### CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>In English</th>
<th>In Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Vice-Chancellor's Statement to Senate on Implementation</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Memoranda of Colleges on Implementation</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>A Letter From the Vice-Chancellor</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Report of The Committee On Teaching Methods</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Lehmann/Loach Report</td>
<td>24</td>
<td>44</td>
</tr>
<tr>
<td>Summary of Two Reports With Particular Reference To Actions To Be Taken</td>
<td>59</td>
<td>61</td>
</tr>
<tr>
<td>INDEX</td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>
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敎學方法之報告

在實施新敎學方法時，各學院雖無須以同一速度進行，但凡屬於小組教學、兒童教學及研究班等領域之問題，一學院之學系與其他學院之同系彼此交換消息及意見，乃充分瞭解其目前與未來之措施。此等事項，應由大學系務會處理。

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】各學院之前提作業及學科課、寫作作業併應參加大學舉辦之中期考試與學位考試。各學院確定如下，這些規定，應由大學系務會處理。

【二】大學於每年六月，舉行大學二年級期中考試；
1. 每一學生必考科目為中文、英文、主修科試卷一，及修科試卷一及選修科。通才教育之學科亦可作選修科。
2. 檢查性試卷，由大學教務會議定，呈請大學教務會核准。

【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二。

【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。如系務會建議認可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而經大學教務會認為之某一部分之學位考試。

【五】學期中之控制考試，學生須由各學院提名。學生試卷中有一門或兩門不及格者，則須再於學期末再參加學位考試。但如經系務會提出，一部份未及格之學生得於同年度九月參加補考。

【六】學生如有過半數之試卷不及格者，卽勒令退學。

【七】參加學期中之控制考试之學生須由各學院提名。

【八】學生試卷中有一門或兩門不及格者，則須再於學期末再參加學位考試。但如經系務會提出，一部份未及格之學生得於同年度九月參加補考。

【九】學生如有過半數之試卷不及格者，卽勒令退學。

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.

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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.

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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：(1) 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；(2) 每兩週上小組課一次，每五人至十人分為一小組，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，將一年級學生之選修科目分為兩類：其一為理科學生之共同選修科目；其二為文商二科學生之共同選修科目。

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、化學三科為共同選修科目。一九六六至六七年，生物系學生亦將加入此種共同選修科目辦法。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。

文商科——文商科學生均須採用小組教學方法，目前每週三小時之課表將縮短為每週四小時至五小時。一九六六年後擬再予以縮短。

【二】二年級學生

（甲）普通必修科目

一九六五至六年，各系至少一科須採用小組教學方法。目前每週三小時之課表將縮短為每兩週四小時。一九六六年後擬再予以縮短。
【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，所有教員邀請有關大學系務會商議後，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：

與會仝人均認為：
【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「增進敎學效率辦法要點」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、確定普通英文科敎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敎。
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，按照下列原則改革敎學方法：
甲、精減課程內容。
乙、減少各課講授時數。
丙、選修人數較少之科目，應酌量從一年級開始，以減輕教員負擔。
丁、嚴格執行增進敎學效率辦法要點之規定。
戊、實行小組教學，分下列二週進行：
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便以核定實行。

聯合書院

【甲】一年級：
①主修科實行導修制。
②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：
①實施學系內各有關課程之小組討論。
②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。
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，備其查攷。

此致
大學教務會委員
各學院學系主席

校長 李卓敏

香港中文大學校長室

香港九龍彌敦道六百七十七號

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。此兩份報告書中文主要建議，本人均頗贊同，且認為務須予以實現。蓋莘莘學子須有良好學習機會，並於最佳條件下予以培育。惟建議中所牽涉之變更，在若干方面言，影響異常鉅大。用特將此兩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。
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. Hau, 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.

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.

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 undergraduate 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 intercollegiate 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 Vive-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 organized 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 films 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 dormative 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 specialized 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 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. Diagonally 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 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 part-time, 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.

APPENDIX 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。第一次會議在四月一日舉行，而第三次會議（亦即末次會議）則於九月七日舉行。其委員名單如下：

容啓東博士 崇基學院 主席
黃耀宗博士 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
楊乃舜博士 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；第二次會議中，改由周紹棠博士接替周紹棠先生任委員。第五次會議中，改由崇基學院黃志昭博士接替華基亞博士任委員。

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，在那個方案中要擷取英、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，可着重在教材教授及小組討論；在研究院時，則可着重在研究班工作。因為現行的教授及討論方式中，事實上還是佔了我們的大部分時間。」

此外，校長希望我們的報告書作爲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。他們將在九月十二日來訪問本大學。

C3. 我們不久覺得，若不稍稍討論一下大學的整個學科結構組織，就無法有效地研究教學方法。因為時間和費用限制，我們不能把所有問題仔細討論，我們只限於討論三項主題，即我們認為大學教育的重要性。那就是，通才教育。因此，我們的報告書分成兩部分，一部份談教學方法，一部份談通才教育。我們當然深知許多其他因素可以影響教學方法，但這些因素不是我們能談到的，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，是每一教師個人所獨有，由於其個人之教育與經驗以及其對於大學任教的意義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條文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，而所提出者，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。

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，請他們填答。許多學系都派了許多教授來答覆我們的問題。我們開兩次會議討論他們的意見。我們在報告中，將所有的答覆作一簡要報告。

C7. 此外，校長希望我們的報告書作爲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。他們將在九月十二日來訪問本大學。
我們許多人，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，成為浪費而不得其所。

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。

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激烈競爭，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，偏重於學院的區別？

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？

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，因爲由於激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。我們的調查所得到的答案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複寫出。

丙：教師們不止要自問其所講授的教材是否真正地是必需的，並且是否有必要刺激和振奮學生們在教師講課時更積極地參加討論。凡學生筆記明白清楚者，通常是以聰明聰穎，不論如何作筆記，甚難難以贊同。對於大學的學生當然無此，他們的筆記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，那時所預訂的計劃當可以減輕教學負擔。

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。這種職務，不只是需要蘇格拉底式的衝擊，以推動其在智力方面的惰性，在教師們方面亦需要一項牧人式的關心和護，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，必須做到；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，則導師教學或是因年太少或次數過少而無大用處。這項問題，不論是本大學如此，世界各大學因其領域之迅速擴展，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。
(三) 由助教及实验室助教主持导师教学。

(四) 聘任毕业生成为研究工作者在其研究工作开始后，为期任导师。

(五) 学系之课程不同，应由各系教师自行决定。

(六) 订制学系课程，须富有伸缩性，以便鼓励教师们之愿意从事试验研究。

(七) 审查学生之研究工作，为兼任助教。

(八) 导师教学小组并非万能之物，不能自动地解决一切的教育困难。其方式各有不同：由一个或两个学生批评其他学生之文作；由小组共同讨论一个学生的文作；小组共同讨论一题或一著作。每一方式在教师及学生双方都需要小心考虑及准备。

(九) 订制学系课程，须富有伸缩性，以便鼓励教师们之愿意从事试验研究。

(十) 导师教学小组并非万灵仙丹，不能自动地解决一切的教育困难。其方式各有不同：由一个或两个学生批评其他学生之文作；由小组共同讨论一个学生的文作；小组共同讨论一题或一著作。每一方式在教师及学生双方都需要小心考虑及准备。

(十一) 各系之课程不同，应由各系教师自行决定。

(十二) 学系之课程不同，应由各系教师自行决定。

(十三) 学系之课程不同，应由各系教师自行决定。

(十四) 学系之课程不同，应由各系教师自行决定。

(十五) 学系之课程不同，应由各系教师自行决定。

(十六) 学系之课程不同，应由各系教师自行决定。

(十七) 学系之课程不同，应由各系教师自行决定。
統地照舊進行這類的教導工作，有時利用測驗以加強效果，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、熟悉圖書館手續及圖書分類，如何使用參考書等等。
(乙) 如何在講課及指導教學時寫筆記。
(丙) 如何讀書，如何過不讀某段，如何筆記。
(丁) 如何使用機器輔助，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，如何留出時間作休息運動之用。

C19. 轉易學系

在本報書之第三部分，關於通才教教育者，(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。因爲在這時，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通，並且在這時轉系者與其他學生們的水平都是相同的。

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。我們以爲，學生們雖然應當致力於其本系內的學業，但在假期內則當留心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。在新錄甲我們提到教師們不能常有充分時間接見學生們(參閱附錄十三)，並且學生也難以不常接見其教師們(參閱附錄十三)。除了現行辦法之外，我們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困難，應指盼望學生們學校之單位予以協助。

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：教導學生、領導及輔導他們作研究工作；考慮所教授之內容及其方法，並研究如何改進；還有各種行政及委員會工作。此外，社會上還要其參加公衆工作，這亦不能不亦其職責之一項。而且，我們曾經指出，在最近之將來，正式大學之形成時期，教師在時間方面所受的限制，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，我們覺得富勒敦委員會，當其主張限制於一對八之比例時，

C23. 教學方法之研究

我們深深了解關於此事我們只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爲其全部職責之一項。此外，爲了該系能明瞭大學之日常工作，該系之教師們應參加大學有關學系之教學作爲該學系之兼任教師。
(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，例如在教師俱樂部中討論是。

C24. 訓練畢業生

我們作這項建議時，頗爲猶豫，因爲我們深知大學教師願師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師們都需要一番訓練，我們不能不感到大學之將來教師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) 對於研究生之同時擔任若干教學職務者，應有正式的輔導。
(乙) 職由教育學系與他學系合作爲他們組織討論小組，時或有些講演。這類組織低級教師們亦應參加。

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，教育有其根本存在意義，在求其廣，而不求其深。組織之繁雜，大多數職務上所需專門而聰明的技能之程度，及每項事業皆欲追求進步而與此願望俱之不斷的改變，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除有專門的知識，但此外，還要知道在他們的本行之外發生了什麼問題，願意向那各種學科學習，並且願意與其
他學科合作；對於新技術準備予以評慣，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。一個狹隘的硏究範圍，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敎育的學生而不願雇用一位只擁有狹隘的專門敎育的學生。因爲這些有通才敎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敎育課目後，才開始選定其學位學科。在那時，他們比在校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，但其主要敎學方法，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，主要的是因爲我們感覺到各學系未能實施這一步驟。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，由於缺乏必需的敎科書及刊物之故，講演不得不包括全部課程範圍。

C27. 語言之學習，不當認作通才敎育課目之一部分，因為那是「工具」科目，其要點完全在實際運用該語言之能力。至於語文作爲文學的欣賞，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，暑假中組織嚴格語言訓練。其最終目的在使學生們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敎育。至於該課目的組織、內容及考試則當由各學系負責擬定。

附錄（甲）

本委員會曾向三學院教師們發致調查表一份，徵列問題，請其客觀。下面是將所收到的答案做成摘要。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 講演及其他敎學方法

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之內容。
   戊、說明對於一科目的如何處理方法。

2. 在大多數學系內，講演為最重要的敎學方法，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。有些敎師們令學生默寫，或分發提要，有些敎師們則間或審查學生們的筆記，而有些敎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範圍，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，由於缺乏必需的敎科書及刊物之故，講演不得不包括全部課程範圍。

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

4. 只有一学院的英文系，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敎學方法。差不多所有各學系，當其指定師生見面時，或查閱學生考試成績時（參閱節七），對於程度較低的學生，則給些更多見面時間，對於新生，則予以更多的監導。

5. 除了課堂活動以外，各學系在學生們教學上利用視聽或其他輔助工具。
生們在教學時間以外的生活問題也要關心，願意和他們談話，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談他們所欲談之事，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，但只有二三學系，在正式系務會議時，定期討論這個問題。大多數新來的教師及實驗室教員都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擔任而受到阻礙。惟一應急的辦法則是任用本地兼任講師、助教，及國外之客座教師。

準部份 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. 教師們不認爲在目前情況下，學生們的上課負擔過重。在教學時間或可減少而有利益。

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。很少的學系有有系统的辦法來辦理（參閲下第四節）。

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。有些學系並未強迫學生們在假期中作實驗或其他活動，也有若干學系認為學生們不必在假期内作實驗室以外的工作。

13. 虽然教師們願意接受學生，而事實上，很少學生自行前去向教師請教關於學業以外的事。

第四部份 圖書館

14. 每一學院對於新生都教以如何有效地利用圖書館之書。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，認為學生當有直接在圖書館書架上取書之便利。

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：我們的畢業生們將會適應香港本地工商業之需要，則必須具備下的技能：

「（一）能提出合適的問題及有效討論室討論，研究及各種會議。

（二）師於發現而未有明確定義的問題，能夠從事調查

（三）師於問題能下適當定義，能證明有關事實，能用其想像力提出適當解決的方法，並能用判斷力，

（四）師於特殊問題選擇其最好的解決方法。

（五）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、能作陳述及主持會議及聚會；

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、能編譯技術性文章，尤其是由英文謬成中文；

己、能作摘要及提要。

（六）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可由大學來教導，然而我們覺得，無論如何，這是一個有價值的習題，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，譯文錯誤之處在所

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

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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

I.1.1 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)

I.1.2 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(c)) 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 analogous, but not identical, to that in many parts of Europe (Abace, 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.

L.3.7 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 intercollegiate 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-sessional 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-sessional 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.

(e) 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 longer 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, 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 skillfully, 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.

L.4.7 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. 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).

L.4.8 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.

L.4.9 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.

L.4.10 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 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:
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.

1.5.6 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) one main principle 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.

1.5.7 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.

1.5.8 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.

1.5.9 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 proceed in the most realistic way is this ratio rather than the very abstract (and for some purposes misleading) 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(e) and (r)). 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; the teaching is more easily accessible; they are 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 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 justice to the material unless he memorises 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.

L.5.20 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.

L.5.21 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.

L.5.22 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.

L.5.23 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)).

L.5.24 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 is often said in the Colleges that it is only after a number of years that the staff become 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 greater 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 "coaching" (the best students) and "coaching" (the less strong); and feature (v) 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 Colleges 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 preessional 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.
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：

「重新建立全校教學制度，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。各該學院對於其所在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，以及實踐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論述。這個委員會是於一九六四年三月經李博士指派成立，由副校長容啟東任主席，並自三學院中選任若干委員，負責擬訂報告，作爲和我們討論的基礎。我們能參閲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，則我們勢須自己多作調查，這在我們旅居期間內所不能完成的。該委員會向各學院提出各項問題所得到審慎而有意義的答覆，其提要給我們很大的幫助。

【註】中國傳統之教學優點將於兩專家建議案提出時予以補充。
L1.5 该大学正处在其发展过程中一个重要的阶段。每一学院各有其自己的传统并依循其自己
的方法，自然深愿继续保留其固有的方式。然而每一学院又必须在某种程度上融通其他学院。此
举并非求同，而是旨在于将可能共同开设若干课程。俾在某一学科上，所有学生都能领受各学院
专家的教益。如果缺乏任何共同或类似的处理方式，则集合三院学生于一项共同课程之下时将更
难于达到心理的沟通和了解。

L1.6 由于这些考虑，所以我们有一章谈到大学系务
会。在大学组织法内曾提到系务会的组织，该系
务会确有重要工作可作。大学教务会有权规定大学系务
会的责任（规定11.4），其主要职责之一，为在最近将
来某大学中某一学科的教师共同讨论有关课程纲
要及考试事宜。

L1.7 一个学生在大学攻读，可能有下列
一项或数项理由：
（甲）为他将来的职业作准备，求得实用知识与训
练，以及如何运用其所得。
（乙）尚未选定职业，但认为大学给予他的智力训练对
他是有用的。
（丙）对于某一科目或某些科目感到兴趣，他希望在这些科
目上已经表现了能力，除了在大学继续攻读以外，无法再深
造。

许多学生有意识地或无意识地受上述理由或其他理由的
影响。无论如何，学生求学所得中最有价值之事物，乃是
如何运用其知识来考虑事实，作合乎逻辑的推断，明辨论
d据，以及整理和表达自己的思想。虽然由阅读和聆听他
人关于各科目的讲授，也许能造就上列诸特质，但究
不如由学生本人在指导之下，自行学习那样子来得有效。

L2.1 名词在教学方法里，时常见到问题，所以我们要在
此将本报告书内所用的若干名词加以界说。这些
界说可能对各位读者都有所帮助，至少在本报告
书内可以免除误会。

L2.2 （甲）课程：我们用这个名词指某一学期内为学生
所制定的全盘教学计划，举例来说，譬如，崇基
学院社会科学第三年课程计画，在一九六四年一九六五年
见校历页112所载者，包括各项目科目一共有四四个学分。

（乙）课程：我们用这个名词指全年课程中之各个部分
份，该部分在校历中附有号码——例如在甲联校历页131
「中国历史文化」，即附「历110」。每一课程
在全年或半年中选点若干授课时间。
（丙）直接教学时间：包括学生正式在教师讲授或指导
之下之每次时间。
（丁）讲演：教师的单独讲演，属述解性者。在讲演
中，有时只有小部分时间可备学生发问之用，有时无之。

甲乙丙丁均较少。
（戊）讨论时间或小組敎学时间：指任何非讲演式的敎
学，如学术研讨会等。甲乙丙丁均较少。
（己）实習班：指在某中间期内学生所参加实习，使
他们对于已为他们解説的材料，加强熟習运用，或指对于
任一科目在适当时间内的实习。“
（庚）实验室或实验室：指学生在某一时间期内，利用已
备或未备好的仪器，进行指定的工作，是项工作通常在教
师或导师监督下进行的。其时间长短，因学科而异。

班级人数常以地方面积及学生与教师比率而定。
（辛）研究班：指在教师监督下的一個研究班。在歷次
集會中由各級學生選任議案而所規定之議案提出若干論
文或報告。所有学生每星期不必是同聼教师的批誼而已，
須於論文未完成前交付討論所報告的議案。其人數最大的
限度，不比（戊）项所建議者爲多。
（壬）教授教学：指在某一段時間內，学生在指导
下进行工作，如论文、习题、问题等，使教师能够就之与作
讨论或批评。这项工作大体是一连串的，由同一教师指导，
有或无与讲演相关，但有或无与讲演无关。教授教学由一位
教师与一位学生或者与数位学生同时举行均无不可，但数目
超过三人，即研究班与教授教学之分界便更难不清晰。
（癸）「科目中心」及「学生中心」：这两名词表示侧
重方面的相对程度，因为所有大学本科的敎学都是为学生
而设，也为了教授一个科目而设。然而，有些小 noi 數
(特别是在导授教学)主要是关于学生个人所遭遇的問題及
其智識上发展的问题；在另一方面，虽然所有講演都有需
对听众，然而若干讲演，尤其是高深科目者，其主要价
值则在于处理科目方面有其特色与专长。导授教学人数
如果增多了，应明确地分隔处理每一個学生的個別問題。

研究班与教授教学较适合於以「科目为中心」。
我們在後面將另列一章詳諭小組敎學，以上各項將均再提及。

第三章 語言問題

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的。這種困難在全世界大學內都有，並不只限於香港。倘若我們知道有一個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，也有這種問題，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）不同的課目有不同的問題。

（乙）學生以往在中小學時所受的訓練，以及在某種程度上社會背景的影響。

（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問題，並且在這時他或者尚不能完全了解在其本國語言外其他語言的用處。

L3.3 中文大學對於語言問題，早經熟加考慮，並已為最初之兩年語言工作定出目標，這是值得慶賀的。就我們所見到者，這目標有兩個各別部分：（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，使他們能在完成高級敎育後能充分而且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。第一項在細部上，則視學科而異。（試比較用在研究一年深學數學符號之使用，與在圖書館中讀一讀本書，如歷史著者之時間。）

我們假定第一步目標必須大致上在頭兩年內完成，於後兩年再加以熟諳。無論如何，使學生能夠流利地閱讀與正確地寫之英文資料。第二項則須於四年級時完成，但恐怕一個四年級生，例如數學科學的學生，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們四年課程中需要所得之程度。

L3.4 關於第二項，在現時大學大學敎師心目中，還有一問題，那就是，教學的真正運用能力。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，或文學院，都能時時去運用思想能力加以改善，使必然說而有效。這種能力只能在這兩種情形之下得到發展——與好榜樣供觀摩，有機會作實踐。一個學生在班際考時如想學要領而有效地表達自己，他必須將發言的機會。除非他事前曾有練習機遇，並受到鼓勵去當。

這種原則對於文學或研究純粹科目或數學科目的，一律適用。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，是只有由單調口述的重複的練習，才能取得運用語言的能力。在英美自然科學學者，為使科學家及技術專家們能作有效的表達，規定學生在最後考前時，寫一篇關於一個普通科學題目的論文。採用此辦法愈來愈多，這種試驗，在各學校中均有練習，作爲準備。

學生寫作能流利地進出這個場合，在許多國家內都談著於學。不管這種責任對小不對，無疑問，高級敎育所要求者，是如此一個水準，需要這種程度的智力成就。不論該學生入學時之程度如何，應當讓工作工具充分活躍，使之有效，盡是大學的責任。這有在處理困難的智力問題時，學生面對著一個考驗，才感到能以更正確而熟練的方法來運用其母國語言的必要。

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

特殊問題

L3.5 敎學方法委員會曾考慮到關於學生們其本身語言是用粵語，如何能使他們無困難地用國語通談，或者，至少能聽國語講讀各問題。這個問題當然在第三段中之（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。

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，其目的在追求知識，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，可能是在大學適學方面即可應用，成爲其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規定所公認的。例如在東歐，各學生在中學時已經學習英文，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，所有學生為列等科目的關係（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，並且在校內著作方面都要精通語言能力，認為有良好程度才成。這些學校對於學生在能力及工作時間上所要求的條件，並不比中文大學學生所負者為輕。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。在英美，近年來常討論到如何能為那些志向不正在作語言專家的學生們設計一項更完善的學習語言方法，特別是利用附有錄音設備之語言訓練中心。
處理這些情況，首先要，在開始時就認定一個明確的目的。這一點，教法要會委員會很適當地想到了。

（甲）閱讀速度：為了作工作工具而教授英文兩年，其目的主要之點之一，是要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材料中，所用材料，無論原始資料及講談的著作，部分都是英文的。我們希望達到之標準，是每小時四十分左右。倘若只有一小部分學生能夠達到，則我們就不能達到所希望的標準。當然，課目便需大行修改，或者大部分資料須要譯成中文備用。然而，若是有這項問題存在，則必須想一種方法來解決。我們認為這個問題如得不到解決，便可以克服了該委員會所強調的缺點之一部分，所謂缺點就是教學生在做往後課時的筆記，而不願自己去多讀多參考書籍。若是我們認為閱讀速度之遲緩，是不必要的情況，而不強調學生們須自行閱讀教師為他們所設計的課料及參考之著作，則我們顯然要後退的步驟。當然在某些情形之下，倘若選去若干課及項目及指定之課目，或參書籍之於該科目核心問題之討論上更無必要，也即對於該複習之教學本身反而有改善。

我們建議，適當優化四至四年級的課科，逐科調查所需之閱讀速度，倘若發現實情較於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。這也是我們在一項建議中之另外一部分。

（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為增加。雖然語言的學習仍是一項練習，只有靠徹底工作方能成功。幾十年前之重大困難，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，有些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語言專家所選出並經他們認爲極重要的教材。我們以爲這種試驗要進行得大膽，前進到語言最好計劃分期的計劃試驗，才能求得正確的答案。例如：對於入學的一般學生分配其在一定時間內的工作，什麼是最適當的方法、怎樣的練習、有多少次、多次才能使他們所參加的課長達到合格的程度？

關於閱讀速度，也可作類似試驗。我們很高興各基本學院正注意這些事項。我們以爲如想取得到最佳的效果，這項試驗的研究還可進一步利用院際組織，來交流及比較彼此的經驗。雖然這項研究，日後的教育委員會或學術界自然會有興趣來辦的。我們相信這種研究在現在從事於教授語言的教師們當當奮進。無論如何，我們認爲，在現行制度下，每一年的學年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，並且應當不斷地研究有效的辦法來利用語言實驗室。現在許多國家都正進行這類實驗並且常常得到良好結果，但還不能確定某一種「方法」為最好者，如果認爲最完善的方法業已確定，則未免言之過早。

對於新亞書院所設試驗性的學期前之課程，我們到來時的時期，尚未能完全估定其價值。這種試驗和我們所曾試之其他試驗相類似，雖然有優勢及人力，但這是一個有前途的發展。我們認爲向这方面繼續工作是合理的。我們完全贊同教法委員會的意見（第二十七）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，學校應當考慮到。當然一切還要看新亞校的財政而不必。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。我們贊同教師們對此問題進行的試驗。我們在這個領域中所遇到的一些困難，其中之一是按照學生們願志主修科目而分組的困難。因為學生們已按照程度而分組，那麼新亞書院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可包括各種選讀材料，以便學生們發揮。
學生灌輸某些知識時，講演有很大效用。除上述功能外，講演還能在初期激發學生對一項目的熱誠。當激發力如無講演，就只能由廣博閱讀中求得之。如果要學生能參加學習並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，特別是自然科學，但並不限於自然科學而已。代為講述並檢討各項批判和詰問，可補助學生難以自尋之處。

（丙）缺乏滿意的刊物時為作補救，或為祛除學生因有關書刊雜多而引起思想上之混亂。

（丁）研究或評論上之最高技巧範圍，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」來感動他的學生。

（乙）節省時間和人力，聽衆愈多則愈合算。

（丙）講演在最適當情形下，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之教學方式易於隨時修正。其修正可以顧及到周圍情況（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），也常常可以將講詞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査學生（就一班而言，或個別而言）對於所灌輸的論點、項目、技術，或事實到底能掌握多少。因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定的補救方法可以採用。在講演一小時中留出最後五分鐘作爲學生提出問題之用，但是遇有太繁重或太散漫的材料，學生必不願揭露出他們的困難，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，如教師於講演修後，於課堂內停留五六分鐘（當然儘管準備黑板），學生可能受鼓勵而對老師談出其困難。

（乙）以講演為主要教學方法之另一嚴重缺點是學生只用心聽教師的講述，教師本人除在講演外不能作許多事，以配合學生的其他活動。如果要學生用心聽講再外別無其他要求，那也就無所謂；不幸的是，要學生知道學生了解的程度為何，這種方法本身是不滿意的，並且對於教師也是非常困難。因為教師除於出題考試，審查筆記外，別無他途，雖然在教師方面已盡了艱苦職責，對於學生卻無多多裨益。倘若教學着重學生積極參加，那些講演本身對於這項發展工作便不能有所幫助。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，但這些問題通常是瑣碎的，如果提出問題衆多，將會使教師之講演不見進步，其結果便使學生失望，使教師發怒，甚至影響教材本身之進步。在這種情形之下，此項工作本身是一個有趣的而富有刺激性的經驗。

L4.5 在討論了講演教學方式之短處後，人們或者以爲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，這並不是我們的看法。相反地，我們認爲講演在某些意義上卻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，但是講演與其它強有力的工具一樣，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。講演之程度愈高則愈難定。特別是，如來某一講演，他的一個長處不止是能使聽衆了解，並且激發學生們對於那科目的熱誠。在講演時，教師必須能勝任愉快，而不能使聽衆為之失望。如果教師本人對於該科目有發自內心的熱誠，對講解能勝任愉快，則學生之熱誠將會被激發起來，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。講演作爲一種教學的方式，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
甲) 講授者本人對於所可能運用的時間內能作到的是甚麼？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) 倘若需用説明材料(文字、圖解、黑板上書寫的材料，圖書館內的參考書藉，課本等等)時，則在需要時，必須齊備。講授者不可漫不經心以爲一切都無問題。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) 講授者不當以爲學生們在筆記他的講演時，都已和他本人一樣地知識。就我們所知，關於作任何筆記無通則，有時教師要學生們默寫下來公式，或一段文字，或要他們準備地研究；有時他認爲課目中一部份的註解或例釋有印發給他們的必要；有時他說他所講的都須需要。但他心裏隨時要想到學生可能惘然他說了甚麼，而照他的判斷行事。一個教師對於一個題目講說了若干時，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，其經驗及學識較敎師們爲差，對他們講演，自然要和與講者有共同經驗的聽衆不同。每一敎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，抑或以一種假想中的中資學生爲對象。

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，他們的敎學可能更爲有效。倘眞如此，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分時間準備，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減輕這項困難。(節五、十三、 )

當我們研究到講演技能這個項目，我涉及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；然而在臨於一群教衆多的學生時，這種才能卻是極重要的。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敎師。然而，所有大學敎師毫無例外皆應當具有最低標準的講演技能，這是需要的。否則一般學生難以全部掌握的講演，可能為了有的學生不曾聽到失之的少部分而失去其功效。當大學學生人數增加時，這種情況將更顯著。誠然，一位講演者的宣語方式一定是由其個性的。我們不能要求他適應到一種方式或情形。同樣的，一位大學學生也不是一個公開演說的訓練所。並且，一位有經驗的講演者覈要他願意改進，也不容易改變他的宣語方式，甚至對於他的講解方法的説服力，反而產生了壞影響。究竟何種方法對他有助，頗不明瞭，只有使他善於變通，方能收到好的效果。

第五章 小組敎學

L5.1 富爾敦委員會的報告書(頁98)及敎學方法委員會報告書都強調小組敎學的需要，尤其是在學生初入學的頭幾年中。敎學方法委員對於這點更爲着重，所用的名辭為「導師敎學」，我們同樣也是十分贊同這項建議。我們先說明一些理由，然後從那些理由中，再論及關於這項各種敎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。敎學方法委員會報告書都強調小組敎學的需要，尤其是在學生初入學的頭幾年中。敎學方法委員對於這點更為著重，所用的名辭「導師敎學」，我們同樣也是十分贊同這項建議。我們先說明一些理由，然後從那些理由中，再論及關於這項各種敎學方式上的若干意見。
他的，亦为他在大学研究工作所需的能力。而且，

这个问题和通才教育的全面问题也有明显关系。我们曾经

指出，中文大学所面临的不同与许多其他国家大学

相类似。本问题同样地发生在许多高等教育制度之中，问题

本身根源于社会和教育的背景，而这些背景在许多国家

都有相似之处。简单说来，一般的意见认为各小的教授

学是极为有效的救补办法。为什么呢？因为在一个演讲

内，虽然多是很好，学生仍是一个被动的旁观者或笔记

者。而是在讨论班，或研讨会或导师教学时间，如果指导

得宜，学生便不需不参加。他的教师在选择材料之后，

一面可以使学生掌握题目之真和概要的要领，一面

可以帮助学生养成批判性及建设性的态度，用之弥补新题

目或新的学科。这两项成就都是必要的，知识领域，逐日

扩大，而且，第二项只是消耗资产；没有第一

项，而第二项便空虚而不实在。

L5.3

在我们原则上假设各项问题由小组教学解决而没

有继续研究细部，我们再见而考虑到刚才所

说的两项成就。我们可以利用一小时的时间来和小组学生

相处，研究每一学生对于演讲或指定读物是否真正了解，

帮助他们解决困难，教他们使用更有效的方法来进行学

习。这种工作我们名之曰「教训」，这个名辞不含有非

薄之意。同样地也可以利用这个时间，使学生们对于

演讲或读物做深思熟考。这项方法，可以叫做「诱导」。在

这两种情形下，其教学方法是以学生为中心，因而，其目

的在于针对学生的程度而工作，不超越他们的智慧所及之

范围，利用他们的观念和知识。在任何情形下，而且使他们迷惑。如此，才能建立基础

，按照最合学生程度依次递进，不可过速。

L5.4

更有一个更重要的事项。小组教学办理得宜，大

体上的事可以克服被动性的问题。与之被动性

同等重要或更为重要者，就是学生为了准备演讲时所作的

工作问题。就教师和学生委员会所提的材料，以及该报告

中的节11.6所提者，教师与学生人数之比率，为一

与一。但是有时而何无小组教学，我们承认这个问题的

严重性。在本章中，我们是必须考虑研究如何使用这些稀

少而珍贵的人力。在未开始讨论之前，必须确定一项

无误的原作。那就是，学生应尽量利用其时间来准备

其课程，使教师之努力达到最大效果，学生自己也得到

充分的益处。

L5.5

为了解这项工作的处理方法，和我们所假设

者之重要。我们曾举一个简单而抽象的例子：十

个学生只听一小时的演讲，又因为每天有两小时

向教师求解。一小时。若各这三小时的演讲中，一小时

改作四次一次之五人小组教学（每星期会一次，各一人

分成小组，轮流参加），如此，则教学用时及学生接觸的

时间仍旧。不过，他必须修改课程纲要，除去某些项目，

保留其主要者。我们假定在学期中他对于其演讲，屡屡想

讲的题目，也要作一番预备。如此，他便可以省出一些

预备演讲的时间（至少每天1小时），因讲师讲的时间

少了。但是在另一方面，每听一次指定三个学生散文

写工作，又要仔细地为他们改正。则每隔星期便须有更多

的时间（假定为2小时）。现在假定学生对于每一演讲，其

指定自身为两次识，那么对于每两个小组教学每一学生在

两週中便需费十二小时工作时间，表格可以作比较之用：

| 教师与学生比率 | 一比十 一比十 |
| 教师与学生接触时间 | 每週 三小时 三小时 |
| 学生与教师接触时间 | 每週 三小时 两小时 (平均数) |
| 關於该课程教师全部工作 | 每週 六小时 七小时 |
| 關於该课程学生全部工作 | 每週九小时 一百廿五小时 (平均数) |
| 教师学生工作比率 | 一比十五 一比十七 |

这项改变的特點在最後三行，尤其是有关所表示的。在表上，教师的每星期钟点之全部负担只是增加了一小时。但在该课程中，学生的指示工作则大为增加。教师与学生的比率已不相等，教师工作与学生工作比率实际上是改進了。换言之，对于稀少而珍贵的人力之运用，是改善

了。而且，在新制下工作可以說有助于解决学生被動性

的问题。

L5.6

我们用了不少篇幅来解释这个太於简单的表格

，其目的乃在说明我们对于小组教学的意见中所持

的一个主要原则，那就是，凡是未曾采用这项制度的地方，

只要是合理的小组，不要因教师学生的人数关系，认为

教师数目不够应付需要，而不采用。要緊的是教师工作

和学生工作比率，推行这项制度是要實事求是地根据双方工

作的比率而非那十分抽象的（在某些情形下引起误解的）

教师学生人数比率，無論就一课目而言或就全校而言都是

如此。

L5.7

我们現在来考慮小組教學之需要，和他與現行或

在计划中之课程課目间一些问题。我们曾经说

过，前一節所列的表，是为圆解式与抽象的。我们从而假

定所有的演讲，于学年中，都需要同量的时间准备，实则

有些早已充分预备好了。又，所规定的几小组，只是想

像中的一种小组教学，並且假定小组教学采用学生五人

一组的导师组织。再假定此时学生所做课程，只听講

一課目而已。其最後的假定显然与事实不符，其他各項也不一定盡合實際。
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，每週自十至三十小時不等。在實施之原則上，我們認為對於一週直接教學時間學生們大概要花上兩小時自修，(因當然實習工作不在其內，因其自修時間將依課目之不同而異。)我我們可為自然科學科目之學生減去六小時實習工作，那末，在理論上，學生們每週應自修三十至五十四小時，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，不能依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。

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，將使智力逐漸降低，遑論發展。學生不可能再有時間和精力從事閱讀課外或涉及課目的書籍，或對其通才教學作積極之推進。所以，很明顯的，在三十三小時直接教學時間的課程下，增加學生與敎師工作之比率，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。如果要得到小組敎學的益處，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指定自修工作，而能獲得實效者，能否在一週以上，或是有问题的。其答案是要看你那一課是屬於那一個年級，科目的性質如何，尤其是，課程是否包括實驗室課目，或其他實習工作。所以，我們認為同時不能有三個以上這類自修工作，而這不能適當的影響到學生們在仔細監督之下，予以教導；訓練他，或誘導他，或二者併進。而且這種訓練方法處處關密不疏，至少在一年級中，對於某居科目的各課題，舉辦一系列的指導教學，這在大學一年級尤為重要。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什麼。

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，或依學院政策，或其所着重之點，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。

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並行不悖。很明顯的，在這時，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，課程中各科目的性質更見一致，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、四部分可能，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。倘若他們在這階段不能參加，那麼大學所以存在之一些目的卽未達到。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確的目的：(甲)徹底掌握了關於應用於例範性材料之理論(乙)對具體的事例，如經濟學及社會學方面，能從不同角度來研究而得到結論。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，假定課程中中小規模的單獨研究，那麼，個別小組教學就要時時舉行，作為督導指導中一部分的工作。
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；他們熟悉學院圖書館的藏書，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授課時間為三小時者，一律設法減為兩小時，每週正式授課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。我們認爲這種措施是絕對必要的，如做不到，我們看不出有何把握能改變學生們對學習方式的基本態度。在這上面所省出的若干時間，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很很多，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，而在教學方面，也應和世界各大學最佳的成就相一致，亦具有競爭。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討論的對象。我們所謂「繁重」是，設表面上包括了非常廣泛的材料（這當然有異於嚴格學術標準）。倘若，一個通論性的課目，無論其為閱讀仍是創作，或有關於事實，或有關於事務，或有歷史，或材料之來源，以及異常之質，學生除了認識課目筆記之外，一定不能有更多作爲。並且，在這個過程中，學生不一定能了解那廣泛的思潮流派，雖然講授者本人認爲重要的。某些科目的理解，在現今知識迅速發展之世界中，倘若干學科所明白許多事實，可能很難教授——有機化學就是其中一個例子。其他科目的教學是如此困難，小組教學有一項非常為重要的特點——那就是，無論何時何地教授教學或研究班地絕不能用為織辦百科全書性的知識之有效工具。每週每科或每週小組學習班，在一週內或二週內，只能充分地討論一個課題或一個主題，或一種著作的本文。那就是說，一學期内或能討論如此類的十二個課題。因此題材必須嚴格選擇，以限於中心的及有提示性者為宜。若從學員課目的數量及數學上的課程數量來講，學生可以加強學生對原則的了解，這遠非任何方法所能及，學生完成了一系列這樣的討論之後，他對於其他課題或科目之某方面，雖然未能教師提及，他也能把握自己工作。所以我們減少課目的議論是永，一定要審查上述各點。我們已經提過關於正式授課的意見。當課題減少至必需的限度時，這些優點更顯得重要。倘若教師知道他一年內要對一班學生講授九十小時，無疑的他要為學生們將整個課程分門別類，作個完備的講述。他的講述可能足夠成爲兩本或三本厚書；並且必定替他們作好那些特殊問題的註解。由於這個緣故，學生們反而想在教授時間內尋求新意見，或運用自己的思考能力。合理的原則是教師們所作講述的時間。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，他們對於所謂的科目，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，便容易看出要研究課目的核心問題的重點在於課目範圍；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」，只有託庇於教授的講演筆記。

L5.18 全課程綱要和教師原來要講的內容不符者，便不應截在校歷，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一種較易的綱要。

L5.19 採取導師教學之主要障礙，就是教員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) 正式授課次數，尤其是關於文科及社會科學的課目，應當大量減少。教員人數多，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：

(乙) 兩項內容簡當彙整，使學生們——包括一年級的——認識基本原則，不作百科全書式的涉獵。

(丙) 在一年級時，學生們，任在何學系，應當參加與一個課目有關之二週小組導師教學。最好其中至少有二學期，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二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，應當限在課目講演範圍內的課題之討論或深度之研究，而不是講述新題材。
我們曾經研究過一九六四年及一九六五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，不需要同僚的協助。我們以爲凡可能辦理的小組教學應該辦理。這種辦法的好處，是當教師負責與其所教的課目有關之學生作業時，他不難認定他自己講演的功效。

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次的討論時間時，他可能是不願意的。然而，我們要說的是，倘若他願意，同時假定他的其他負擔不太繁重，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。不過就善盡其職而言，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是：倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充分責任，而他在另外課目上又有類似負擔時，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。我們要說的是，倘若一位教師已經在其他課目上負了充
第六章 考試

L6.1 關於討論敎學方法，若不提到考試，將是大大
不完全的。因為學生的工作與在階段中的考
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
標：
（甲）考試使學生對於自己學習所得作一番「淸査 存
貨」的工作，並且使學生和敎師們雙方可以藉考試來測
定學生所作的（各種）學習研究，其效果為如何。同時敎
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，
要能保證所領給資格的價值，不下於其他大學。
所有學生對敎學的態度，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，考試對於敎學的性質
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
要是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，不再理會敎師的鼓勵
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，使能作答，則學生們定必以背誦講演筆記為 已
足。
（丁）如果在另一方面，大家皆知考卷中若不必要
的問題是絕對在課綱範圍之內，而同時亦知講師只是
講課課綱範圍中之大部分材料，而非包括其全部，那麼，
一部分學生們，（倘若有時間及便利，）對於該課綱之剩
餘部分將會不待協助而自己預備。倘若教師設計中本來
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
敎師達到目的。
（戊）最後，如果考卷所包含的那些「必答」或「不可
免答」的問題中，有一部分課題，學生們可嘗試回答，
考試方針的決定，所以不應當視作次要事項，或等到學年
末即再處理。在所有的科目中，我們應當注意敎師在課
綱的掌握程度，和學生的思維力的一種手段，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。

L6.3 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，第一百最顯著的，就是敎定
試題應當視為一個嚴重的責任，這是很重要的。試題反映
敎學方針的決定，所以不應當視作次要事項，或等到學年
末即再處理。在所有的科目中，我們應當注意敎師在課
綱的掌握程度，和學生的思維力的一種手段，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，僞使
敎師者，就是原來主持課綱敎師的教師，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，不應當認為可取。我們知道這是一個邏輯上的主
義，但也並非是完全錯誤的。我們可以假設下列理由來說明。
在前面我們曾提及「誘導」和「教練」之不同，現在我們
要區別「教練」和「講演」之異。在「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，也應能熟悉其核心問題。在「講演」
之目的，則只要使學生在考試時取得及格而已，至於其
真正了解課科意義則不問。於是，許多事實和技術都促
進他囫圇吞咽，不管他在原則方面，消化與否。不管何種
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，都會鼓勵敎員及學生趨向於「講演」敎學方面。
這種情況存在時，敎師已不再是以教育事業而服務，學生
在考試上固然暫時欣然得到及格，但從遠處想，卻受了嚴
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，再沒有其他方式比這這個使學生確
認敎學就是「講演」而已。我們無意指抨講演筆記或教科書
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、丙兩項所具特點都坊後
受良好的敎學。乙項則令人堪側，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
於課綱材料數量調整的建議實行以後，方能圓滿地採用。

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，敎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敎師考試，或者由同
一學科或系所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)。兩種制各有其利弊。——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，我們所關心的只是大學及其學院所有之人手等問題。在開始討論以前，我們要將學生學位之於學生及早問各項考
試，特別是大學二年級中的考試。

L6.7 關於大學二年級各項考試，我們假定各學院負責
學生們所有的工作，擬定考題，並將繼續如是做去來訓練學生的進步。大學上，各學院都是利用其固有力量等來處理這些事。顯然，各學系不能不負責從那些實際上
掌握課題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，因為卽以實驗室科目而言，其發展都
需要大家共同利用所有的貴重的設備，人力，物力，實驗
室以及專家指導。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
所不研究者；但也可以規定，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
作爲輔助教學工具。在我們的看法，這二者之間不應有何衝
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，便要將這兩項分开
來處理。因為大學教學委員會在這裏負起重要任務。但若是為了學位考試(三四年級各課目)，大學必須有大學考試委員會，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察覺取得協
調，我們希望他們會與大學系務會作若干意見上的交
談。建議中也會包括考試範圍方面的一些問題。大學教務
會決策教學之大致方針，我們希望大學系務會能秉承這些
方針去擬訂發展課程及課目的計劃。到了相當時期，由
大學委員會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
以為什麼步である理由是，現在已有各種程序在一項大學
學位考試委員會之完備制度。這個制度應有兩項主要特
點：

(甲) 有伸縮性，然後可以照顧到特殊學院的創造性及
其所偏重的方面。

(乙) 關於考試的標準和方法(筆試及筆試)力求一致。

第二點在眼前尤為重要，也許將來三學期中到一個校
址上讀時便可無須如此的注意。

L6.11 在可能範圍內，盡是使校外考試委員會參加
作即可取得重大的益處，這是我們所要特別建議
的。我們不能具體建議他們應當如何工作，但可以想
他們應當同時和大學某科或某組各考試人員交換意見，並
可以簡單全部或任一考卷。他們心中對於大學標準，和各
學院的傳統也應當瞭然。我們認為大學系務會在後外考
試委員們能夠儘量有效地執行其工作，遂使經費上有限
制的原則，必可因顧節省成本的費用而不進行，其
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應讓
他阻礙教學的進行，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，然後請人們自行制訂(用
教練或筆試)，指導學生們參預這項考
試，這當然也難得
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，從課程總的課程開始，按其一
般的目標和特殊目標，然後進而研究用以達到這些目標的
考試。我們假設這事的最好辦法，莫如設立教務會，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
種程序大致和辦公室大學的長短及範圍，難易程度，以及各項課程
有關考試之問題等等——這些，都應該當作完善教學方法
研究生之一不可分離的部分。

L6.13 就小組敎學而言，由學院來負責是最合宜的。關
於正式講演，那些科目在某一学院有其特長或特殊
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，即在這，課程範圍愈益需要十分用心和
訂，這不止是為了學生們的利益，且可使各學院院對他們所辦的不
屬於實驗室科目之小組教學，能有深切有效的貢獻。如果
這一點是做到，那麼在在二年級時所剝到的課題及考試建
立互立之密切關係，其效果將可無所損失。如果經過
審覈制的課程要領，可以替大學講演和學院小組教學
55
第七章 通才教育

L7.1 教学方法委员会报告书一重要部分（节25至28）
讨论到这个问题，虽然我们在这里的主要任务，是关于教学方法，但在“通才教育”的问题中，这里是不可忽略的。我们不认为有忽略的必要。研究这一部分问题时，并不都是同样重要。在通才教育中，这些是不可忽视的。

L7.2 首先，我们要说明我们对课程的意见：无论是人文科学、社会科学和自然科学，关于课程的组织和实施，都需要有卓越的管理。我们需要有卓越的管理，才能使课程的组织和实施达到最佳效果。我们和各学院的合作，包括这些课程的最终的决定。在所有这些可能的课程中，我们都设法使我们所有的学生，都能在各学院的课程中得到相应的教育。

L7.3 第一个问题，就是时间问题。任何课程，若是能使学生对于所读学科的真正问题得到批判性的了解，纵然他所研究的问题的范围是有限的，那课程算是得到结果。若是不能，那么学生便要退而背诵讲演笔记，用填塞方法来匆匆应试，于通才教育所期望灌注给他有关科目上的灵活而有建设性之知识，他将不会起任何作用，更不用说如何激起他从事更广泛研究的兴趣。

L7.4 如果进入大学的生在，曾经在中学最后数年中广
泛地修读文科理科各科，那就不能肯定地说，他们在中学时期所修的学科，更容易于继续通才教育的广泛研究。

L7.5 在前面（节五、二）我们曾经说，为了帮助学
生使他从中学教育所需要之成熟而具有批判性的研究，小组成教学是有价值的。我们也曾建议，要想使小组教学产生最佳的结果，每一学生课程中应有适当而充分的小组教学时间。而且，倘若教学时间与学生工作时间的比率，由于小组教学时间增加而减少，则教师之吃力是很明显的。所以就通才教育而言，异常繁重的负担将加于教师身上。倘若这种教学对于学生所读若干科目都有牵连的，那么，学生的工作便有异常沉重之危险。因此成为问题。我们不愿武断究竟当如何应付。

L7.6 教学方法委员会意见中（节26）曾提到这种困难，
并建议「教学主要方法将采用导师小组教学」。这一点我们曾加以注意。但，很明显的，倘若这种教学大部分和学生工作无关联，那么，这负担将加于教师身上。倘若这种教学同时对于学生所读若干科目都有牵连的，那么，学生的工作便有异常沉重之危险。因此成为问题。我们不愿武断究竟当如何应付。

L7.7 虽然，要想为学生订定一个广泛的课程计划，包罗数个学科学科范围，本质上并不是不可能的。如果能够解决了我们所提到的组织问题，其结果是可观的。我们要记住，无论每一科目的内容，都能使学生对学习产生兴趣。例如，在大学研究学院阶段，对于物理和化学，我们应有研究而使学生能对学习产生兴趣。

L7.8 我们现在要将通才教育之教学方法是说如下，
以备参考：
（甲）倘若全国为学生计划一套广博的课程计划，包括各种科学的科目，这个方案，在实际上，可能是较容易的，但在学生工作的品质方面将会遇到困难。
凡是企圖達到良好標準，課程往往會有過分繁重的危險。所以應當自始即要記着（無論在任何課程計劃）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。

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

大學應當注意中學校如何為學生準備升學。倘若有大學決意着重發展通才敎育，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，雖然這事需要時間來辦理。

通才敎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。

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，這是困難的。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，奈何是有的用的，或者只是可用作進一步考慮的基礎，那末，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。

我們已明白指出，在我們的看法，敎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。特別是，對於講授的課題，必須作嚴密的選擇。

（丙）除了在已有的情形外，試圖減講演的次數。

照我們所建議的方法，為所有一二年級學生設立小組敎學（這是最難的，而且在表面上，也是學生工作上——特別是，對於講授的課題，必須作嚴密的選擇。）

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我們同意敎學方法委員會的意見，建議大學敎務會應當儘早考慮考試問題。關於學位考試（或三四四年級課程）應當規定校外考試委員盡量有機會普遍地參加，然後考試上選出新發展而需要他們幫助時，他們便能隨時充分協助。

語言教學技術上之進展，應當照我們所提的方案繼續進行，不可停滯。

試圖解決難語文問題來改善教學方法。

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（丙）重新研究東亞學院的學期前課目辦法及其可能的發展。

（丁）在每一學院內設立或設置專任教師。

（戊）教師間會商。

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，這是困難的。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，奈何是有的用的，或者只是可用作進一步考慮的基礎，那末，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。

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（丙）按照我們所建議的方法，為所有一二年級學生設立小組敎學（這是最難的，而且在表面上，也是學生工作上——特別是，對於講授的課題，必須作嚴密的選擇。）

（丁）通才敎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。

L8.2 我們同意敎學方法委員會的意見，建議大學敎務會應當儘早考慮考試問題。關於學位考試（或三四四年級課程）應當規定校外考試委員盡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助時，他們便能隨時充分協助。

L8.3 關於課程綱要和大學敎務會討論課程綱要問題中，尚有一個要點。我們不知道大學關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相同的。各學院可以考慮開設新課目以及業已開設之新課目，或舉行一系列的講演（并非一定要持續全學年之久）或某種討論班，來利用他們的專門學識。

L8.4 建立新課程的建議可由大學系主任或任何學院系主任或其敎師，當其認為有必要時，得向大學敎務會提出討論。在我們心目中，學院學系聘任敎師可能就是一位專家、學者，或對於一門學問有專長的學者，來主講他所尊長之學識，這些益處至少要使（所有學院的）三四年級學生能夠分享。各學院可以考慮開設新課目以及業已開設之新課目，或舉行一系列的講演（非一旦全部學院所有學生前來聆聽，於有關之導師敎師及寫作，仍可由各學院自行處理。）

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L8.8 在我們心目中，學院學系聘任敎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，來主講他所尊長之學識，這些益處至少要使（所有學院的）三四年級學生能夠分享。各學院可以考慮開設新課目以及業已開設之新課目，或舉行一系列的講演（非一旦全部學院所有學生前來聆聽，於有關之導師敎師及寫作，仍可由各學院自行處理。）

L8.9 關於課程綱要和大學敎務會討論課程綱要問題中，尚有一個要點。我們不知道大學關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相同的。各學院可以考慮開設新課目以及業已開設之新課目，或舉行一系列的講演（非一旦全部學院所有學生前來聆聽，於有關之導師敎師及寫作，仍可由各學院自行處理。）
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）。這種感覺，在大學團結發展中我們認為是必要的。大學教務會毫無怨懟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適當閱讀及研習最低限度與範圍。當無礙於學院教師的工作上所規定的獨特研習方法，這些獨特研習辦法有時會為學生帶來重大啓發。 вознёсся. Случайные изменения, зачастую приводящие к непредсказуемым результатам, увековечены в этом разделе. Оставим его за рамками главного текста, но его значение понятно.
SUMMARY OF TWO REPORTS
WITH PARTICULAR REFERANCE TO
STEPS TO BE TAKEN

1. 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 committee 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 arrange-
ment and length of terms is satisfactory. (C9(d) and
22(h))

(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(e) & (d))

B. Board of Studies

Boards of Studies will need to consider all aspects
of the reports, especially those assigned to the Senator’s
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))
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(ii))
   (b) Schedule fewer lecture hours. (L5.15 and 8.2(ii))
   (c) Plan the small-group teaching to be done in each course. (L5.10, 5.11, and 8.2(ii))
   (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)
4. Set course examinations. (L6 and C14)
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)

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)

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1. Teaching aids. (C16)
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4. The private work which students do. (L5.26)
大學系務會：

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. 指導學生讀書方法 (C 18)。
2. 如指定教材無中譯本，應設法為之繙譯 (L 3.7 與 C 15(c) & (d))。
3. 設立學系問小組 (C 11(f))，並研究寫作。
4. 設裡大學書店。

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. 教學法 (C 23)。
3. 學生自修工作 (L 5.26)。

○教師個人計畫：

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 减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 與 L 8.2(iii))；
   ④ 重新考慮使用課本及指定閱讀書單 (L 3.7)；
   ⑤ 指定學生寫作工作時能配合講演及小組教學 (L 5.4 及 L 12, C 13)；
   ⑥ 製訂各學科考試 (L 6 及 C 14)。

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. 規劃更多資金以購置書籍，尤其注意重要教本應多備副本。
2. 印刷重要文件及摘要。
3. 繙譯外國書籍及進行文成中文。
4. 以減輕教學負擔及減輕編制為方針指揮教授從事教科書之著作與譯述。
5. 將學生書籍補助費。
6. 設立大學書店。
7. 各系間各項相互活動，各同僚彼此合作 (C 11-f)。
8. 將值利用各種機會改良教學技巧 (C 4-8 及 L 4.9)。
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