liu Tsu Ru (United College)  
Mr. W. M. Yu (New Asia College)

ADDRESS: C/o The Chinese University of Hong Kong,  
Hang Seng Bank Building, 13th Floor,  
677, Nathan Road, Mongkok, Kowloon,  
Hong Kong.

中文大學校刊為純粹報導性之大學刊物，此刊物為非賣品，專為大學及三間成員書院之教職員及對大學愛好者而出版。  
出版負責人為大學出版委員會；該委員會包括：陳佐舜先生，芮陶菴博士，楊乃舜先生及黃錫照先生（主席）。  
校刊職員：黃錫照先生（編輯），梁敬釗博士（中文編輯）。書院通訊記者：方信候先生，余允文先生，劉祖儒先生。

通訊處：香港中文大學

九龍彌敦道六七七號  
恆生銀行大廈十三樓

