

1959 年南洋大学评议会报告书

白里斯葛等

致新嘉坡总督阁下

总督阁下台鉴：

我们于1959年1月由新嘉坡殖民地政府委任，规定调查范围如下：

“调查南洋大学的学术水准和教授的适当程度以及为保证满意学术水准工作而采用的设备与方法，并提出建议。”

现在，我们仅将草拟的报告书呈上，里面包括我们一致的意见、判定与建议。

评议会委员于2月12日及17日分别抵达新嘉坡。首次会议于2月17日举行而末次会议则于3月12日举行。虽则我们面对许多困难，但我们仍能在诚挚调查气氛中，以欣然互相了解我们各人的观点的特质，共同工作。由于很多个人与团体代表以及具有公民感的出席调查会议，自由提供他们所知的情报和意见，使我们的工作便当甚多。

我们对政府与南洋大学供给我们很舒服的住所并拨出师资学院和南大优良地点作为办事处之用，仅致衷心谢忱。我们同时要对评议会秘书关世强先生的应付事件才力以及其他办事人员的宝贵服务，志入记录，用以表示我们的特别谢意，因为倘若没有他们的合作，我们将无可能提出此项报告书。

白里斯葛（主席）

洪卫廉

谢玉铭

钱思亮

胡思威

1959年3月12日

（本报告书共备有27分，其中26分呈交新嘉坡总督阁下，一分存于评议会主席手中。）

1.1 于提呈南洋大学评议会报告书的时候,我们首先愿就面对工作的复杂与困难的情形以及工作下的环境,提出一般的意见。

1.2 评议会是由代表多种文化——美国、英国、中国及荷兰——的大学传统的各委员所组成。因此,虽则我们共同具有一大学概念的一般了解,以及共享以高度学术水准的重要作为大学主要特征的共同信念,但各委员仍然不免有个别不同的观点,原因是他们乃是自身经历的大学的产品。在实际办理上说,虽则美、英、中及欧洲大学都是旨在向着同一目标进行,那就是说训练社会上具有天才的青年,但各大学的组织、行政、方法和课程编制的基本方式,都大不相同。鉴于这项原因,各评议会委员实行互相了解每一成员的传统观点,本身就是一项有趣味的工作;再把这种互相了解的结果应用于审查及分析在南大获得的现有情形,诚然是一项错综复杂的课题。

1.3 我们想要保证评议会作详尽完整的建议,势必需要比较四星期更长的时间。但是事实上证明不可能把调查时间延长,因为各委员多在他处事先有预约,无法避免。假使我们有可能把收集的情报,连同接见他人时获得的必要资料,完成初步的讨论,然后回返我们各自的国家,加以整理及融会贯通,再行于日后重临新嘉坡作最后的讨论和准备报告书,那是再好不过的事情。可是由于急切需要早日提出报告书,这种意思便无法实现。

1.4 曾经有人随时向我们建议,认为我们对现有课程应作详细调查,万一发觉有重大缺点而需要在首届学生毕业前改正者,可提出改正课程的意见,以便首届修毕四年的毕业生在最后一学年遵行。但是我们认为无论在理论上感觉这项步骤如何需要,在实际上乃是一件不切实际与不可能执行者。再者,于考虑大学的训练与学术水准时,我们不得不强调提出,对于实际教授课程的详细情形或受溶化以便在考试时反吐出来的知识范围,并不比充分帮助与鼓励学生使其获得对原理、方法及研究学问的技巧方面更深切了解为重要,换句话说,大学教育的特徵乃在训练思想以便从各种源泉中寻求事实,然后应用该项说明的事实,以建立新观念与新原则。光是获得既知的事实与理论,在大学程度上是不够用的。大学训练应使学生不光是获得书本上的知识,还要使他们能够应付可能出现的新事物。大学教育本质上最重要的,乃是一种对方法的训练而非对事实的训练。这里所以认为有旁敲侧击的必要,无非是要坚定指出,对于任何认为发现课程的缺点后,可于最后一年中设法予以补充的意向,不但不切实际,且终归对学生本身或南大没有真正好处。质言之,学术水准的高低,通常从大学教授的态度以及他们担当的研究工作多少,比较从详细考虑对学生教授的课程,更能测验出来。因此,很多我们的观察将是有关南大的一般

情形,但是我们所拟提出的该项观察,依照我们的意见,将是对南大的学术水准和地位基本有关的问题。全体评议会委员所关心强调指出的,就是大学教育主要的及根本的任务,和其他普通教育机关完全不同。

1.5 由于评议会工作的时间短促,显然无法拨出长时间来接见各方面提供意见的人士。但是一个论点或观察并不因继续重述而便成为更准确或更重要。无论如何,我们曾经尝试深深地探讨问题的中心而大大张开调查的网。我们深信我们不曾遗漏任何重要的客观情况以及一般表示的意见。

1.6 虽则我们刊登广告邀请公众人士提供意见书时并未提示有秘密性质,显然地我们感到倘欲获得有价值的情报及证据,我们必须对所有提出的意见书和提供事项,加以机密保证的必要。故在较后的新闻报导上曾经补充宣布,所有提供的意见,均将被严守秘密。由于这项决定,我们在草拟报告书时,将不把情报来源予以透露;所有机密材料将于评议会解散之前另以毁灭,而通常于附录中备载所有会见人士的姓名一节,亦付诸阙如。这将是一部不平常性质的报告书。倘若不作此决定,相信无法搜集证据以作我们判断的根本。为此,本报告书及其建议,只可由我们的信誉来担保,根据我们所考虑的事实,用无畏及不偏的精神来草拟,且在此复杂的情形的新嘉坡,我们之所以能用客观态度判断事理,是因为它对我们无所损益的缘故。

1.7 不幸,最后委派的数位评议会委员受到若干延迟。虽则评议会主席于正式委任发表时(1月5日)即曾向南大要求搜集及整理所有有关的资料,但直到我们到达新嘉坡若干时候以后才见到提出,且当时提出的资料并不若我们所期望的完备(例如教授颁受学位日期,在正式名单内并未见载)。此种措施,在我们的脑海里,诚然感觉多少诧异。我们知道委派评议会的意思是于1957年秋间提出,我们假定南大当局将会于评议会委员抵达新嘉坡时将全部最后及完整的提供书提交评议会,乃是极自然的事。假若有关情报能自动搜罗而提交评议会,那么评议会的工作便会便利得多。以大多数大学当局的经验来说,由大学小心准备和提出全部提供书,至少需要六个月的时间,而大多数评议会委员在通常情势下皆坚持于评议会正式会议前六星期,必须接到该提供意见书。

1.8 另一特点使评议会工作发生困难的,便是委员们无法亲身看到南大全体师生上课的情形。各班级非至三月的第二星期不克复课。而其时我们的主要工作应该是在集中草拟和修正报告书了。所以,我们无可能观察学生实在担当的实际工作以及教授所应用的正式及非正式的教学方法。但是从我们所能接触的学生看来,他们曾经明白表示他们的意向以及他们准备投身新嘉坡社会担任适当角色的愿望。这一点使我们获得深刻的印象。虽则去年8月曾经指出,评议会有非常必要在南大

全体师生上课时举行会议,再由于其他不受我们管制的因素,致使我们无法遵行。

1.9 当评议会抵达新嘉坡时,发现一宗在新嘉坡法律设立有关入学的法令经已渡过二读及遴选委员会考虑的阶段。这不能不使我们感到多少诧异。管理南大的方法是基本的有关它的生命及健康,而该宗法令,依我们的见解,应该是在考虑我们的报告书之后而言,更为适当。我们同时亦感觉诧异的,就是得悉正当评议会举行会议时,南大当局决定为该年度招收新生约五百名及先修班新生约二百名。

1.10 由于各种因素的介入,面对评议会的工作因此更为复杂,可是更加困难的却是我们工作的实在定义。我们的调查范围原规定是在调查大学的学术水准及其地位,但在所有提供的意见及所有我们正式或非正式会见的想法,多含有一种假设,那就是要我们对承认南洋大学有限公司为大学及它打算授予毕业生的学位,加以评述。照这样便发生一个“何谓承认?”的问题及更进一步的“由谁或何种权力给予承认?”的问题。究竟是承认南大抑是承认它授予毕业生的学位?要解决这问题的意义之复杂性,可能从研究其他大学怎样被‘承认’及其承认的范围怎样,加以澄清。

1.11 按照英国的传统,一所新大学的设立,必须经过国会法案或皇家特许状准许,才能成为一所公众学校,由于该新大学被规定须接受办理完善的大学的指导(此处指继续采用外间考试制度),它的学术水准和身份,自始即受到保障。又由于该新大学法律上自始即被承认为一大学地位,及继续受到资格较深的大学所监督,而后者往往保证前者将会维持一般认可的水准,年青大学的学位亦从开始就自动地被接受和其他英国或自治邦各大学相等,毋须再度有特别承认之举。

1.12 在另一方面,在美国设立一所大学,比较说来,是自由得多,虽则在新大学开始办理之前可能需要获得一项州特许状。可是在美国并无一种正式机构来承认学校,或为其系论来维持水准。为了使持有大学学位的人士能合格地担任某种职位,他们必须通过再度考试—州考试或联邦考试—尤其是法律、医学、工程、会计及政府服务等专科为然。由各种私人的专门组织加以严格监督,鼓励了大学达成适当水准,而它们对特定学校水准的批准或否定,便作为指望着前途的学生的指南。

1.13 此刻一种混乱的局面乃是南洋大学一方面在设立形式和教学组织上多仿照美国大学形式或仿照中国大学形式之具有美国典型者,一方面新法令赋予约模相等于马来亚大学的法律地位。

第2章 组织、行政及管制

2.1 目前南洋大学所提出的组织大概是附入本报告书附录甲,而大学各种委员会的组织则附入附录乙;凡有关组织方面者,亦应参照南洋大学有限公司的章程。

我们无意对现有的南大组织作详细的描述,但提出数项评语乃认为值得的。大学正式文告尝称“南洋大学的设立乃是模仿中国最佳大学而设计”,但是我们找不出任何证据显示一间好的中国大学是依照有限公司方式组织的。南大的一般组织在任何地方的任何大学无此类似。基金的收集和投资很明显的是由大学执行委员会的财政委员会处理。大学教授在此等委员会中并无地位。其他有关大学的事务是集于行政委员会手中。此刻南大并无校长,虽然我们知悉学校方面曾一再试图聘请一位。南大亦未委任一位代理校长;结果,虽然行政委员会据称是实际掌校长职权,但由于未设立此一职位,使整个组织完全与美国或中国大学不同。尤有进者,财政收支并不属于行政委员会而是由大学执行委员会的财政委员会处理,其账目保管且不在大学而在中华总商会。同样地,据我们所知,建筑事项亦照样地完全不属于行政委员会处理。

2.2 我们认为把财政及建筑事项的管制权从普通的行政委员会手中移开,和既缺乏美国意味的校长又无马来亚大学意味的副校长,乃是导致南大今日极大混乱以及在处理大学事务方面缺少统一性的最大原因。

2.3 目前的行政委员会是由文学院院长张天泽(兼主席),教务长陈宗南博士,理学院院长锺盛标博士,商学院院长徐佩琨先生,秘书长潘国渠先生及四位南大执委杨缙文、黄奕欢、林国仁诸先生及庄竹林博士组成,叶可仁先生则担任秘书。

2.4 所有大学内部事项均由行政委员会处理,但其主席并非南大执行委员会成员;结果,从行政委员会把意见传达到执行委员会必须假手于秘书长。目前南大的秘书长无疑是一位非常能干的人,但由于他不曾受过高深的学术训练,于是遭受到大大不利。我们同时应该指出的,虽则大学里其他委员会是对行政委员会一种补助组织,但一切实际主意皆由后者决定。更奇怪的,秘书长亦系纯粹学术委员会的成员,例如教授资格审查委员会之类。

2.5 在秘书长部门之下包括购置科学仪器,图书,校具等任务,而一切在校内的财政事项并不由中华总商会处理。我们相信秘书长是南大的全日受薪职员,但我们不曾在大学薪津表内确定其薪金等级。

2.6 关于南大的各类委员会,除对于它们事实上有无经常举行会议一点不能获得协议外,我们不欲再作评语,虽则我们所获得的一般印象是这些委员会的工作效率并不显著,且彼此间对各自的任务并无清晰地了解,同时在校内亦无统一指挥系统。一项纸上的委员会是无价值的。果欲使其推动工作,委员会必须把责任负起来且必须按时举行会议,同时还要被赋予一定的权力。举例来说,附录乙里面载明现有的各部门委员会,但从向我们提出的不少证据中,使我们相信有些此种委员会根本就不存在,且该种重要项目若编制授课纲目及课程,统一考卷的给分办法,避免各

项选修科目的重复以免废时间等等,均显然不曾在各院系讨论,或在规定的委员会制度中任何委员会讨论之。

2.7 当我们得悉此种制度目的在于“反对独裁和获取各人的意见”,以及使“行政委员会负起其(校长)实际任务”时,我们的心中非常明白其结果经已变成双重管制,以致陷于极度地无秩序。我们认为在这时候是很不幸的事,因为平衡的权力操于秘书长之手,而他的缺乏学术方面训练乃是阻碍南洋大学趋向健全发展的因素之一。此种半双重管制办法导致了行政方面完全缺乏明朗化,是南洋大学一般最不健全的情形。

2.8 试列举几项例子也许可以帮助使我们的意见更臻明了。南洋大学似乎没有一项等于通常了解下所谓批准预算的东西。虽则据称逐年曾经制定一预算案,但我们无法不作如是感想,那就是说:假使鼓励曾遵循此项通常程序办理,我们理不应待请求而获得一份预算的副本。且未照目前情形而论,虽然各班级上课不久,本年度的预算案仍未曾准备好。论及新旧科学室的设备,就我们所见,诚然有若干实际的缺点;但是我们竟无法确定造成此项缺点的责任应由谁人负责。我们相当明了当设计旧部分时显然不曾请教专家的指示,可是于扩充新馆时究曾与现任教授作何种程度的磋商,实不易阐明。我们也无法发现有关招收新生数目与教授人数及教学设备相关的任何既定政策。此是重要的行政与政策问题,因为鉴于目前的教授分配情形,最近决定于1959年度招收约七百名新生,依我们的见解,乃是不智之举。关于会计组织,虽则较早时期把它设于大学之外不无好处,但我们认为倘使要大学在处理校政方面无所畏惧或无所偏差,欲要避免设立一大学会计处由校长属下的财政委员会处理,乃不切实际的。这是有关购置图书与仪器直接可能作最有效及最快捷供应的代理商采办的唯一保证途径。偿付账单亦应作速办理。人们审查许多账单中的唯一事件,使我们相信在此方面可作不少的改进。我们愿再度建议,在任何大学的最高行政当局,不论是“校长”或“副校长”,必须要负起大学正确事务执行的责任,同时必须采取步骤以保证大宗购办时乃依照招标办法或其他竞购制度行之。当然,需要购买的物品清单务必小心准备好并设法全部购置之。

2.9 我们已经说了很多表示不满意现有行政委员会的组织,内中包括主席与秘书长,有一种有效率的行政方法,尤其是因为这个机构把过份大的权柄放在一位对于大学事务并不十分通晓的非学术人员身上。虽然有人可能会辩称说这事乃与学术水准问题分开,故并非严格属于调查范围内事项,我们必须明朗地申明,据我们的意见,南洋大学的无数毛病可说是直接出于行政管理方法的不善,导致业已造成的误会,组织压力集团,酝酿妒嫉,及渐渐发展及于几乎全体教职员间的争权斗争。再者,我们认为此项情形的演进结果,经已妨碍到招聘及留任第一流教授的希望,至少

一部分影响到目前教职员的服务精神。我们非常失望地发现教职员不但未能提高士气及贯注全神从事学术研究以期排除万难为建立大学适当水准与崇高原理而努力,他们反而垂头丧气,抱着失望的态度,认为对赞助人必须不顾一切去讨好,而那些批评者将会自讨苦吃。这个可能对实在情形有多少夸大。我们不信情形果如是,亦不信这是具有远大眼光与热心而创办南洋大学者的本意,愿见此种情形的存在。我们相信此乃偶然发生的事件,事实亦如此,因为南大是跟着这方针而设立,倘若任何负责南大的人具有办理大学经验的话,是绝不会采取这种方针的。

2.10 不少向我们提出意见书的人认为大学应有评议会的设立,而新的法令中经已有此项规定,诚使我们喜悦。这项设立评议会的提议只或说是现有的教务会议(附录乙)不曾好好的执行其任务。它应该按期举行检讨而非“临时”开会。文告中所说的“会议是随时召开以讨论及决定有关研究……的组织”一点,乃非常使人误解者。据我们所知,南大就从未进行此项有组织的研究。

2.11 我们对于有意设立一正当学术代表机构,且具有全部责任以作有关学术上之决定一层,衷心表示赞同。诚然南大执行委员会之规定广大办学方针,一若英国制度,具有最后责任来批准若干学术评议会所提出有关学术事件的决定,乃正当者,但若大学的学术评议会未曾赋予有关学术决策的权力或甚至容许执行委员会对评议会专家所指示的决策作相反的决定,那就是绝不可能成为一个名符其实的大学。我们认为依此方法办理的大学,其评议会与执行委员会的关系,应该是一种合夥关系;互相合作、互相敬重、友爱与了解。一个大学没有外行的委员们,甚至没有毕业班学生,仍然可以存在及仍然可以保持其美誉;但倘若一间大学没有具有广泛自由来决定学术政策的有组织和负责任的教职员集团,那它就无法生存了。

2.12 我们认为那些职员诸如秘书(或注册主任)和财政员(或会计员),应该是大学的全日受薪职员以协助校长,由校长推荐再由执行委员会加以委定;他们当然应该持有那种专门资格以便适合处理大学的行政。校长应该是评议会与执行委员会之间的唯一沟通媒介;执行委员会对于学术事项非俟其充分在评议会讨论并提出了建议以作执行委员会指南,后者不应采取行动。

第3章 1958年南洋大学法令

3.1 从前一章看来,评议会对大学管理的见解显然是认为继续目前的管理方法将会严重地损害到南洋大学的成长。新的南洋大学法令固然可说是对原草案进步了许多,例如把原来遗漏了将评议会委员会加入为执行委员会一节改正,但目前的法令仍在若干方面有缺点。

3.2 倘若评议会能够集中精神来准备一分完全修正的法令,可能是很需要的。

当然,这是实际上做不到的,因为我们要应付许多其他工作。我们此刻只能把我们对现有法令的一般印象提出,同时把需要并入日后新法令的若干特别建议提出,倘若要使南大能依照办理一间大学的规矩办理的话,但迟早,宁愿早些,这部新法令必须由懂得新嘉坡法律程序和充分明白大学施政的人士组织委员会去加以小心修正。

3.3 我们的印象是:不但法律辞句后面含有的意旨混淆不清,且与大学组织著称的水准或形式不相称。这些混淆的例子列举如下:

- (1) 第六节:这里显然把大学的宗旨和其法律上权力混为一谈。
- (2) 第六节(1)(n):这里似乎很奇怪的要给予大学权力去供给“职员”的住所而无权力去规定他们的福利及纪律。这一条可能解释为使大学可能于大学范围内供给行政委员会主席及副主席,秘书及财政,不问是否义务职,甚至于查数员的住所,而同时不能管制他们的福利及纪律。
- (3) 第六节(1)(p):我们以为实在的大学建筑与土地之用以执行重要任务者,不应拿来作抵押或售卖。
- (4) 我们认为第六节(2)的字句是很奇怪的,我们猜想可能这是新嘉坡法律程序所必要的。但于作初次阅读时,会使好的律师解作为南大保有宗旨与权力在任何地方组织任何东西之可能与南大任务极不相符者,或更进一步把南大现有在新嘉坡的建筑卖去而在世界上另一地方另建一所大学。
- (5) 大学评议会成员亦是南大成员。这样一来,在第七节第二段的“雇员”字句好象是要重新斟酌。一个大学的职员在法律上并不通常解释为“雇员”,而大学的雇员通常并不是大学的成员(这个毕竟是一个字句规定对于同一节中首段所规定的例外。)第二节中的定义表并不包括“雇员”亦不包括“职员”。因此,这第二段的意思便缺乏明了。我们亦感觉“南大职员服务的酬金”一句是不平常的句子,尤其是第六节给予了全权“去签订合约与委任那些需要的职员。”我们倒以为付给南大会员借款予大学的利息应限于现行的银行利率。
- (6) 第廿一节:行政委员会的制定,修改或撤消在其权力范围内的有关任何事项的办事细则。行政委员会亦得在第廿九节中制订条例。我们不明白这个名词有何分别,亦不晓得那一个在法律上占优先;在这里加以说明,是有需要的。无论是细则或条例均应解作为不得与法令或依法令而制定的条款有所抵触。
- (7) 我们注意到第二附表所载的条例只可由南大会员大会获得三分之二多

数通过始得废除。这种规定实是不需要。若干这些条例是和一间大学中的通常实施办法不相调和的。我们不喜欢运用投票方法来处理事务,虽则在商业组织上可能是适合的。假若南大会员患有精神不健全的话(参阅第14条)我们同意他不应当行使表决权,但他的“委员会、管理人及法定保护人”亦均不应享受此权利。毕竟南大会员大会是一个制定及修改条例的重要机构,故在法令之下乃是最高的合法当局。我们对于委派代表行使表决权亦不表赞同。于草拟第廿二条(二)时,校长理应被包括在有权召集大会人士之中,因为他的执行此项权力经载明在第十三节。

3.4 我们已说了足够的话,表示评议会各委员对于应早日制定一宗适合的,可行的及适当修正的法令是很关心的。显然地我们不能修正所有前后矛盾的条文,而我们在上面所指出的特别各点,于全部修正法令时实有小心考虑的必要。

3.5 我们认为在作该项修正时,下列最低限度的修正应于实施:

- (1) 在第八节(5): 于“委员会”后嵌进“的一致表决”。
- (2) 在第十二节(1): 把“将为南大的首长及”一句删去。
- (3) 在第十二节(5): 我们认为这一条文应该被删去。
- (4) 在第十二节(13): 在第一行“委员会”之后,嵌入“与评议会委员磋商后”。
- (5) 第十三节(1): 于“法令”之后,删去其余的一段而补入“其下制定的法规及条例或由行政委员会决议及应有权力召集任何负责当局。”
- (6) 在第十四节: 在每一副句“行政委员会”之后,“插入于与校长磋商之后”字句。
- (7) 在第十五节: 删除“及他可能是一名义务或受薪职员”一句。(从我们已经说过的将会明白我们的意思是: 这个位置应该是由一个受薪的人担任,而这个职员亦应由行政委员会与校长磋商后委任之)
- (8) 在第十九节(1)(b): 我们的意见是应该考虑委员数目从二十名减至十名。
- (9) 在第十九节(1)(c): “二”应改为“三”及应行规定新的(e)条款使所有上述委员有权从南大以外之被认为对教育有专长的人士中,委选不超过四名委员。
- (10) 在第二十一节第二段: 于“法令”两字之后加入“或依本法令而制定的任何条文或条例”。另再加上一条: “并以行政委员会不作有关任何属于学术评议会事务的决议为条件,除非事先给予评议会一个机会去作记录及传达其意见。”

(11) 在第廿二节：删去“授权……委员会”字句，而代以“委任行政委员会常务委员会”字样。

(12) 在第廿四节：在“教职员”与“及”之间加入“教授”。于“证书”之后加入“评议会应有权对于任何事件之足以影响南大事务者提出意见”。

(13) 在第廿九节：在首句“法令”之后加上“或于本法令下制定的条例”。

(14) 在第廿九节(c)：修正为“为委任行政委员会的常务委员”。

(15) 第二附表第廿六至卅及卅二条应删去。(我们根本就反对第卅二条，因为学术评议会应该是一个能够决定本身事务的秩序，开会时间等等的机构。第卅二条(3)所载“主任”二字，想来是一个未发觉的文牍上错误。)

(16) 其他各条之受上述修正而影响者，应作适当之修改。

第4章 教职员

4.1 南洋大学目前分设三学院，每院复分设若干系。各系教师分为四级，既是教授，副教授，讲师及助教。目前各院系教职员之情形如下：

	教授	副教授	讲师	助教	总数
文学院					
院长	1	—	—	—	1
1. 现代语文系	4	3	5	2	14
2. 中国文学系	4	3	4	1	12
3. 教育系	2	1	1	—	4
4. 史地系	1	2	—	—	3
5. 政治经济系	6	1	1	—	8
	18	10	11	3	42
商学院					
院长	1	—	—	—	1
1. 共商管理系	2	—	—	1	3
2. 银行学系	1	—	—	1	2
3. 会计系	3	—	1	4	8
部份时间讲师	—	—	(4)	—	(4)
	7	—	1(5)	6	14(18)
理学院					
院长	1	—	—	—	1
1. 数学系	4	2	1	2	9
2. 物理系	2(?)	4	1	2	7(9)
3. 化学系	3	2	1	2	8
4. 生物系	5	—	1	3	9
	13(15?)	8	4	9	34(36)
全校共	38(40)	18	16(20)	18	90(96)

(2) 理学院

1. 数学系	一名:	一名 教授, 副教授或讲师
2. 物理系	四名:	三名 教授, 副教授或讲师 一名 助教
3. 化学系	二名:	一名 教授, 副教授或讲师 一名 助教
4. 生物系	一名:	一名 助教

理学院新教务人员总数	八名:	五名 教授, 副教授或讲师 三名 助教
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(3) 商学院

1. 会计系	三名:	一名 教授, 副教授或讲师 二名 助教
2. 银行系	五名:	三名 教授, 副教授或讲师 二名 助教
3. 工商管理系	二名:	一名 教授, 副教授或讲师 一名 助教
4. 国际贸易系	一名:	一名 教授, 副教授或讲师

商学院新教务人员总数	十一名:	六名 教授, 副教授或讲师 五名 助教
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4.5 这个意思就是说在很短促的时间内, 不少于三十五位教授, 副教授或讲师及十三位助教, 总共四十三位, 必须找到。据南大一位发言人向记者说(见1958年2月17日新嘉坡《英文虎报》), 这些增添的教授人员乃是非常需要的, 另外据报章报导(3月4日海峡时报)说, 五十名教授人员经已聘定。在常年报告中有关上述事项, 行政委员会主席述及在1957年至1958年度中, 总共增加了人员四十一巴仙。倘若当局能成功地聘得上述的四十八位, 那就是说教授人员增加了五十巴仙以上。不管当局用甚么方法去加聘这些教授, 我们对于在短时间使他们加入教学服务的可能性, 实不能不表示极大的怀疑。尤有进者, 这种重大的永久变动将无法适应供给良好教育于不断膨胀的大批学生。

4.6 南大的教授通常是于报纸上刊登广告招聘; 据说他们是“在新嘉坡、联合邦、香港、台湾及菲律宾的各大中英文报纸”登出。另一方面, 对于适当的人选, 他们亦间或用个人接触方法去聘请。一般来说, 这种征聘制度虽说尚感满意, 但向本评

议会投诉的人尝称：应用此种方法并不是时常正当。我们注意到在南洋大学中并无马来亚大学的毕业生充任全部时间的教职员。

4.7 据本评议会所能探查得出的，教员资格审查委员会在1958年内始行设立，而其条例则在是年10月间始行草定。这个委员会包括了九人至十一人之间的委员组成（可能包括更多人数），是即三学院的院长，教务长与秘书长（均为职务上当然委员），及由全体教师（只限于正教授）依照行政委员会所规定的各院比例人数，用秘密投票选出的代表。前时的一个委员会（或仍然存在）之具有同一任务者，似乎包括了行政委员会主席为其成员。

4.8 依照1958年9月10日的决议，教授的资格规定很高且候聘人必须填报详细的履历与摘要（见附录丙）。理想上，听来是很好。但是目前的环境亦必须考虑到，尤其是因为政局的关系，招聘的地域几乎只限于东南亚方面。再者，于聘请教授时必须完全符合那些严格的条件，是否真正的适当，还是有疑问的。

4.9 几件提交评议会的意见书，曾对教授资格审查委员会的工作是否适当，表示严重的怀疑。在一方面，当局聘请教授时并不时常和这个机构磋商，或虽被咨询而不当是一回事，因此应允聘请了一些不够资格的教授；在另一方面，这处委员会对于责任教授的资格似乎从不加以审查。我们一再听说，若对后者实行审查，可能引致不愉快的发现，同时他们亦建议了其他方法以期改正一般认为最不健全的情事。

4.10 对评议会来说，那是很明显的南大关于聘任新教授是没有一定的政策。在多数情形下，增聘教授的决定性似乎不是出于南大的组织上需要，而是出于立即需要更多的教授人员以应付急速增加的学生人数。在另一方面，便当聘到可能来的新教授好象是针对要招收最高数额新生的一种指示。虽则大家承认南大仍然是一所新近设立的大学，而评议会则认为招收大批学生的渴望及，依此，用“批发”式来聘请教授，并不是脚踏实地设立一间学府的办法。我们充分了解在此地区内对于需求知识及高等教育，有很大的需要，同时也明白南洋大学的愿望去满足这些需要，但是我们怀疑这种显然缺乏深谋远虑和计划，是否会妨碍到全部大计。

4.11 教授与南洋大学的关系是建立在一个合约上面，内中包含十一条件。所有教授的合约期限均是一年；期满后可能续约或停约。除了条件（第十条）上规定万一受聘人员不获移民厅允准入口因而解约外，合约内并无规定任何当事人之一造得送递通知书停止合约效力。这两项事实，那就是短短的一年聘约及在合约满期前无任何义务在规定时候提出通知书，曾大大构成教授间的不确定和不安定的心情。这种情形评议会当然会观察到的，尤其是学校当局向教授发出短促的解聘通知书是被认为最能引起沮丧与消沉的作用。有人且向评议会指出，学校当局于早过年终之前的任何时候（其实是在十二月中旬与该月终之间）发出通知书，将严重损害教授热诚工作的本意。

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4.12 我们相信急急在短促时间延聘大批教授与他们的平均较低落水准之间，是多少存有一项密切的关联，因而逼使对新教授实行短短的试用期及采用一种快速辞退的方法。那著名的不能令人满意的教授资格审查委员会的工作，当然是另一因素。目前的制度是必然会发生一个因循的关系：大学因害怕充斥了劣质的教授、于是坚持互签一年期合约，但由于服务合约期限的短暂以及对教授毫无保障，教授不安的心情是油然而生，以致不论在讲授或研究时完全提不起对工作的兴趣。

4.13 关于任聘期限及对行将满期合约以出通知书的义务两项，评议会曾经收到不少的建议。其中大多数建议一年或二年的试用时期，再继续以另一时期由三年至五年的临时聘用，最后才发永久聘书。至于辞职通知书，则应于合约满前三个月发出——这种义务当然是适用于双方合约当事人的。

4.14 南大提出的许多文件之中，我们发现薪金率一项：

院长	月薪一千元
教授	月薪七百元
副教授	月薪六百元
讲师	月薪五百元
助教	月薪四百元

老师于“第二年”被聘用时，将获得十巴仙之加薪，而于“第四年开始时”将再获得五巴仙加薪。院长及系主任将获得额外津贴每月一百元，其他若干职员亦有额外酬金。最后，老师于合约规定的每周十二小时授课时间外作额外讲授的，将按照每月每周一小时五十元予以补贴。由于评议会不曾收到南洋大学缴送的账目，我们不便说所有发上所引的数字是否完全与事实相符；但是七百元显然是付给正教授的起码薪金。

4.15 如今一般的责难是说南洋大学所付的薪金实在过低，南大创办人之一及现任执行委员会委员杨缵文先生，据1957年华文报纸的报导，甚至曾说过甚多教授离校是因为薪金不够。我们应该指出，四年前（1955年4月）“全部津贴计划”的华校教员可能到达如下最高薪额：

（1）高中三年或高中师范三毕业之“未受训”的教员：达到四百九十元—总额六百三十七元。

（2）第三处师范毕业（华文组师资训练班）的“师范训练”教员：达到六百九十元—总额八百四十元；已婚者九百三十一元五角。

其他在同一情形的亦很容易看出来。在大多数向评议会提出的建议书里，均建议南大应从新调整其教授薪金以符合当地情形；有几个甚至认为有需要把南大的待遇提高到与马来亚大学相等的薪率。

4.16 无论采取那一项解决办法,我们相信爱好研究的教授的可能性不应因他们无力购买必要书本而切断。究竟一个大学教授的为首职责是光是教书还是同时要做研究工作以求获得更高深知识,仍然是一个值得争论的问题。但是有一件事是毋庸置疑的,就是大学教师尚不能—由于任何情形—藉阅读与研究来增进他自己的知识的话,他决不能教导他的学生比课本外更多的学问。换句话说,如果要使教师能教的话,必须要使他有上进研究的精神。

4.17 我们认为聘约上需要各级教授人员每星期定要负担十二小时的“授课负荷”(合约第三条)实在过重,所以我们在前段最后的陈述便成为这意见的一个很需要的序论。我们完全明确在大学课程当中有那些所谓例行功课及一般测验而无需很多时间去作准备的,但那些课程不过是整个课程的一部分。我们对此点经过熟虑的意见,几乎受所有向我们提供意见的人士的支持。一般表示的愿望是教授讲授的时数不应超过每周九小时。由于聘约上规定老师有在校内参加各种委员会的义务(合约第四条),这个钟数似乎是绝对不能更多了。

4.18 我们明白规定聘约第六条的动机。其中载明南洋大学是一个纯粹学术机关而不渲染任何政治色彩或参入任何党见,因此凡有与此精神抵触,不论是用言语或行动表现,可能招致立刻无条件被开除。为了使南大健康精神的生长,我们以为执行此条款时似乎应该特别小心,因为若严厉执行这条款,可能带来与原期望相反的结果,我们感觉在大学权力之内尚有比较单纯与简单的拒绝更积极的方法。教授人员于校外参加政治,本身并不是坏东西。当然,如果有妨碍到大学的福利,那又当别论了。

4.19 我们注意到南洋大学进行大规模的建屋以供给教职人员住居,直至目前都是免费的。聘约内注明(第八条)教员对于分配往屋及家私不能有选择之权。这个,当然,是很合理的,但我们一再听到有人投诉说大的家庭往往被分配到比较小的房子去居住。除了狭促的住屋情形可能是使人愤懑的不断因素—这种心理状态当然不会有助于良好的教学—外,我们认为更严重的便是大多数的住屋均无书房的设备。这又是对大学各方面的工作和生活缺乏小心计划的一个例子,而使其在其他种种缺点方面特别显著。缺乏私室来工作与思维,在文学院与商学院的教授是感到最切的。因为理学院的教授们至少可以躲到实验室去工作。目前南大并无任何私人个别工作室的设备,不但在上述的住家没有,各院的建筑内没有,甚至在有人满之患的图书馆亦付诸阙如。

4.20 聘书第九条规定,南大负担教授,他的妻子及两名子女(半票)的头等船费。副教授与讲师及其妻子和二名子女则负担二等船费,至于助教则只有其本人的二等船费。虽则南大提交评议会的油印文件之一提到于合约届满时会免费把教授

人员送回原籍,但提交评议会审查的一分空白中文聘约内并不见包含此项重要的条件。从摆在评议会面前的陈述书,好象回程船费通常是由南大交付的,但是仍然有几椿事件南大不曾照此履行。这样做法必须认为是一个难以接受的处置。

4.21 由于事实上大多数的教授人员是来自海外,南大的聘书不曾规定于继续任职一定时期后有关海外例假的条款,这必须认为是南大当局的遗漏。许多提出的意见书均提到这点,且建议教授于服务四年或五年或甚至七年后,应给予例假并付给旅行费用。我们要指出的,大多数雇佣大批海外人员的团体,通常皆在雇佣条件中规定于服务一定时期后得享受全薪例假。

4.22 就此而论,我们必须一提的就是在许多的提供意见中都认为有采用一种给大学教授停止讲学例假制度的必要;依照此种办法,回国渡假可以及应该作为进修而利及南大。

4.23 由于任期的短暂,聘书内不曾提到任职最高年龄限度,退休及养老金各点,当然是不足怪的。但为了将来及现任若干教授人员的年龄,对此方面的规定是很需要的。有许多建议曾提议退任年龄规定为六十岁—指出马来亚大学是规定五十五岁—或依照政府公务员的一般退休年龄,接受这些提议当然将暗示若干教授人员之到达此年龄者应准许其退休。至于有关一般的退休,有人对评议会提议只有教授人员完成服务十年者才有资格领取养老金。目前似乎没有条款规定设立一般养老金,公积金或福利金,我们的意见是在不久之将来,应该采取步骤来补救这情形。

4.24 前面几页曾经多次提到研究的需要,我们愿意重申我们的意见:一间大学的声望是由该校教授的学术成就所建立的。我们希望南大当局会改良该校教授目前不安定的状况务使他们能够在安静的环境中研究,同时,并供应必要的设备给他们进行研究工作。

4.25 在这里提出警戒相信不会是不适当。我们经常都可以听到有人建议应该鼓励学生做“创造性工作”及研究工作,但是,大学学生的主要工作是学习—在教授指导之下睿智地,批判地学习,求取坚强的知识基础及透视事物的能力。这种坚强的知识及透视能力最终将能协助他把在学习过程中得来的能力应用到他个别进行的研究工作上,这里所说的最终是指在他毕业以后,当然,在适当范围内,学生本身亦会进行研究工作,例如准备期考工作及在实验室中第一次进行个人的实验工作。目前南大学生实不应该鼓励做更加广泛的研究工作。第一,这一种工作不属,同时不应属于在学学生的工作范围;第二,南大目前还不适合开办研究院,如果南大当局清楚看到目前存在多个院系中的严重弱点,他们将不会坚持设立研究院使本来已够复杂的情况变成更加复杂。唯有等到目前这种快速但通常并不健康的进展状况转为比较正常及具体的发展时,才可以考虑设立研究院的计划。

4.26 差不多来自南大内外的全部意见都强调一项迫切需要,即让南大教授参与纯属有关学术的事务的行政。虽然我们体会到目前南大负责人所遭遇到的种种困难,即在未曾获得专家意见的情况下创办南大,包括教授人才的聘请及学科的筹划,我们觉得我们必须指出一间组织良好的大学,通常把有关学术的各项事务最先交由教授人员处理,行政委员会则仅处理经过教授考虑而提出的种种建议。一旦对设立学院有所决定时,有关这些学院及学系的内部组织(学科、课程、科目大纲等等)则应全部交由各院系职员去处理。

4.27 有关财政方面的事务,最后的决定权应属于行政委员会当局,可是对涉及费用的提案所作的考虑,它却无权过问。

4.28 有关较高职位的任命,应该由教授等人去考虑并提出建议。换言之,凡有关新旧职位的任命以及升级事宜,应该交由有密切关系的教授组成的特别委员会去考虑。很明显的,对有关教授人才的征聘,教务人员的意见应该受到尊重。这件事情不能让一拥有多名非学术界人士,更非教务人士为委员的常务委员会来作决定。

第5章 学科与设备

5.1 为达到大学教育的目的(参阅附录丁),在学学生的课程的拟定必须符合下列需要。第一,在课程表中,一般性的教育和专修学科的时间必须得到适当的分配。第二,学科的安排必须符合逻辑的次序,而学科科目必须细心选择。第三、一般性教育与专修学科必须相互联系,使到它们在专门教育的整个过程中,成为相辅相用的两个部分。

5.2 该项计划的实施,并不是单靠行政机构与学院的正式采用,同时还靠一项难题的成功解决。这一项难题便是怎样寻出一个教授方法,使到学生能够自动思考并发展自己的能力以专门的方法处理并解决他们自己的各种问题。

5.3 于查阅南洋大学的课程后,评议会获得一个结论,就是:南大的课程仍需大大改良。现有课程的缺点之一,便是太过繁重。依照南大的规定,文科和商科学生最少必需得到一百四十二学分,方能毕业,理科学生则必需得到一百五十二学分才能够毕业。由下表可以看出这些学分比美国、中华民国以及菲律宾的大学所规定的高出不少。各大学所规定的毕业学分:

大学	学 院		
	文科	理科	商科
南大	142	152	142
美国	120	120	128
中华民国	132	132	132
菲律宾	120	120	121-123*

(*如以“会计”为专修学科,则需123学分,如以其他科目为专修学科,则需121学分。)

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我们认为南大的毕业学分应减为在一二八—一三二之间的一个数目。我们可以建议把最低学分减至一二八而不是一二零是因为中文(八学分)与英文(八学分)目前是南大第一年学生的必修科。

5.4 现有课程的另一个缺点便是：课程中有许多科目是不应该被列入的，而对获得良好训练不可缺少的一些科目反而未被列入。由于这个报告书有限篇幅不容我们逐条详述，所以我们仅需说明：应该放弃的学科便是一些较适于研究院学生的专门学科或是对学生的一般性教育或专门训练没有关系的一些学科。第三个缺点便是：一些科目并没有依照合理的程序安排。在一些学科中则忽略了先决条件。

5.5 到现在为止，我们仅讨论了各科的课程。远比科目名称及各科的时间分配重要的是：(一)一个学科在整个研读过程中该科内容的完整密切的连贯性及(二)学生学习运用头脑及应用原理，定理及基本技术或技巧以实验或非实验方式来解决各项问题的程度。于重新查阅南大的课程与各科目的大纲后，我们觉得在这个时候对课程内容及教授方法提出我们的意见可能会是不适当的。

5.6 由于每一学科的分配时间有限，同时，为良好教育着想，宁可放弃纯属描述及讲解事实的学科的传统的内容，而从头至尾集中精神使学生精通基本原理，定理及技术及学习怎样应用它们以解决问题。为了要得到精深的认识，必须牺牲广博的范围，而每一学科应该着重较后能够在大学或离校后用得着的科目。学科中所的事实及所举例子应首要地作为学生应用原理定理的根据，或用来解明一个原理或实验一个定理。我们因此认为应细心重新检讨现有课程并作必要的更改，务使经修改的课程，一经学院员生采纳正确地实施，当能符合本章于开始时所指明的各项需要。

5.7 我们现在谈到建设方面。南大获得可供未来作大规模发展的广阔校址应归功于该校之创办人。在短短的三年时间内，南大已经依照它的建设计划完成了图书馆，文学院及商学院各一座，理学院两座，百余间屋子组屋供其职员居住以及多座学生宿舍以容纳该校为数约二千的学生。以整个来看，该校的建筑物确是非常的动人。它们增加该大学场地的美观。不过，一经细心观察，便发现许多建筑物似乎是未经适当计划匆忙设计的。例如，图书馆建筑中有相当大面积的空地被浪费，然而拨出供放书架及作阅书室的地方却又不足应付大学目前的需要。新的理学院建筑刚刚完成，可是，特别设施及其他装置却仍似不充足。好几座学生宿舍的窗口本来应该向南或向北，却被发现向东和向西。还有，这些建筑物建得非常坏，虽然它们是于最近完成，可是，有些已经显示破裂损坏的痕迹。这种迹象显示大学当局、绘图师、建筑包工缺乏周密计划及监督。我们因此认为今后在设计一项新的建筑物之前，必须设立一个委员会以研究实际需要并草拟报告。这项报告应该作为建筑设计的根据。这一个委员会的委员应该是一些对该项事务有经验与认识的人士。

5.8 南大已经用了一笔相当数目的款项购买书籍, 定期杂志, 实验室装备、仪器、工具及化学用品。再次, 购买这些物品之前亦似缺乏周密的计划。为使南大程度提高至与第一流大学相等, 必须供应较多及较好的设施以利实验性与非实验性学科方面讲授。我们认为必须向校内外专家征求意见以列出必需添置的实验室设备、书籍、期刊物的名单, 以便能够获得足够的设备以供教授在校学生。

5.9 前一段并未提及专供研究用的设施的需要。可是, 这并不应该被解释为我们低估大学教育中研究的重要性, 或我们认为应该使南大永远停留于和美国小规模的文学院一样的水准上。相反的, 我们一致相信在一间大学中, 良好的讲授仅能在发问与研究的气氛下进行; 为吸引并保留够水准的职员, 供进行研究的设施是很需要的。同时, 我们认为应该优先供应对教学有助的适当设施。

5.10 我们认为语文系太过注重文学评论而忽略了更重要的语文精研。

5.11 关于中文研究, 我们所遭遇的困难便是: 到现在为止, 我们仍未有世界公认的标准以供我们衡量它们的内容及方法。我们认为该系的教授有许多对古典文学及文学传统是有着很广博的认识的。但是, 由该科大纲看来, 近代学者的研究成果, 好象并没有得到充分的注意。

5.12 我们同意马来文组迫切需要在广度及深度上作改良及扩充, 并应尽量利用当地所拥有的大量材料。

5.13 我们深切地注意到目前存在着的对设立个别教育系的用处的各种不同观点。以我们过去所得经验, 我们必须表明我们完全主张采用一种制度, 使学生于念完一些专修学科之后, 可以在相当短的时期内取得额外的教育文凭。我们因此主张在1959年末, 教育系应改为后育组以供给获得这种文凭的必要训练。

第6章 考试

6.1 一间大学如要得到优良的学生, 最普遍, 同时可能是最好的办法便是规定每一个有意进入大学的学生必须参加一项入学考试并获得及格。这种入学考试, 如果正确地施行, 可以挑选出有读写能力, 学习技巧以及大学所需的在学习方面的广泛准备。因此, 一间大学对学生录取的条件必须细心规划, 保证被录取的学生拥有适当的准备并符合大学的需要以及使学生的教育经验保有调和的连续性。

6.2 南大是依照南大章程录取新生。有下列资格之一的学生便可以参加入学考试:

- (一) 高三文凭或三年制的高师文凭。
- (二) 两年制的高师文凭及超过两年的教学经验。

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(三) 剑桥九号文凭及有相当读写中文的能力。

参加南大主办的先修班而于该课程结束时参加考试获及格的学生可以不必参加入学考试直接进入大学。

6.3 我们认为一小部分不够资格的学生而设的先修班应该尽早放弃。如果认为在一个学年内,大学未曾作准备同时也许对这个特别的工作并不热心的教授,能把一些低级材料改变成为大学人才,那便是很大的错误。对于教职员,这是一项生疏的工作;对于大学当局,这是要增加开销的一件事情。应该同时提到的是:在过去,中国的公立和私立大学曾经开办过先修班但被认为并不实际。

6.4 我们认为重要的是:入学考试的出题范围应该细心准备,列出适合的课本及补充读物使应考学生清楚知道他们应该作些什么准备。出题的主要目的应该是考验应考学生是否有思考能力或应用公式或普通原理以解决问题的技巧。

6.5 我们认为录取新生应依照下列方法:

(一)每一院系录取新生的最高数目应视各该院系的职员数目及设备而定。

(二)如果合格的新生的人数太少而位置又多,那么,尽量容纳其他的学生。

但不应该超过最高额。

6.6 如果所有位置不够容纳全部合格学生,那么便应该按照学额录取学生。

6.7 我们认为每一个学生于被录取后,应该分别由大学中一名教授照顾,该名教授将充任他的顾问。顾问的责任便是协助该生挑选科目,说明该学科的需要,并代为安排一个良好的学习节目。而学生的首要任务便是应付学科的需要,务使他们不致到第四年时不能毕业。这一种学生顾问制度可能于较后时发展为正式的导师制,这当然要看是否有可能获得必要的合格职员。

6.8 我们同意,为了使南大的毕业生考试和其他海外大学的同类考试达到划一的水准,必须设立一个正式的考试委员会以拟定考题并批阅考卷。我们认为主要的是应该采取目前马来亚大学的校外考试制度。

第7章 学生生活

7.1 大学的几年生活,可能说就是从少年时代转入成年的过渡时期。在这几年里一个大学生从本身经验去学习怎样与别人共同生活,共同工作;因此,一个健康的大学生活,实在是学生服务社会,领导人群的好准备。但是,良好的大学风气,养成难而破坏易。为了这缘故,学生人数之增加,就不宜过速。现在人类服务社会的精神与领导能力,日觉重要,所以在准备的过程中,其经验范围就不应受到地理上、种族上、语文上、或宗教上之狭窄限制。

7.2 按照上述的道理,我们认为重量不重质,大批地录取新生而未曾详细考虑这措施对课程上以及课外活动上所可能发生的影响,乃是不健全的政策,无论多增学位的须要是怎样大,亦无论大笔学费的收入对弥补财政的短绌有怎样的裨益。若是开源无路,经费不敷果真无法避免的话,则增收学费的办法比多收学生为较可取。反对者或认为增收学费等于增加清寒学生的负担,可是,大学方面可以多设奖学金与助学金等。此款如不能求自捐款,亦可从增加的学费中拨出。有些外国的私立大学,以能在大量地,迅速地增收学费后复更大量地,更迅速地增加资助学生的助学金而觉得自豪。举例来说,美国哈佛大学的学费总收入在二十五年内,从美金三百三十一万四千二百零七元增至美金一千一百五十九万五千六百八十八元,而同时大学支附学生的助学金亦从美金五十万元增至美金六百万之钜。换句话说,学费增加三百五十巴仙,但是助学金已增了一千二百巴仙了,现在哈佛大学给予学生的补助金达全部学费之一半强。

7.3 设立多项种类不同的奖学金,助学金与贷金等的好处,就是它给予各种的学生一个进大学就读的机会,使大学生生活多姿多采。共同生活,共同工作的结果,可使不同阶级,不同宗教的学生之间,自然而然地产生互相了解与尊重。一间大学如果学业成绩优良,而同时亦能给予学生愉快融洽的课外生活,就不特可以使富家子弟没有出洋留学的需要,甚至到外国攻读,反不如在本地就学的切合实用,因为到外国读大学的青年男女,无形中就丧失了机会去预先尝试未来社会的滋味,这便是将要协助建造起来的更美满的社会。这种具有教育性的经验就非外国大学生生活所能充分地给予我们的青年。当然,大学毕业后的专科训练或深造又不同,因为到外国作专科研究是有相当好处的。天资特厚的大学毕业生应该可以遗送到外国继续研究,生活费可由本人家庭或大学所设的研究基金维持,大学将来须要教学人才,便可从他们之中聘请,那么,高等教育就不必全靠外来人才维持。

7.4 话又回到大学生生活来。关于这方面,切要的就是适当的宿舍与教职员的指导有方。很多大学为了想把通学生也纳进大学生生活圈里,每每感到须先有学生会所的设备,虽然宿舍之供应尚觉不足以应付需要。这座学生会所,在学生生活全部发展之后,就成为学生课外种种活动之主脑,所以它是一项基本需要。除了具备这类建筑,同时负责其修理外,一般来说,为了要培养学生的责任感与独立精神,最好还是不要给津贴予学生会或其属下种种式式的协会。学生活动之指导人员,最好是个年青的人,同时,协助他工作的应有一个由体育教练、宿舍舍监、大学教授以及学生代表所组成的学生福利委员会。有关支配大学生生活的各项规则条例,应从长细议,抵触者应受到公平坚决的处罚。检阅学生意见这一举是不切实际的,同时也难于实行。目前南洋大学生刊物,可说非常可观,虽然在读者看来,在刊物上对师长或同学

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的批评，似乎尚须较大约束。诸如此类的轻率鲁莽行为，往往须要教职员更耐心地更精明地谆谆善诱，使年少力强充沛盈盈的精力可以陶冶成一种有了涵养的智慧。那时便能有所领悟，认识一个人在礼貌上，在仁慈上所应尽的义务，同时也明了正人君子的风度，与谦逊自守者的尊严。

第8章 判定

8.1 于提出本报告书的这一部分时，我们愿意指出我们故意避免提到我们在和南大校园，赞助人，职员，教授及学生的极其稀少及短促的接触中所见到的愉快及令人钦佩之特点。这些特点并不需要改良。既然我们是被邀请考虑学术水准及提出改良建议，我们仅把我们的判定限于下列数点：

- (一) 我们所得的总印象是：南大扩展得太快而于招生前长期未作连贯性的精密计划。
- (二) 南大目前的组织及行政方法并不符合大学型的现代教育机构。
- (三) 实验室与图书馆的设计水准并不符合大学在学生适当训练的需求。
- (四) 我们认为大部分的教授人员不够资格给予大学学生适当的指导。该大学的雇用条件似乎阻止了许多较够资格的人士接受该校的聘用，而经为该校聘用够资格的教授则感觉沮丧而不能振作。
- (五) 结果，该大学便缺乏学术性的研讨气氛。
- (六) 在课程方面，教授及学生双方都似乎有太过繁重之感。南大所需的学分超过通常的需要，学科方面则显示缺乏连贯性及均衡，而且时常缺少整然的程序。一些主要的学科被遗漏而一些没有需要的却又包括在课程内，各系教授如能对全部学科重新作彻底的检讨，将使所有学生得益。

8.2 由于上述的制定，我们很遗憾我们必须对南大的学术水准作不利的报告。本着良知，我们再度表示遗憾，我们目前不能向新嘉坡政府建议承认南大学位与其他经被承认的大学的学位相等。

8.3 虽然我们未能看到学生们的实际工作，可是，我们觉得我们必须报告：经我们会见过的学生的智慧，求知欲，热忱及进取心给我们一个很深刻的印象。政府对南大的前途及南大学位的承认无论作怎样的决定，必须有一些过渡性的安排以保证这些学生不需担当这项罪过。

8.4 于提出这些判定后，我们必须说明这些判定并没有减少我们对南大创办人之崇高理想的钦佩。他们创办高等学府的宗旨在于遵循中华传统以供马来亚学生最好的训练。至于他们的作为尚未达到他们的宗旨，并不需要感到过分的失望：一番新努力将会带来新的成就。

第9章 建议

9.1 如果没有适当的财力,下列建议不能付诸实施。

9.2 我们建议设立一个拥有不超过七名委员的特别委员会,该会委员将包括南洋大学及政府代表,以检讨我们的报告书并决定我们认为需要改组的范围与程序。

9.3 我们建议于详细考虑本报告书第三章所提各点以后,修正1958年南洋大学法令。

9.4 我们建议立即把目前全职的教授人员的薪金提高约五十巴仙,作为过渡时期的一个步骤。目前的每年重新签写聘书的制度,应该暂时保留至整个大学完成改组为止。在新合约下未被重聘的现任教授人员应该于合约期满时获得他们自己及家眷的回归原地的旅费及相当于四个月薪金的退职金。

9.5 我们建议1960年度录取新生的数目应该比以前几年大量减少,而受到改组严重影响的院系,更不应该录取任何新生。

9.6 我们建议特别委员会的第二步工作应该是拟定全部教授人员及行政职员,包括校长的新薪金率及雇用条件而由1960年正月1日起生效。新薪金率不能自动适用于现任教授人员;依照下面所说明的步骤在新薪金率下的所有位置将重新登报征聘。

9.7 我们建议特别委员会应进一步考虑并决定1960年度南大来自私人及官方的经保证的入息;同时,有鉴于拟定全年预算的需要,必须确定有意聘请的教授人员的数目。该预算不仅须拨定适当款项作教授人员薪金,且须拨定充分款项供该大学各院系的适当经常费用。我们认为与其设立许多不够教授及设备不足的院系不如设立较少但教授充足及设备良好的院系。

9.8 我们建议校长的位置应该于教职员数目与大学的全年预算有所决定之后尽速登报征聘填补之。特别委员会应该采取步骤委任一代理校长处理例行公事,直至新校长就任为止。

9.9 我们建议于新校长就任之后,在本章第七节所提的各项位置应该按照次序先后登报征聘。

9.10 我们建议于征聘学术人员时,包括大学校长,应该征求校外学术专家意见。现任教授人员都可以申请所有的位置。

9.11 我们建议于新校长就任及学术评议会建立之前,应尽量讨论南大目前面对的财政及学术方面的种种问题,同时,逐步减少学生的数目。

9.12 同样的,我们建议不应再计划兴建新学院或设立新学系,同时,有关把四学年制改为三学年制及实施荣誉学年制的两项建议应该暂时放弃,直至改组完成为止。

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9.13 我们建议行政机构及特别委员会应于新校长就任以后解散。

9.14 为了要尽速提高南大的学术水准,我们建议南大当局应采取马大的校外考试制度。没有理由为什么不能拟定一项方法同时借用马大全部或一部分的校外考试的考试委员。

9.15 再者,我们体会到,由于上列建议,南大必需进行改组,南大学位必须等待数年方能由一有资格的评议会向政府建议承认进入政府机构服务之合法资格。由于我们感觉到使目前的学生再度受罪,我们因此向政府建议暂时放松进入政府机构包括教育机构服务的资格,使南大毕业生可以于经过面试及参加公众服务委员会认为需要的一些考试而获及格后,进入政府机构服务;这些毕业生的最初薪金可由公众服务委员会决定。至于他们将来的升级,甚至升到最高位置,则全靠他们个别的表现。

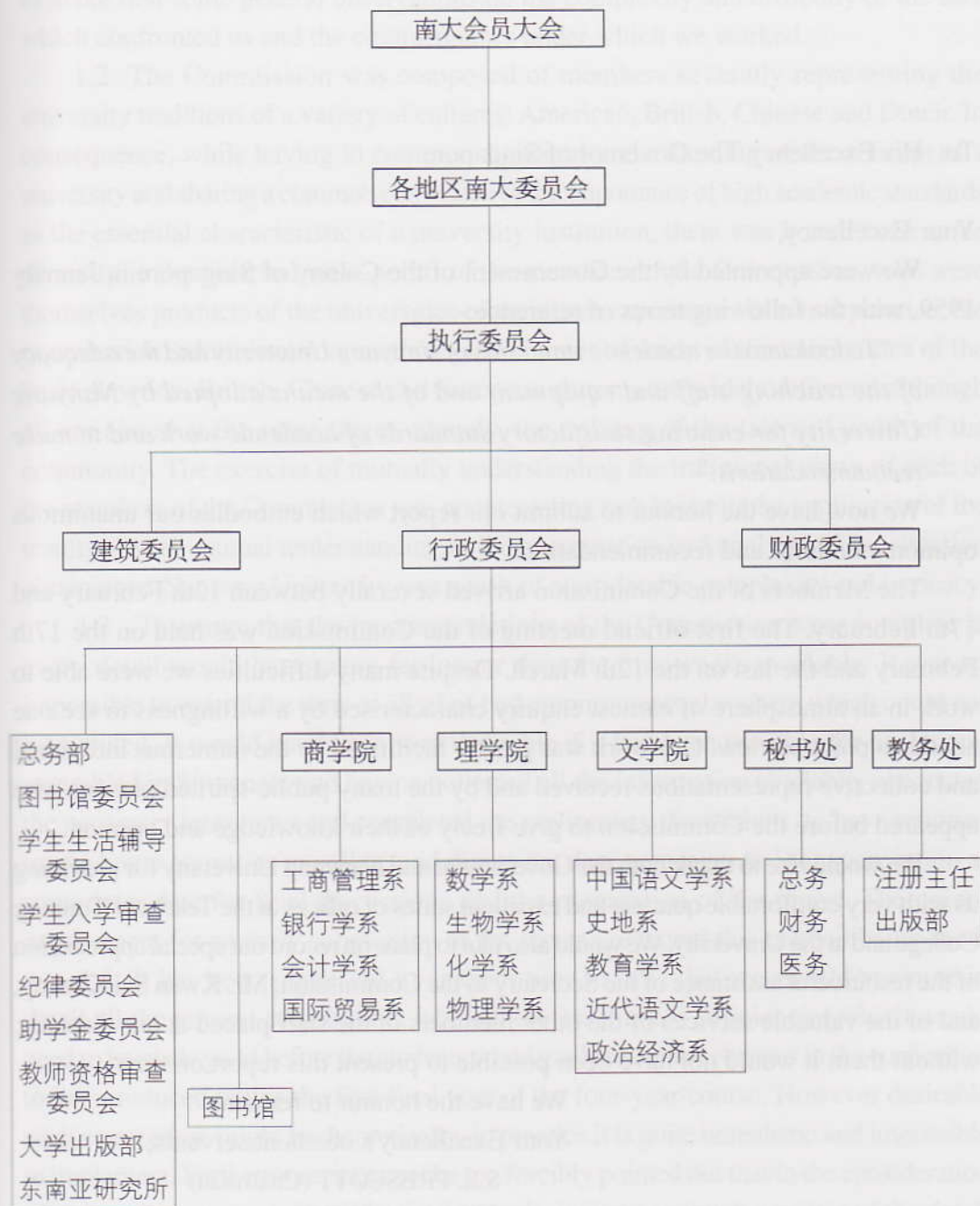
9.16 我们继续建议鼓励新嘉坡的两间大学设立一些非正式的校际的学术性研究会,以促进友谊并鼓励合作。

9.17 我们希望目前存有的两间分别的“华文大学”及“英文大学”的思想将会由两间马来亚的大学的思想取代之。这两间马来亚的大学,一间的教学以英文为主,而另一间的教学则以中文为主。这两间大学的共同理想便是以多种语文,良好的学力及知识上的联系,建立一个相互了解及尊重的和谐社会。我们相信,这样一来,目前由于教育上的隔阂而存有的互相猜忌,将在独立与自由下成长的新团结中完全消逝。

(新加坡政府文化部刊行,1959年)

南洋大学组织表

(南大提出)



南洋大学检讨委员会报告书

(1960年2月9日)

魏雅聆等

检讨委员会委员名表

主席：魏雅聆

委员：翁姑阿都阿芝、符气林、黄丽松、廖颂扬、连士升、B.R.史林尼哇山

秘书：谢哲声、关世强

弁言

敬启者：

我们1959年7月23日由台端委派为检讨白里斯葛《南洋大学评议会报告书》的委员，以审定认为必要改组的范畴和程序。现在谨将草就的报告书呈阅。

首次会议于1959年7月27日举行，末次会议则于1959年11月20日举行，委员会开会，访问南大及会见各人士的详情，经列入本报告书的附录，各种有关南大的重要事实的图表，亦一并附在报告书中。

从我们的检讨范围来说，可以预料到，我们草拟报告书时必然会时常参照《南洋大学评议会报告书》，尤其是有关该报告书的判定与建议两章。事实上，由于该评议会把调查时所有文件均加以毁灭，我们发觉在我们自己的调查中有需要对经已调查过的事件再来调查一遍。我们发觉这样在我们提出一项独立方式的报告书，比较方便。我们相信，我们的报告书跟前评议会报告书的异同点何在，于看了我们的报告书之后，自能分晓。

我们对于在我们工作时给予协助的人士，谨致谢忱。我们尤其要对检讨委员会联合秘书谢哲声教授及关世强先生以不辞劳苦的精神和专家的知识来使我们的工作更加便利，特志我们深厚的谢意。此致

新加坡教育部长

(签名) 魏雅聆(主席) 翁姑阿都阿芝
符气林 黄丽松 廖颂扬
连士升 B.R.史林尼哇山

1959年11月21日

第一章 绪言

一、南洋大学是为了特定目的而设立的,即为应华文中学学生进修高等教育的需要。这种需要的产生,是由于华文教育从小学向中学阶段急速扩展的结果。根据官方报告,在1941年中,新加坡与马来亚联合邦华校学生总数为121,200名。到了1953年,就是发动筹办南大到了最高潮的一年,这个数字已增至319,057名,其中中学生占了22,310名。目前,光就新加坡一地而论,其总数是140,661名,其中18,388名是中学生。

二、以前华文中学学生进修高等教育的机会,大部份是由中国各大学所供给。随着1949年后中国政局的变更,这项主要的出路更完全被关闭了。至于马来亚大学,只有那些能够适应入学的必要英文程度的学生才有机会攻读,同样地受着语文困难和留学费用浩大的限制。为此便感觉有创设另一所当地大学,以收容华文中学的毕业生的必要。南洋大学也就是在这样的情形应运而生。

三、到今天,南洋大学已进入了第四年度,且其第一届毕业生不久便要踏出校门。此刻南大共有1,700名学生,128名教职员,以及拥有耗资1千2百30万元的建筑物和设备。南大代表着一种理想的实现,而为这理想的实现,各阶层人士曾热心地捐献。这项需要高等教育以供来自华文中学学生深造的事实,至今仍然存在,而导致设立南洋大学的情况,也并没有改变。

四、我们认为我们的工作是在决定采用何种措施以便在未来的三四年间改进南大,使它能够在提倡本邦高等教育上作有建设性的贡献。我们一致同意,在此期间内,应采取步骤,把南洋大学和马来亚大学的关系紧密联系起来。讲到这种联系的办法,最好是由包括两间大学及两地政府的代表去厘定。讲到这种联系的性质,我们的意见却不能一致:翁姑阿芝和史林尼哇山两君认为南大应早日和马大合并,其他的委员们则认为本邦有需要一间以上的大学,但以那些大学能具有马来亚意识内容为条件,而且这两间大学的联系应能达到最大的效益。然而委员会确一致认定,到了改组末期,南大该能发展为一所让来自马来亚各种中等学校的学生均能有机会受教育的大学。

第二章 行政

五、南大的行政是从许多当地华校的管理制度中承袭下若干特点。这种制度就是由捐助学校经常费的人士或其代表去组织董事会,它不但有权委任及辞退教职员,且有权处理学校的教育政策。诚然,学校董事会如具有高瞻远瞩和良好意识的人士,未尝不可以使那间学校达到高度的效能水准。但反过来说,由具有良好意念但却缺少教育知识的董事会来干预学校的用人和教育政策,以致严重地阻碍了学校的进展,也并不是罕见的事情。

六、我们的见解是：一所大学的非常复杂的组织，决不是这种行政制度能办得好。一种公认的良好大学行政制度，该是包括有一个理事会(Council)和一个教授会(Senate)的组织，让前者有总揽一般政策的权力，让后者去负责学校事项。我们认为这个制度是最适合于南洋大学，因此，建议立即采取步骤，按照这办法去改组行政机构。

七、我们赞同南大设立一个评议会(Court)。这个机构可以用来沟通包括成千的积极支持者的南大会员大会与人数有限的理事之间的关系。评议会亦将用来使公众人士参与维持与指示南大的范围扩大。至于这个机构的权力与组织连同大学当局的其他权力，则于我们所拟议修正南洋大学法令中规定之(见第八章及附录A)。

八、为使跟当地的术语相符，我们认为名义上的大学首长应被称为校长(Chancellor)。大学的行政与学术者首长则被称为副校长(Vice Chancellor)，其主要行政与财务员则分别被称为注册主任(Registrar)与会计长(Bursar)。我们同时认为名誉职位如名誉校长(Pro Chancellor)之类，亦应行设立。

九、我们认为委任副校长是刻不容缓的事项。可是正式的委任恐怕不是短期内所能办到，因为这个职位必须广事刊登广告，且必须以最大的小心和缜密考虑，然后方能作最后的选择。由于这项理由，我们建议就当地具有适当资历且在教育上有经验的人士中立刻委任一名副校长，在此过渡时期代行副校长职权。

十、委任注册主任之事亦应尽速。由于这位职员是直接在副校长之下工作，且负有行政与学术事项职责，他应该持有良好的大学学位及适当的行政经验。关于委任注册主任及其他职员的规定，已载明在附录A的大学法令修正建议中，至于所有主要职员的职责，则在附录C中详细列明。

第三章 财政

十一、截至现在为止，南洋大学几乎全靠公众献捐和学生学费来维持。我们不认为这种事情是可能或需要无限期的继续下去。我们的见解是，靠公众献捐来维持学校的经常费，乃是没有十分把握的收入来源；为证实我们的见解，我们可以指出，我们曾经发现过去几年间的捐款有很大的变动，而其中不少答应捐献巨款的人士并没有实践他们的诺言。所以更适当的方法，是把那些收到的捐款划入基金中的一项。

十二、为上原因，我们也建议政府应按照下列方法辅助南大：首先拨款补足预算不敷的数额；其次，供给助学金予家贫而学优的学生及供给奖学金予成绩优异的毕业生，俾他们能在当地或往海外深造。此外，政府也可以考虑拨给辅助基金，以配合公众人士的捐献数目，藉以鼓励及维持公众人士对南大的支持。

十三、我们对于编造适当的常年预算表一事，认为非常重要。我们甚至进一步主张，把三年的全盘预算编造好，载明逐年的详细数字，且务须于每年财政年度开始前六个月提出通过，然后订定计划，以便大学所有的活动均能按照预算来进行。这个预算将显示预定计划的清晰面貌，使行政和教务人员能够按照计划，以最有效的方法去准备他们的工作。此外，有了这种预算表，将会推动及维持政府与公众人士的信心，以及使他们明了大学的有计划和有次序的发展情形。

十四、我们审查过南大的财政情况，且草拟了一个今后三年的全盘预算，载在附录C中。这个预算是根据我们认为必须改组因而可能产生的收入估计。从这个预算案可以看到估计不敷的数目：第一年为60万6千5百70元，第二年为67万5千3百2元，第三年为74万5千34元。我们建议这些不敷额应由政府补足。

十五、我们经把财政条款包括在我们所拟议的修正的法令中。这些条款中最主要的，便是设立一个财政委员会去负责厘定大学的常经费及长期发展计划而使它置于健全的财政基础之上。我们同时建议早日委任一位会计长，对副校长负责大学的日常财政事务。我们认为会计长应该是全部时间受薪的职员，且必须具备会计的专门资格。

第四章 教职员

十六、南洋大学教职员的组织大部份是仿照1949年前中国大学的方式。在每一学系里，设有系主任一名，其下便是许多位教授，副教授，讲师及助教。这种组织跟同样规模的英国大学有所差别，因为后者是以一名教授为其学系的首长，其下分为高级讲师，讲师，助理讲师及实验室助理。

十七、从教职员所供给的资料看来，我们发觉在南大的教授中，只有二十巴仙是获有博士学位，而在副教授中，只有十七巴仙是获有博士学位及四十巴仙是获有硕士学位。这里我们愿意一提的，就是在美国（许多南大的教师都从美国获得他们的资格）训练硕士学位，通常包含高级的课程，旨在把学生引入研究的门径。虽则在有些大学里，论文是获取学位必要的条件，但是这项工作的性质多半是学术上的练习，而不独创的研究，且多半是没有印行。同时值得注意的是通常经过两年或两年以上的精密和有效的研究而获取博士学位，成了大多数英共和联合邦或美国任何大学聘请讲师或助理教授的必要资格，尤其是聘请自然或社会科学的教师更是如此。

十八、大学教师持有的学位，于估计他的学术能力时，固无需过份重视，但他必须能够从他的已发表的著作中，表现他从事独立和独创研究的能力。这项学术才干的能力，证据在南大的许多高级教师当中是缺乏的。据教师本身所供给的资料，所有著作大部份是翻译、书评和通俗文章，而极少的作品表现出独创学术研究的结果。我们深切地觉得，南大应罗致更多持有高级学位，富有经验及积极从事学术研

究,且其学术水准经由其刊印的专门著作表现出来的高级讲师。

十九、要改进南大的学术水准,重新评定现有及将来教师的资格是很重要的。因此,我们建议立即由临时理事会(见第57节),在校外学术专家协助之下,设立一个教师遴选委员会,以审查现有教师及行将聘请来校教师的资格。这项评估的制度将有助于维持一个相当水准以便与世界上其他地方的著名大学相伯仲。此外,还可以藉此办法排除一些学术以外的烦恼问题,诸如讲交情,拉关系,而这是被指称在过去任用人事时曾含有的因素。我们认为若不执行这个建议,将使其他改进南大学术水准的意图徒劳无功。

二十、目前南洋大学的教师聘约是一年为期。这种制度的好处,便是更换人员时比较容易实行,但是若继续保持这种办法,将无法使教师安定下来去计划长期的工作。他们应该享有若干安全的措施,以便计划一个安定的课程及研究的纲领。因此,我们建议将来的教师聘约应该起初以一年为期,其后便继以三年,再后便是永久性的职位,而退休年龄定为六十岁。倘若理事会认为某教师身心健全,得权宜的把退休年龄展至六十五岁。

廿一、我们的意见以为目前南大的教师薪金率未免过低,它似乎应该跟当地毕业生在其他职业上所得入息更为接近才对。我们亦赞同继续实行目前的公积金计划,但建议对永久教师给予增加利益。据我们所知,教职员是由校方免费供给宿舍及一切水电。我们反对这项制度,因为它掩盖了他们薪津总收入真实性,并且把同级教师分别安置在不同式的宿舍,往往会造成不满。此外,我们对于供给完全免费住宿一层并不曾发现这种先例。因此,我们建议大学当局应响应教职员按照宿舍种类鸠收同等数目的宿舍及水电费。关于薪金,公积金及屋租的详细建议,载明于本报告书附录B中(请参阅本章末的附录一)。

廿二、我们认为教师应依照每一学系规定的人员来征聘,这是很重要的。至于系主任,则应由富有资格及经验的人员充任,庶几他能够指挥及联系该系各组的工作,并对教授会负责办理该系。为了这项原因,我们对此职位经建议一个分别的薪金率,而且认为应登报征聘。

廿三、我们查悉,占了极大比例的教师是来自台湾。在运用华文作主要教学媒介的办法存在的时期,这种偏重的现象恐怕是免不掉的。我们在下一章里对南大运用英文为教学媒介一节,作了若干建议。当学生的英文程度一年一年进步时,较高年级的学生对于需要运用英语教学的学科应毫无困难地运用英语进修学业。况且大多数学系里使用的课本是英文原著,且它们是唯一可以获得以供研读的课本。这样一来,我们更达到一个结论,就是语文的困难毋需成为限制征聘教师的条件,而南大应从其他来源去寻求它的教师。为了从更广大的场所去吸引师资以及鼓励与其

南洋大学走过的历史道路

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他大学实行交换教授,必要时对教授应给予特别津贴,作为短期间吸引人才的办法(请参阅本章末的附录二)。

廿四、我们认为在当地征聘大多数教授应该是南大的最终目的,这并不是说在外地聘请师资的办法应该完全停止,因为和外地不时作新思想的交流,是任何大学所需要的。可是为使一所大学更有效的存在,它必须和当地人民有共同的愿望,要达到这个目的,那么聘请教授时应以本地人才为主。依照这个宗旨进行,我们于是建议南大应该采用有效的计划去聘用可以罗致的当地人才担任教师,以便建立一个当地教职员的核心,同时吸收它的最优秀的毕业生担任助教,并鼓励他们于短期服务之后,再到当地或外国大学作高深的研究。

付给教师较低的薪金,意味着他们是从廉价市场中聘请得来的。这样一来,低素质的烙印是逃避不了的。尤有进者,除非付给较高薪金,否则想要聘请一些可能在四年之内把南大的情况逐渐改进的教师,未必可能。这种不可能性的程度将会增加,因为几年后南大在其扩充教师计划中,大概宁愿聘请更多低薪的教师,而不愿聘请相等数目的高薪教师。我们同意,要吸引台湾以外更广大区域的申请人,较高薪金乃属必要。

附注: 翁姑阿芝与史林尼哇山医生认为南大的教职员应享有如马来亚大学同样的薪金,后者目前付予已婚教职员的总月薪如下:

教授	……\$1,900 至 \$2,100
高级讲师	……\$1,530 至 \$1,780
讲师	……\$1,107 至 \$1,580
助理讲师	……\$ 966 至 \$1,059

附注二: 翁姑阿芝与史林尼哇山医生认为如果他们建议的薪金被接受,特别津贴便不需要了。

第五章 课程

廿五、南洋大学的课程,显示了缺乏有系统的计划。各有关课程之间的联系不够,且课程的编排,似乎颇受个人经验和偏爱的影响。若干课程的开设,并没有参考一般的先决条件或同一领域内的其他学科,且时常理发以适应意想不到的师资情况。另一个不能使人满意的特点,便是分派学科给不曾对该门功课受过特别训练的教师去担任,因而加重有关教师的困难,从而使学生受到严重的不利。这些缺点,无疑地有些是由于南大急速发展以及不安定的师资状况的结果。要消除这些缺点,应该从实行我们的建议,即由能干的各系主任去编排固定的课程做起。我们要强调需要一个好好计划的课程,课程编妥之后,跟着要把它实行,以便保证所开设的学科能保持相当的固定性。

廿六、南洋大学采用的学分制，是跟随中国大学的制度，而后者又是仿照美国的制度。根据这个制度，一个学生按照规定课程上课，获得足够的学分便可毕业。一门每周上课三小时的功课，修满一学期经考试及格后便可获得三学分。同一时数的实验工作，则给予一学分。南大目前一年分作两学期，一个学生除了主要必修科外，无需在特定一年内修毕所有学科以便升级。其实，他可以在以后数年内，补足所缺学分。根据这办法，我们查悉有些学生虽在最后一一年班里，仍需完成他们第一年的一门或两门功课。

廿七、分配给一年级学生的学分数目显示过多而不相称。这样一来，不但加重了第一一年级学生不合理的负担，而且使有些学生原应在最后一年多习几门功课，结果反而少修。学科科目方面的分门别类，亦显得过份的细致，致使学生模糊于细节中而未能清楚地把握着在广大范围上的基本概念。所以，我们认为首先要把第一一年级的必修学分数目减少，其次应把必修学科重新调整，以便编成较少的科目而又涉及更广大的范围。这种办法对于文学院及商学院的课程尤为适用。

廿八、拟议减少第一一年级的学分可从语文科的十六学分——英文及中文各八学分——着手。我们认为语文科的学分的确实太多。我们的见解是：一个学生打算进入大学之前，他应具有足够的大学所应用的教学媒介语文的程度，以便进修其课程。训练精通语文的目标，不应在大学课程里占了一重要部份。因此，我们建议应把第一一年级的十六个语文必修学分减为八学分。

廿九、上文已经提过，南大大多数学科的课本和参考书是应用英文本，而事实上这些课本是唯一可以获得供应的课本。可是我们发觉第一一年级甚至以后的几年级的一般英文水准尚不足够，以致大多数学生不曾具有容易了解标准课本及参考资料的能力。由于学生的英文程度不够，他们在大学攻读期间的作业便受了阻碍。解决这问题的关键，全靠提高入学时的英文程度。学生在入学考试时只有英文一科不及格者，应使他们进入一年期的大学先修班，专门进修英文一科。这些学生于满意地修完内容充实的英文科后，便毋须再参加入学考试，就可以直接入大学本科。这个大学先修班应好好的由中学校供给，但是在中学校能够开设这个学科之前，南大有负起这个担子的必要（参阅第43节）。

三十、马来文在两年前即已开班，作为各院系的选修科，学生对于选读颇具热忱。然而我们查悉在二年级所达到的水准还低于学校文凭班的程度，甚至比政府一年级考试还来得低。大学的马来文学科的程度，理应比学校文凭班来得高。为了鼓励学习国语，南大应多开课外补习班，以便所有学生有机会学习巫文。假如要認真办理，那么南大须聘请一名马来文教授。

卅一、由于事实上南洋大学的语文科目已经比大多数其他大学较为繁重，我们

建议,目前的初级拉丁文、德文及法文班应该停办。大学程度的现代语文,如果有足够且具有必要基础的学生,当然可以开班。

卅二、南洋大学学则所规定的考试制度,未免过份复杂。该学则规定每学期举行学期中及学期终考试各一次。由这两项考试所得分数,以及由教师随时举行的非正式级试所得的分数,是用一连串的平均法计算以获得一个学期考试的平均成绩。这成绩又再和最后毕业考试所得的分数合并来计算,以获得一个毕业的最后平均成绩。我们的见解是:虽则非正式级试所得的分数是一种对学生学业进展有用的,指示且对于离及格线不远的成绩,可以用来决定学期考试及格或不及格,可是这些分数不应参进毕业成绩里面。此外,我们认为毕业考试要得到及格,学生应同时获得各科及格的分数。

卅三、正式考试之外,每学期开始时还为上学期不及格学生举行补考。这个补考中各科及格成绩的百分率是惊人的。我们曾随便检阅正式和非正式的考卷,对于给分的宽大实感惊奇。我们甚至发现一个例子,在全套考卷上打了三次的分数,结果有若干学生的最后分数竟比原来的分数高出一倍以上。给分的标准必须严格。关于这问题,我们很欢喜看到南大学则里面规定设立一个有校外主考人的考试委员会,而且这个办法将举行的毕业考试中实施。我们相信这种制度,将帮助南大在学术界建立它的地位,虽则由于事实上学生是准许用中文或英文作答,选聘校外主考人可能大受限制。

第六章 设备

卅四、最近增建的新实验室已经减少了实验室的拥挤情况。可是生物系却仍然有不足容纳的困难,同时文学院亦需要更多的课室。除上述的情形外,课室和实验室是足够容纳现有在校学生。

卅五、可是设备方面却未能跟着学生人数的增加而增加。我们认为理学院所有各系的设备,都需要增加。

卅六、目前图书馆的一部份建筑物,是用作行政部门的办事处。我们认为这种安排不能令人满意。图书馆应早日使用其全部建筑物,这样一来便可以增加许多阅览室,因为现有的阅览室是不足够的。据我们所知,兴建大礼堂以及行政办事处的计划,正由学校当局考虑中。

卅七、最近获得的数字显示图书馆内共藏有书籍10万3百36本,其中中文6万1百7本,马来文3百49本;英文及其他欧洲文2万5千3百9本,另有刊物与杂志1万4千5百71本。我们认为这数目是不足够的,尤其是英文书,巫文书及杂志部门为然。我们所以有这种见解,不但因为英文课本广被应用,且据图书馆主任所编就的统计,显示英文部门的需求真是迫切。直至本年七月止,每月平均由学生借阅的英文书籍有

1千2百15.7本,同时期借出的中文书是1千2百92.3本。如果我们注意到不相等的每种语文书籍的总数,以及事实上最大需求的中文书籍是中国文学的话,则我们不难看出学生对英文书籍有着更大的喜好。

卅八、我们认为图书馆主任应该对主持大学图书馆具有相当经验,最好是由持有图书馆学资格的人士来担任。

卅九、学生宿舍除了缺乏学生休息室外,大致能令人满意。我们认为早日供给这项设施,对于学生间的健全团体生活是很重要的。由于同一理由,我们认为目前对运动及康乐的小量设施应从速加以补足。

四十、我们认为学校当局应该为教师供应各种研究设备,我们亦同意目前教授们还缺乏适当的办公处及休息室。

第七章 学生

四一、目前南洋大学有1千7百名学生,计第一年级4百54名,第二年级4百17名,第三年级3百58名,最后一年4百71名。总人数中,47巴仙是读文科,46巴仙是读理科,17巴仙是读商科。这些学生中,估计来自联合邦的超过了50巴仙。我们的意见是,招收学生数额,应依照教师多少及设备如何而定,目前的学生人数不应在未来的数年内超过这数额。

四二、超过90巴仙的南大学生人数乃是来自华文中学。学校在南大发展的初期,还是可以预料到的,其实南大的分界也就是为了适应来自这些学校的学生进修高等教育的需要。可是我们认为南大的宗旨,应该是使来自中等教育各源流的学生,都可能进入南大受教育。只有这样,南大才能完成真正马来亚化的大学的使命。

四三、我们知道一个先修班经已设立,以作三百名入学考试不及格的学生补习之用。这些学生一经先修班考试及格,便可于来年进入南大本科而无须再经入学考试的手续。我们认为这种制度不能令人满意,因为它导致南大接受由两种不同的考试来招收学生,而这种考试又不一定是具有相同的水准。所以我们建议,这个先修班应由我们在上文所建议的大学先修班来代替。这里需要指出这两种制度主要不同的地方:现行先修班旨在用来教导那些低过一般入学水准的学生,而大学先修班却是给那些入学考试时只英文一科不及格而其他均可接受的学生就读(请参阅第29节)。

四四、我们以为受高等教育的机会不应限于少数幸运而出得高昂学费用的人们。所以我们建议,目前的每年7百20元学费应减至5百40元。

四五、不少南大学生经已获得了政府助学金。我们以为这种方案应该加以扩

展,庶几值得帮助的学生不致因缺少经济来源而被否定受高等教育的机会。我们也希望有一种奖学金,使品学优良的毕业生在当地或往外国就读研究院。

四六、学生与教师,最好时常作非正式的聚会。关于供给教师及学生休息室的建议,无疑将对此事有所帮助。另一应加以考虑的措施,便是每一座学生宿舍里应安排一位教师进驻其间,以作学生的指导和咨询人员。

四七、我们很欢喜看到学生在各种文化及运动方面的课外活动。一俟运动方面增加的设备完成之后,我们深信一个更活跃及有意义的学生生活,将在南洋大学发展起来。

四八、关于南大毕业生的就业前途,不少人持有一种印象,以为南洋大学法令含有承认南大所授予的学位和其他大学进入政府服务的资格相等。我们曾经从政府方面得知这事情是不确实的。目前南洋大学所给予的训练水准在许多方面是不够的。可是,我们以为经挑选过的南大毕业生应被准许进入政府机关试用,担任那些受承认学位毕业生有资格担任的职位。接着便由公务员委员会对个别试用人员作个别的评定。翁姑阿芝,符先生,黄博士及史尼哇山医生对此要作明白的申明,就是这项建议不应被解作目前南大所授学位,是跟新加坡政府接受被承认的学位相等。

四九、很明显地只有少数南大毕业生可以有机会进入政府机关,而大多数则将在工商机构寻找职业。南大对其本身毕业生的可能出路,并未曾作任何考查,但我们得悉学校方面经收到若干来自商界的询问。拿这些询问作基础,南大当局对于毕业生的出路,深信不至成为一重大问题。事实上,我们和南大行政委员会作正式会谈时,曾听说南大毕业生是求过于供。我们却没有这种信心,就是那些和我们会见的学生,亦不敢作这样的想法。

第八章 法令

五十、南洋大学法令于1958年11月5日在新加坡立法议院提出。议院于1959年3月4日通过而于同月16日由总督批准。法令于1959年5月27日政府宪报通告后实施。

五一、许多法令中的缺点乃由于南大在特殊情形下建立并于1953年按照有限公司组织而产生的。拟用立法手续来使南大成为法人的措施是二年前的事情。这个法令似乎曾经企图把南大公司章程和一个特别用来组织一所大学的法令之间的罅隙弥补起来。但此项意图并没有完全成功。

五二、我们有一种印象,就是这个1959年南洋大学法令是基于1949年马来亚大学法令而拟成的。于提出对该法令的修正案时(见本报告书附录A),我们曾注意下列几点:

(甲) 南洋大学法令应该进一步自由地采用1949年及1958年马来亚大学法令作为蓝本,以便把这两间最高学府的优点并合一起,作为南洋大学将来发展的指南。

(乙) 在我们深度改进南洋大学的基本结构时,我们经设法促使原来有限公司的某些特点。这些特点是来自南大是一间私人独立创办而由广大热心公益的民众所支持与维护的大学。

(丙) 另一方面,我们承认南洋大学,一如任何具有良好水准的大学一样,本质上是一间供给公众需要而值得大众支持的大学。为了这个原因,由公众人士参与及指示南大,不但需要而且必要。

五三、我们发现尚有许多法案、法规及条例需要制定以确保南洋大学法令能圆滑与有效地实施。除了上文提过的财政条款外,他如教务处、老师遴选委员会、学生福利委员会及其他委员会的条款,均为本检讨委员会所认为有同样重要的东西。

五四、我们认为理事会应从评议会、教授会、政府与毕业生同学会各选出不等数目的代表来组成。我们规定校长,依照理事会的推荐,有权委派不超过四名的理事会委员。由于事实上南大毕业生同学会要到1960年才能成立,我们不认为它应该立即选出四名代表参加理事会。所以我们规定毕业生同学会在1960年中应选出代表一名,1961年选出二名,1962年选出三名,作为过渡时期的办法。理事会因而选成委员人数不足的情形,可以授权校长于1960年委派七名,1961年委派六名,1962年委派五名委员来补足,这样一来,到了1963年,理事会便有足额的委员以充份实施该法令。在头一年,校长可以按照自己的意思,委派他自己指定的人,因为依我们看来,此时理事会尚未克产生,可是在第二年以后,他将受理事会的指导。我们所以让校长委派若干名理事会委员,其目的无非想加上若干专家以达成平衡,因这些专家可能是理事会有效地执行任务所不可或缺的人物。

五五、我们觉得就目前这样组成的检讨委员会,是不宜草拟一个正式的修正法令的草案以便提交立法议院。因此,我们只限于建议我们认为必须修正的各点,然后由有资格的法律起草人,在提交立法设计院前,作具体的整理。

五六、我们假定,一俟我们建议的修正南洋大学法令被接纳,南洋大学有限公司自然没有继续存在的需要,该公司将会尽速地结束。可是在南洋大学有限公司最后结束之前,必须规定一种条款,以便建立南洋大学有限公司与南洋大学间的连续性。

五七、为使南洋大学能在修正的法令实施之前进行改组,我们建议代理副校长应立刻采取步骤组织一个临时理事会。这事最好是先和教育部与南洋大学执行委员会磋商。这个临时与理事会一经成立,南大执行委员会与行政委员会应把它们所有权力移转给临时理事会,然后自行解散。其后临时理事会应设立老师遴选委员会

并组织临时理事会。等到修正法令实施后,这些临时机构均应停止活动,因为这时正式组织的各机构均已次第成立了。

第九章 改组程序

五八、检讨委员会认为南洋大学的改组最好能按照下列程序进行:

- (一) 南大执行委员会与教育部磋商后,任命一名代副校长(第九节)。
- (二) 南大执行委员会,教育部与代理副校长共同磋商后,设立临时理事会(第57节)。
- (三) 临时理事会依照拟议之修正法令第14条规定,接收南大权力(第57节及附录A)。
- (四) 解散现有之执行委员会及行政委员会(第19节及57节)。
- (五) 由临时理事会设立教师遴选委员会,委员中应有校外专家身份的评审员参加(第19节)。
- (六) 由临时理事会设立临时教授会(第57节)。
- (七) 依照附录B中所建议的各院系教职员人数,聘任教师(第19节)。
- (八) 制定修正法令(第8章与附录A)。
- (九) 解散南洋大学有限公司(第56节)。
- (十) 设立评议会,毕业生同学会及其他法定机构(第7节及附录A)。
- (十一) 聘任校长及名誉校长(第8节及附录A)。
- (十二) 设立理事会(第6节及附录A)。
- (十三) 由临时理事会将权力移交予理事会。(第五十七节)
- (十四) 设立评议会(第6节及附录A)。
- (十五) 由临时评议会将权力移交予评议会(第57节)。
- (十六) 设立联合工作团,由南洋大学,马来亚大学及两地政府代表组成,以便策划两间大学的将来关系(第四节)。
- (十七) 修改课程(第5章)。
- (十八) 设立大学先修班(第29及43节)。

(新加坡政府文化部刊行,1959年11月)

南洋大学课程审查委员会报告书

(1965年9月12日)

王赓武 等

按：该委会乃由星马学者组成，其职权范围为“检讨南洋大学目前课程之编制及各科内容，以便向大学提供能适应当地社会需要之修正课程。”

该委会主张对南大现有课程作了重大的修改，并且建议实施一项包含普通及荣誉学位的新学制。

委员会主张南大应开放门户容纳国内所有源流教育的学生。

报告书建议应该设立一个为全校服务的语言中心，文学院内应设马来学系。至于原有之现代语言学系，教育学系及化学工程学系，应予停办。政治学系应予调整而改称为政治与行政学系，工业管理学系和银行财务学系应予合并改称为工商管理学系。

报告书指出，如果商学院课程要有一个能接受的水准的话，就必须注意有关专业团体的条件。

大学应尽速聘请具有高等学术资格的师资，特别重要的是每一学系均应有一魄力强的系主任。

为了吸引和款留优良的师资起见，新的薪金率应该立即实施。

南大必须有充分的研究的机会和设备。

为将来的师资着想，南大必须有训练本校毕业生的设备，并即行着手拟订授予更高学位的计划。

教师的薪金率应加以修订，使其能媲美马来西亚境内其他大学的待遇。

此外报告书建议设立一个常务委员会，以指导新学制的实施，这个实施委员会应继续存在，直到所期的学术水准已经确立为止。委员会的迫切工作，就是督导从

旧学制过渡到新学制的种种措施。

关于新学制的实施方面,报告书建议南大应就所能罗致的师资,明年起尽量实施新制的普通学位课程,但实施工作一定要有最大的伸缩性,必须十分仔细地进行,以保证学生都能获得新课程的全部利益。

报告书相信新学制完全实施后,南大今后的毕业生所达到的程度,应可媲美任何有地位大学的毕业生。

课程检讨委员会名单

王赓武教授——马来亚大学历史系主任(主席),许少治先生——新加坡工艺学院讲师,林和合先生——新加坡经济发展局局长,刘孔贵教授——南洋大学商学院代院长、会计系教授兼系主任,卢曜先生——新加坡教育部总视学官,汤寿柏教授——马来亚大学物理系主任,王叔岷教授——新加坡大学客座教授,秘书许统义——南洋大学图书馆代主任。

下面是南大课程审查委员会报告书全文。

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第一章

绪言

一· 本委员会之检讨范围为“检讨南洋大学目前课程之编制及各科内容，以便向大学提供能适应当地社会需要之修正课程”。

二· 我们曾详细检讨现行的学制，全部课程及考试制度，我们对课程各方面都曾提出建议，对与所提出课程方面之建议有关的师资事项也曾提出建议。南洋大学评议会报告书及南洋大学检讨委员会报告书的内容均曾加以注意，凡与本委员会检讨工作有关的文件，亦曾详加研究。我们曾设立三个学术小组委员会，分别研讨三院的课程，又设立一小组委员会，研究有关师资事项。我们曾与南大的主要人员会谈，而且我们的会议多在校内举行，因此我们有充分机会，实地观察南大现有的设备。

三· 依我们看来，南大至今仅负起一个有限度的任务。它只着重于造就大批毕业生，而对于毕业生的就业机会，教学与研究的高水准，以及在多元社会中高等学府的基本目标，都不曾给予充分考虑。它至今只容纳国内华文媒介学校的学生。我们觉得这任务太偏狭，南大可以大事努力，以趋向为我们社会整体而服务之目标。

四· 我们觉得我们社会的特质应该在任何一间为此社会服务的高等学府反映出来，欲达到此目的，南大的课程须有适当的调整，以保证国内各源流教育出身的学生都能得到南大存在的益处。

五· 我们的社会非常关心马来西亚新兴国家的繁荣及和平发展，际此情况，我们迫切需要一批人，他们对这个基于多元种族的国家有深刻的，理性的和同情的了解，南大造就的毕业生应能辅导国家的发展路向，他们应有处理公共事务及管理工商业发展的训练，而且具备特殊的能力，以应付国家迅速现代化的需求。

六· 因此，我们相信关于所需语文能力之问题应该特别加以注意，南大的目标应该是它所造就的毕业生，如果不能精通三种语文，至少应精通二种与国家发展有关的语文。

七· 我们也得到一个结论，南大的学制应该重新修订，以启发学生的优点而造就所需的毕业生。

第二章

关于语文的建议

八· 鉴于我们社会的改变情况，语文训练已成为南大将来发展的主要课题之一。我们承认南大在给予马来西亚华文媒介学校的毕业生有机会受高等教育这方面，仍须扮演一个角色，而且仍得开设一些科目用华文为讲授媒介语，然而，只精通

华文显然是既不符合毕业生本身的利益,而且,南大继续造就这类毕业生也不符合国家的利益。我们深切感觉到,如果南大要在本国扮演一个完善而有效的角色,那么,它的毕业生应该同时精通国语和英语,所以我们极力建议南大应该给予学生种种机会,让他们能够兼精这几种语文。

九· 我们也建议,入学资格中关于语文部分应该仔细而明白的加以规定,以便全国所有源流教育的学生都有资格入学。从华文源流学校考取的学生,必须使他们精通国语或英语,从英文源流学校考取的学生,必须使他们精通国语或华语,从马来文源流学校考取的学生,必须鼓励他们精通华语或英语,所以学生都应给予修习上述三种语文的机会。

十· 目前南大全校一年级学生必修的华文及英文科,并不能令人满意。我们建议,所有语文科目,都应该仔细地订定,以应付不同源流学生的需要。华文精通的学生不须修习一年级华文,但须修习适当的国语科。英文精通的学生不须修习一年级英文,但须修习适当的国语科,并鼓励他们修习华文科,国语精通的学生,应鼓励他们修习适当的华文或英文科。

十一· 通过一种经常指定作业的制度,就可促使学生运用每一科目所用的语文。这样一来,他们就须把有关语文当作专精所修习学科的工具。如果学生们能够明了一种语文,在他们想求得的学问和在他们想献身社会之需要的情况下如何被运用,他们在南大求学期间内,一定会对运用有关语文发生更大的兴趣。

十二· 目前除华文之外,其他语文教学都由现代语言文学系开设。该系开了许多不同程度的英语科目,以及一些英国文学科目。该系也开几项初级马来文,法文,德文和日文科。我们认为这种安排并不令人满意,其理由如下:

(一)国语没有得到充分注重。

(二)该系所授课程相当于英国文学的学位。鉴于新生入学时英文程度差,这样的学位课程并不够水准,不值得继续开设。

(三)在一个偏重英文及英国文学的学系中,同时教授数种语文,并不是应付全校之语文需要的有效办法。

现在迫切需要设立一个机构,其特殊用意为使全体学生的语文能力达到水准;使他们能够运用语文为工具,以便从事学术研究及为国服务。

十三· 因此,我们建议

(一)停办现代语言文学系。

(二)设立一个为全南大服务的语言中心。

(三)立即设立马来学系以便充分的强调国语。

十四· 我们建议语言中心应依下列方式设立：

(一)语言中心不给学位。

(二)它不属文学院,而应为一独立机构。

(三)它的主持人应有教授的地位。

(四)它的主要人员是语言教师,他们的聘用应基于各人的语言教学的技术与经验。

(五)它至少应开设两类科目。

(甲) 有学分科目,以应各系学位课程之需要。

(乙) 无学分科目,学生至少修习毕两年课程,满足上课实验及考试等规定后,即可授予文凭。

(六)语言中心应有最新的设备,所有科目都应分小组上课,并尽量利用最新的教学法。

(七)每项科目都应仔细依各组学生之需要而设计,以便有助于各人所习的学科。

(八)有关开设华文及国语的初级和中级科目,语言中心应与汉学系和马来学系密切合作。

(九)语言中心应管理总语言实验室,以及其人应各学院之需求而设的语言实验室。

十五· 语言教师之聘任,得根据其资历比照大学教师之薪金率而定其薪额。但他们的薪金率不应低于本国师资训练学院等地位之高级语言教师所得的薪额,通常或许只须聘任兼任教师,按钟点计算适当的报酬。

十六· 我们知道有些学生或不满意在学期中修习所需的评议科目。因此,语言教师须随时准备开英文,国语及华文专修科目,以应学生的需要。

十七· 语言中心设立后,南大的语言教学设施如下：

(一)语言中心应负责教授南大所有初级及中级语言科目,其中包括国语,英语,德语,法语,日语以及其他随时需要的语言。如遇需要时,语言中心也可开任何高深语言科目。至于马来语及华语高深科目,则须与该两有关学系共同开设。

(二)汉学系应继续开设华文的高深科目(修正课程:见第六章)。

(三)马来系应即设立开设高深科目,让学生攻读普通及荣誉学位(所建议之课程纲要,见第六章)。

十八· 现行的学制是基于一种加以更改的学分制。学生须在大学攻读四年，修足128学分，始能获得普通学位。然而，学分制之伸缩性似乎不曾充分加以领会。

十九· 南大成立已有九年，在这期间内，课程与课程纲要经过多次改变。这些改变，大部分是由于教师变换频繁，因而导致若干学系中有不正当与不协调的现象。频繁的改变不仅影响教学，而且也使学生起了一种无所适从之感。

廿· 各科似乎都完全依赖演讲式(课堂讲授)教学。教师与学生之间似乎没有保持个别的，积极的接触，这种接触是大学教学所不可或缺的。学生没有给予充分的指定作业，因此他们也就少有机会增进他们的阅读，选材及组织与提供资料和意见的能力。同时，对于课本与油印讲义亦过份倚重，许多科目，并没有根据最新的出版物，而能利用新刊资料的，却少之又少。

廿一· 有些科目显得太过广泛，无法在一学期甚至一常年中授完。另有一些科目，虽为三、四年级学生而开的，却显得太粗浅。有些科目分得太细，太窄，太专。结果，各科所规定学分的多寡，大有悬殊。目前这种由二至十二学分不等的安排是不能令人满意的。

廿二· 必修科与选修科的划分亦显得牵强，同时不同年级科目的安排往往缺乏一种合理的先后次序。

廿三· 大多数学系的一年级课程都偏重普通华英语文科，就目前的编排这些语文学科，不是太容易而不能当作大学的科目，就是不合学生攻读某种学科的需要。更糟的是，这类科目既耗费学生太多的时间，又不能补救学生在这两种语文方面的不足。

廿四· 按照目前的制度，各课程都依靠太多次的考试，许多时间都花在准备学生参加这些考试和评阅试卷上面。频繁的考试阻挠学生自动作广泛阅读，也阻挠学生得到自学的重要训练。再者，在这些考试中，并没有多少试题可让学生选择作答。这也阻挠学生对所选学科作全面性探讨，却迫使学生记答案。

廿五· 我们尤其惊讶的是，南大的考试并没有一种统一的评分制度。教师之间对于百分率之运用，似乎不能取得一致。这便引起给分之间很不一致，而使评定学生的学业成绩产生了许多极困难的问题。现行考试制度的最严重缺点，就是每个学院都没有法定的考试委员会。

廿六· 目前这种考三科的毕业考试并不能令人满意。其理由有二：第一，科目的选定甚牵强；这些科目可选自二年级，三年级或四年级的课程。第二，学生要参加这些考试两次。第一次由任课教师单独命题及评分。第二次也由原任课教师

召出试题并评分,唯须由校外考试委员会权衡,这种考试的重覆既浪费时间又令人误解。我们很难看出这种校外考试方式,能有助于确定学生所达到的程度和学生成绩相对的高低。

第四章 关于新学制的建议

廿七· 鉴于:

- (一)造就最合社会需求的毕业生的重要性。
- (二)确立一个能启发学生优点和给予毕业生最有利的制度的必要性。

我们建议实施一个新学制。

廿八· 新学制应设普通学位和荣誉学位,荣誉学位将照荣誉学位考试的成绩分等如下:

- (一)第一等荣誉学位。
- (二)第二等(上级)荣誉学位。
- (三)第三等(下级)荣誉学位。

廿九· 学分制若应用得法是足于施诸普通学位的。我们建议,新学制的普通学位完全依照学分制,在仔细考虑过所需课程的范围和内容之后,我们决定,学生凡修足108个具充分学术价值的学分,即合授予学位,这通常应在三年或四年内完成。凡在南大攻读五年而尚不能获得所需学分的学生,均不得授予学位。

卅· 我们注意到新加坡自1963年起施行高级文凭(华文)考试,而对于这措施促成了较高的入学水准,表示满意,我们建议以高级文凭或同等学历为正常的入学资格,依此种资格录取的学生,攻读三年后,应能获得普通学位。在特殊情形之下,理学院录取的学生得破例准予免修第一年第一部分之科目。这些特取学生准予二年修完所需一百零八个学分,但是他们必须在第三年继续攻读荣誉学位。他们须在南大读完三学年,否则,他们不能获得任何学位。

卅一· 我们建议,普通学位只设两类科目,即三学分科,和六学分科。每科包含若干讲授及教导或研讨或实习节数。本报告书有关个别学院各章,对于这些都有规定。

卅二· 为了保证师生之间有充分机会进行学术讨论,我们极力建议实施教导或研讨制度。所谓教导或研讨,我们的意见是由不超过八至十个学生合成一小组,按时集会合作研究和讨论。这种小组的研究,应该以学生所缴指定作业为基础,教师与学生都应该把这些按时集会的教导或研讨课,当作大学教育的最重要部分来看待,在这些集会中,学生的指定作业应该加以充分讨论,而且应鼓励学生讨论一切与

所定论题及与全课程有关的问题。这些指定作业都应该仔细予以评定；所得分数也应该予以登记。这些分数不与考试合计，除非是这些分数可以帮助考试委员决定该学生的考试成绩。

卅三· 荣誉学位课程将不依照学分制。这种课程只是为那些两年内修足一百零八个学分和那些三年内得普通学位而成绩优异的学生而设的。四年内得普通学位而成绩特优的学生亦可加以考虑。

卅四· 在新学制中，每一科只须有一次考试，在科目结束时举行；三学分科的考试至少二小时，而六学分科的考试至少三小时。考试不及格的学生如经有关考试委员会的推荐。得准予参加一次补考。

卅五· 学生必须考获每学年所定的最低学分数目。我们建议凡不能获得该学年所需最低学分数目的学生，应令退学。

卅六· 关于普通学位，我们建议若干科目的考试应由校外考试委员权衡。在第六、第七和第八章有关各节，这些科目都已标出。

卅七· 荣誉学位考试应包括若干试卷，在学年终结时举行这些考试均应由校外考试委员权衡（评定），而且必须在同一次考试内同时都及格，此外又应尽可能包括一篇毕业论文或报告，学生须在论文或报告获得通过后，始可得到荣誉学位，荣誉学位不给予补考的机会，学生亦不得再参加荣誉学位考试。

卅八· 我们建议全部课程不但应该采用最新书籍和专题论著，而且还应采用学术期刊里最新文章，在学生的研习过程中；应防止他们只依某一书或某一见解。大学教育的精义在给予学生充分机会以考虑问题的多方面意见及种种可能的解释。图书馆的设备应该特别注意求其充实，以供应付新学制所有科目的需要。

卅九· 我们极力建议每一学院有一种统一的评分或评等制度，如有可能，应有全校性的制度。一切百分比和分数都应化为有关学院所定的非数字制度，这点特别重要，其理由如下：

（一）凡学生所修的课程兼有本系及他系或他院科目，就非应用相同的评等制度不可。

（二）新学制牵连到攻读荣誉课程的资格和荣誉学位的等级。这亟需有一个统一的评定制度，作为根据，以便评定学生在许多科目中所得的成绩。

四十· 我们建议每一学院设立下列的考试委员会：

（一）一年级课程考试委员会。

（二）指定须由校外考试委员会评定之普通学位科目的考试委员会。

（三）荣誉学位考试委员会。

这些考试委员会应包括所负责这类科目的教师，这些委员会应向有关学院的教

务会提出有关考试成绩的建议。再由学院教务会转请评议会核准。

四十一· 每一学系至少应有一位校外考试委员,校外考试委员应评阅所指定普通学位考试科目,以及荣誉学位考试的试卷。每一学系接到有关校外考试委员的意见后,应将考试成绩汇呈有关的考试委员会。此外,校外考试委员应写就一机密报告书,直接寄给副校长。

四十二· 我们认为任何一学系的课程都应不时加以修订,以应付改变的需求。因此,我们建议每学院应设立一个包括所有系主任的课程委员会,以便向该学院教务会议提出课程之必要修正案。

第五章

关于师资的建议

四十三· 我们确信我们对于新学制所作的建议,必会促使我们提出其他有关聘请适当师资的建议。我们深觉任课教师都应具有所须的研究经验,尤其以对本科有著作发表者为佳。所谓著作,我们的意思是指发表在学术期刊的著述,或者是创作性研究印成书或专刊,大学阶段的教学通常是不适宜由那些对所授学科没有积极进行研究的人来担任。

四十四· 我们建议各学系教师的编制应依照本系实验的教学需要而决定。教师的名额与本系的学生人数应有密切的联系。正常的编制应包括四类教师:教授,副教授,讲师,副讲师,每类有一合理的名额。这四类教师之间可行的比例应为:一比二比五或六比二。全校教师与学生的比例通常不应超过一比十。

四十五· 学术地位一定要与有关的研究和教学经验有密切的联系。我们建议下列最低限度资格,以便遴选委员会遵照:

(一)副讲师通常应有大学学位,这应是试用性质的聘任,以三年服务期满另叙为条件。

(二)讲师在薪率的起点应有大学学位加上三年教学经验,或有地位大学之博士学位,或是有好的第一级学位加上有关的专业资格。

(三)副教授通常应有地位大学之博士学位,加上至少五年大学阶段的教学经验及与本科有关的著作在著名学术期刊发表,或有创作性研究印成书或专刊。

(四)教授通常应是出色的学者,既有大学教学的经验,又有被认为有价值的著述。

所有学术人员都应显示继续不断的研究活动,而在聘任他们的时候,应有一种指标,就是他们的研究对南大的声誉应有所贡献。

四十六· 我们相信在南大发展的现阶段,每系都需要有一个魄力很强的主任教授,就所建议的新学制而论,这点尤其重要;我们期望凡应聘为系主任的教授都应曾显示处理行政的能力。

四十七· 我们关注南大能得到尽量好的师资以便实施新学制,如果要保证能聘请到素质好的师资,有两种因素必须给予充分的考虑,第一,南大必须提供研究的设备,第二,薪金制必须有吸引力,而且任期必须有保障。

四十八· 我们建议应有研究设备以支持具有研究能力与潜力的师资的聘任。研究所需的书籍与仪器应充分设置,积极的研究是良好大学的主要特色,一间大学的声誉不是光靠造就优秀的毕业生,而且要靠学术人员对学问所作的贡献。如果研究设备缺乏,又不能一直改进,有研究的师资便难聘到,聘到的要留更难。我们相信从事研究的师资较能获得学生的尊敬与信任。而且他们本身便可作学术品质高的学生的启示。

四十九· 聘请具有所需高资历的师资应基于一项薪金率,足与世界主要大学的薪金率相比,尤应足以媲美马来亚境内其他大学的薪金率,在进行修订薪金率应从实际着手,必须知道马来西亚境内其他大学的各种薪额是施于不同的编制,我们建议薪金率应立即制定,而且师资应速依照此薪率聘任。

五十· 薪额应根据资格与经验,而不应根据授课钟点,然而我们强调正常的教课负荷,包括演讲,教导或研讨,实习及实验应为每周十小时左右,至多不应超过每周十五小时。

五十一· 使我们感到惊奇的是文商二院的教师都没有个人的房间,我们相信学术人员都必须有足够的教学方便,我们建议每位教师须给予一间房,这种房间可作教导或研讨课的用途,同时也可让教师有在工作上所需的幽静和尊严。至于理学院的教师则应有足够的实验地方,作为研究的用途。

五十二· 图书馆的设备应先满足教学的需求。教学所需的书籍应给予优先办理,每位授课教师应给予相当的权限订购该科的重要书籍,教师和学生所需的书籍应有足够数量的供应,否则,小组研究的指定习作便不能达到所求的水准。

五十三· 教师必须给予与本门学问的最近发展保持接触,我们建议订定一项让教师休假出国研究的计划,我们亦建议资助教师出席讨论会,及其他与他们的教学研究有关的国际会议。

五十四· 南大不能无限期依赖外来的师资,那些年轻,资格高,而对本地区的情况有深切认识的当地毕业生,必须有机会受到聘用。这样,南大在我们的社会服务方面将扮演愈来愈重要的角色,大学要依藉年轻教师的精力与热诚而茁壮起来,在一个成长的社会中,我们必须时刻留意热心的年轻教师对大学团体所作的种种贡献。

五十五· 因此我们建议南大继续在它的学术品质高的毕业生当中聘用一些精选的助教,但是这些毕业生应该给予种种机会让他们接受研究的训练,从而获得高级学位,我们知道目前并无授予高级学位的规定,因而建议尽快开设这些高级的课程。

五十六· 助教不应该像目前一样担负过多教学,书记及其他杂务,而应该对他们的研究给予足够的协助与方便,同时也应给予机会让他们到海外著名的大学求深造,这样可以保证南大未来的师资,可自资格高的毕业生当中得到稳定的供应。

第六章

关于文学院的建议

五十七· 我们建议文学院 应就下列各系给予改组:

(一)中国语言文学系

(二)马来学系

(三)历史学系

(四)地理学系

(五)政府及行政学系

五十八· 我们建议目前的现代语言学系及教育学系应予停办,目前的政治学系也应予调整而改称政府及行政学系。

五十九· 在仔细地考虑过现代语言文学系的任务之后,我们已建议设立一个语言中心。理由已在本报告书第二章述及。因此,我们认为文学院无须保留现代语言文学系。我们也曾考虑到目前该系在造就英国语言文学系毕业生的任务,但是我们并不能确信所设的学位有够高的水准,因此我们不建议设立英国语言文学系。在语言中心内应设英语科目以代替之。这类科目将不授学位,但得发给特别文凭以志学生的成就。我们相信这种文凭对于那些有志出国攻读高级学位的毕业生,无论是那一系,都将有所帮助,这类科目在某一学院规定作为所需学位课程之一部分时,亦得列为有学分课程。

六十· 我们建议现代语言文学系现有的学生,应着令依照下列方式转入南大其他学系:

(一)与有关学系相同的科目应承认其学分。

(二)有关系主任得斟酌承认某种限度一些科目的学分。

(三)其余学分,如语言中心认为某些科目具有够高的水准,得颁给特别文凭。

六十一· 我们深深觉得教育科应该是一种为执教目的而设的专业训练及为毕业生研究本国问题而设的科目,在专业训练方面,南大毕业生应该进入专业学院

攻读一年或两年。至于研究方面,大可设立教育研究院。目前的教育学系并不能应付上举任何一方面的需要。因此,我们建议教育学系应予停办,教育学系的学士课程亦应予停开。

六十二· 至于应否为了专业训练抑或研究的目的而设毕业后的教育课程,这问题在本委员会检讨范围之外,我们提议这问题应根据社会的需要另行研究,大学当局可委任一个研究委员会,以考虑所有大小争点。

六十三· 我们建议教育系现有学生应着令依下列方式转入南大其他学系:

(一)与有关学系相同的科目应承认其学分。

(二)有关学系主任亦得斟酌决定承认某种限度一些科目的学分。

六十四· 中国语言文学系应能造就中文程度很高的毕业生,然而,它在履行此任务时应照顾到我们社会各种需要。我们建议应该把较大的重点,放在那些关系到马来西亚华人的文化,文学及语言背景的科目上面。该系学生应准备适应本国在语言条件,而且应有能力去研究一些诸如本地华人方言性质,分布和运用;马来西亚的华人社会,华语与马来语的关系之类的问题。我们希望该系的毕业生在维持国内各族和睦相处方面将有所贡献,在此种情况下,南大得考虑将该系改称为汉学系。

六十五· 依照本报告书第二章所作的建议,我们建议设立马来学系。该系将开设普通及荣誉学位课程。它的目的在给予那些马来文相当好的学生基本训练,以便研究马来诸民族语言,文学及文化。南大应尽力从各民族当中罗致教师与学生,使该系成为校内外一座重要的文化桥梁。南大应立刻采取步骤聘请系主任,并由他负责拟订适当的课程。

六十六· 我们建议历史学系的课程应侧重本地区的历史而辅以世界其他部分历史的研究。我们发觉现有的课程过份着重中国历史方面。我们承认中国历史的重要性,可是,我们不同意它应给予那么显著地位而牺牲了东南亚历史,尤其是马来西亚历史,我们也认为将历史文献介绍给学生是十分重要的。这点最好是从运用国内容易得到的文献着手。

六十七· 我们建议地理系应修订其课程,务必能从该科的诸不同方面,看出整体。授课时应留意本地区的特征,该系必须有一些设备良好的实验室让学生上实习课时有足够的方便;有田野工作以供学生研究与应用测量的技术;又有经常指定作业使学生熟习本国的自然和人文的环境,地理应该当作一门科学来讲授,这是很重要的。而且,在教学方面,应该鼓励运用最新的科学技术。

六十八· 我们认为政治学的全部范围太过广泛,并不适合现阶段南大的发展的需要。因而建议该系应倾全力于政府与行政两方面,这样可以期望该系所造就的

毕业生，在政府部门当有更大的用处。

六十九· 我们建议新学制的安排应如下表：

新学制——文学院

普通学位(三年) ¹	第一年	27 (9) ³
	第二年	27 (9)
	第三年	24 (12)
	第四年	荣誉学位课程
	第五年	荣誉学位课程

普通学位(四年) ²	学分	最低总学分
	21 (6)	24
	21 (6)	45
	18 (9)	66
	18 (9)	87
	18 (9)	108

注①：或其他适当的变化三年修完。

注②：或其他适当的变化四年修完。

注③：括弧内数字是选修学分，以示与必修科有别。

七十· 就文学院而言，三学分科，每周授课一节，另加教导或研讨课一节，两学期修完，或每周授课一节，另加教导或研讨课一节，一学期修完。六学分科，每周授课二节，另加教导或研讨一节，两学期修完，文学院的荣誉课程，每一科约相等于一周六学分科。

七十一· 教导或研究课是根据学生的指定习作，每项三学分科目，每位学生至少应征文章或报告二篇。每项六学分科目，每位学生通常至少应征四篇文章或报告。

七十二· 对每一学系，我们都建议了新课程。这些新课程在下面各段开列。从这些新课程中，可以明白看出他们的成效多数要靠院内各系之间有密切合作，同时也要靠院系加强合作（凡附有星志的科目均须由校外考试委员权衡）。

新学制的实施

我们相信新学制实施后南大未来的毕业生所达到的程度，就可媲美其他有地位大学的毕业生。

但是,实施的工作必须进行得十分仔细,以保证学生都能得到新课程的全部利益。

我们确信为使新学制的实施获得成功,最重要的一个因素,就是各学系应遴选一位有魄力的系主任。我们相信这些人所具有坚诚的领导作用就是建立新制度的关键。我们建议南大应尽一切努力寻觅尽量好的人才。

我们承认新学制可依照许多办法实施,在考虑过一切可能办法之后,我们得到的结论是,鉴于目前遴选师资有种种困难,要把我们全部建议立即实施是行不通,分段实施办法,在行政与教学方面也会产生许多极端复杂的难题,我们觉得实施工作不可让任何硬性的时间表束缚着,而一定要有最大的伸缩性。我们建议应就所能罗致的师资,尽量实施新课程中的普通学位科目,这可以在1966至67年度新学年开始时进行,而且,如果有可能,其余普通学位科目可在1967至68年度开设。

我们进一步建议设立一个常务委员会,以指导新学制的实施,这个委员会有必要继续存在,直到所期的学术水准已确立为止;由于现有学生的资质参差不齐,这个委员会的迫切工作便是督导过渡的安排,让这些学生在新学制下修习适当的课程,这些学生被编入新的三年学制的时候,他们在目前的四年学制下所获得的学分应予以特别注意,以便给予恰当的份量。

我们知道在过渡时期的开头几年间,在保证达到所期水准这方面也许有困难,如果依照我们所建议的方式立即施行校外考试制度,这困难便可以克服,那些选定须由校外考试委员权衡的科目非编排得当不可。我们关心到未来的毕业生,应达到适当的水平,才能继续攻读荣誉学位课程。因此要紧的是,校外考试委员应自熟悉荣誉学位的性质的学者中遴选。这样南大就可以向这些校外考试委员咨询有关在数年后开设荣誉课程最好的办法,唯有在各有关人士都满意师资学生及仪器设备都够好够充足的时候,南大才可设立第一期的荣誉学位课程,我们并不建议每一学系都应同时设荣誉课程,开设荣誉学位课程必须根据个别学系所具条件而定。

我们觉得新学制的重要性,主要是在南大将颁给的品质上,因此在挑选毕业生进入荣誉学位的荣誉学位班时,非得极慎重其事不可。

我们承认过去几届的优秀毕业生可能有志攻读荣誉学位课程,因此建议规定办法让这些毕业生入学。我们也建议这规定的有效期只限五年自开办荣誉课程那天算起。

荣誉班录取学生时,那些在新学制下的应届毕业生应予以最优先权利,其他毕业生都有资格竞争荣誉班的学额,但那些名次列在班上前20%的毕业生应给予某些优先权。

结论摘要

- 我们修改了课程,并建议一项包含普通及荣誉学位的新学制。
- 我们相信南大应开放门户容纳国内所有教育源流的学生。
- 一个为全校服务的语言中心应即设立。
- 文学院内应设立马来学系。
- 现代语言文学系教育学系及化学工程系应予停办。
- 政治学系应予调整而改称为政治与行政学系。
- 工业管理学系和银行财务学系应予合并改称为工商管理学系。
- 如果商学院课程要有一个能被接受水准的话,就必须注意有关专业团体的条件。
- 大学应尽快聘请有高学术资格的师资,特别重要的是每一学系均应有一魄力强的系主任。
- 为了吸引和款留优良师资起见,新的薪金率应立即实施。
- 南大必须有充份的研究的机会和设备。
- 为将来的师资着想,南大必须有训练本校毕业生的设备并即着手拟订授予更高学位的计划。
- 教师的薪金率应加以修订,使其能媲美马来西亚境内其他大学的待遇,否则,我们所作关于新学制的任何建议,不会有什么意义。

(取自《南洋文摘》第6卷 第12期)

新加坡的大学教育初步报告书

(1980年3月16日)

丹顿爵士

新加坡在可预见的将来提供大学教育的规模和范例

1. 在考虑到1996年为止十八岁分龄组别内(男女)的已知人数,可能的离校考试成绩(高级及普通水准),各种因素所造成的人口增长、新加坡为了配合国家预见的经济和社会政策而到了本世纪末为止,对经过大学教育和大学训练的人才的可能需求,以及大学教育在肄业生和研究生水平所需的相应素质等因素,我认为到了公元2000年,一万二千到一万四千之间的学生总数很可能是足够的了。

2. 在各学科之间以及在肄业生和研究生之间,学生人数分配必须反映新加坡的需求:a)对高度合格专才的需求,以在充满高度竞争的世界里负担掌管和领导创造财富的工业,因为这样的世界,是以科学为基础而又以与商务企业有联系的工艺能力“挂帅”。b)对负责掌管服务工业和公共行政的人才的需求,这些人不但要有才干,并且对新加坡种族结构的特殊文化背景也有敏锐的感应。肄业生的学术分科比例,必须继续保留大约一半是以科学为基础(医科,牙科,医辅助学科目、自然科学、以及有关的工程和工艺),一半是文科和社会科学,但不应作出任何偏向安排,以置永久硬性规定这种分配的比例,因为新加坡的前途,正如(或更甚于)其他国家那样,必须依赖迅速适应不断改变的环境和时机的能力。因此,大学生的教育目标,不只要给他们打好基础,掌握必须的技能 and 培养积极的好奇心,以及发挥他们潜在的天资和才华,而且也要鼓励适应能力和处理新问题的意愿。这些问题是不能够事先预见的,但在学生的一生中必定会碰到。

3. 在这方面,我必须记录在案的一点是,我所得到的印象是(这一点已获得我所会见的一些人所证实),当地对考试的成绩有过份的重视,这对新加坡的教育是不利的。这样一来,除了少数例外不算,申请人的高级和普通水准考试积分,似乎是大

学的唯一入学标准,而且又是一种在应用时相当没有伸缩性的标准。申请人在其他方面比较难以衡量但也同样重要的素质,如个人求学的动机以及对选修学科的志趣深度以及在这方面的发展潜力,也应该加以考虑。这几方面的资料可以在导师的成绩报告里提供,并且通过面谈进一步检讨。此外,过份依赖考试成就的态度如果太普遍,也会对学生求学的方法有不良的影响,而大学教职员也会倾向于把学生当做是被动的听讲者,从而把讲义和课本中的简化资料生吞活剥地向他们进行填鸭式的灌注。大学教育的最大好处在于对一般有充分的理解,再加上对各种具体问题和事物应用这些原则的方法的基本训练。这样一来,毕业生就能有良好的准备,以在离开大学后能够应付必将遇到的各种不能预见的问题。这种能力——这种清晰逻辑思想的能力以及解决问题(而不是死背笔记)的态度,只有在大学教职员也具有这些素质,而他们本身的工作也处处发挥这种典范的情况下,才能培养起来。学生如果没有同时得到言行典范的激励,是不能单以口头训诲教导的。

4. 为了达到这些目的,大学的学术人员对于他们的工作就必须抱着一种发问、好学和不断探索的态度。这种素质只有在一种研究的环境里,教学最好是能够参与一些比得上国际水平的研究工作,才能够培养起来。这在目前来说还是缺乏的。不过补救的方法并不在于使各学术领域都有庞大的研究计划,这是不可能而且也是不好的。更好的办法就选择数目有限的探究领域,在每一个领域里,同一个或者是有密切关系学科的学术人员都以合作的方式参与研究工作,并且也得到各种资源的支援,以确保有关的研究工作能够取得相当的结果,而参与这些研究工作的学生也能够得到良好的训练。这些学术领域的选择需要通过思考,当局也应该考虑设立一个“新加坡研究方针委员会”,以便对这些问题和其他因素进行讨论和给予应有的重视,例如有关研究在最广的意义上对新加坡的需要有什么关系,以及需要什么资源才能够在必要的水平上保持研究学术的能力等问题。这样的一个机构应该具有真正的“影响”,也就是拥有足够的财力,使它能够把研究工作导向只有生产力的领域。它的成员应该包括本地的学术人员(他们将基于自己的常识和经验以私人身份出任委员)和政府部门及工业界的代表,并且有权征求外界提供任何所需的意见。有了这样的安排,就有理由可以预见到有着一万两千到一万三千名大学肄业生的新加坡,将会有有一个实用蓬勃的研究事业。这个事业将使大学肄业生的教育更有生气和更加充实,并且也将能照顾到大约一千个攻读大学研究文凭、硕士和博士学位的学生。这样一来,大学生的总人数就会达到一万三千到一万四千人。大学研究工作的分配需要进一步的考虑,同样的,通过研究工作或教导课程攻读硕士学位的相对重视,也必须给予进一步的考虑。不过,就业的可能性很可能使到这种分配大大地偏向工程、工艺、自然科学和医科等方面。

5. 各学术领域研究工作的实行可以通过以短期或长期合约聘用资历深厚的外国科学家来加以改进。这个过程能够照我所建议的方法——扩大目前的大学研究生人数,以及同那些在相同学术领域以工作素质高超而出名的海外学府发展联系,使它更容易进行。在这一方面,我认为把基础学科的教学人员分为两个部门(两间大学各一),对于充分地利用他们的潜能是一种障碍。这种障碍应该加以消除(参阅下列)。

6. 这里应该提一提有关的一点,这就是:某些学院出现教学人员严重不足的现象,最显著的是法学院、工程学院、商业行政和会计学院以及牙科学院。我的逗留时间太短,无法对造成这种教学人员不足的原因进行可靠的诊断,但是,我毫无疑问地相信:(a)如果有了一个更有生气的研究工作环境,那将能够使这些学院对能干的男女学者更有吸引力,要不然这些人可能到别处另谋事业的发展;(b)如果鼓励适当,鼓励自己开业的专业人士兼职教学的安排可以带来好处。

7. 有人问我有关学术组织和如何把学科和学系组成学院,以便使两者的关系产生最好的教育成果等问题,没有经过更详细的调查和讨论,这些都不是可以肯定回答的问题。不过,我的初步反应是:我认为把文学和人文学院(语文、文学、历史、哲学等)和社会学院(包括法律、社会行政、政府等)分开是有优点的。会计可以同经济和商业学编排在一起,以组成个别的学院或作为社会学院的一部分。而且,由于这些学科的组成部分应该编入工程师的教育里,这个学院和工程学院的联系应该加以促进,此外也应该设立一个电脑科学系,负责这个科目的教学和研究工作,并且同电脑服务部门保持密切的联系。

三处校园的容量

8. 在新加坡,大学教学工作目前是在下列三个不同地点的校园进行:那三个校园我全都到过了。

校园名称	使用者	面积 (英亩)	建筑物能容 学生数目	一九七九年 肄业生数目 ^①
肯特岗	新加坡大学	366 ²	9010 ³	3517
裕廊	南洋大学	512	3500 ⁴	722 ⁵
武吉知马	新大及南大 联合校园	88	5000 ⁶	4063

注① 这些数字适用于一九七九年十二月三日行政和会计系学生从武吉知马校园迁至肯特岗校园以前的情况。

② 这不包括建筑医院和公务员进修学院所需的100英亩毗邻保留地段,由于医科学学生的临床医学训练多在医院里进行,肯特岗可供大学教学工作用的总面积其实超过366英亩。

- ③ 这是在肯特岗已经落成正在兴建的建筑物的设计容量。有人告诉我说那些建筑物的设计多数可以用来向上加建楼层或在旁边进行扩建使可供利用的面积增加25-30巴仙。
- ④ 裕廊校园历来最多的学生人数是2500。据南大说,它在理论上的最大容量是3500。
- ⑤ 到了一九八零年,大约将只有150名非联合校园的学生在裕廊校园攻读。
- ⑥ 这是武吉知马校园所能挤进的最高数额,这么一来,那里就会太挤了。

根据共和联邦各大学的经验,肯特岗校园和裕廊校园都各能容纳共有14,000名中学生的一间或多间学府的教学和研究学系,它们也能拥有宿舍,供小部分希望能寄宿而不住在家的学生利用,不过应有的条件是当局并不打算把任何耗地很多的活动并入校园范围,例如150英亩大的体育中心,或一个拥有大片附属农场的农业系。不过,我要特别强调,我到每一处校园去访问和考察都是很匆促的,所以我建议对每一处校园都应该仔细进行容量调查,以确定供下列各种用途时它在学生数目方面的最大容量,住宿,体育运动,设备空间,学生福利,学术性建筑,包括必要的中央设施如图书馆、电脑中心,行政处等。

9. 如果这项调查证明我的初步估计正确,我要建议在这些校园当中应该只发展一处,以应新加坡在大学教育方面的需求。虽然肯特岗并不是最大的校园,但它在这方面却是最适合的地方,因为:

- (a) 它拥有最新式的建筑,其设计可供日后扩展之用,而且
- (b) 它是兴建医学学院和教学医院的指定地点,这些活动同基本科学以及工程学方面的活动互相接近,对彼此都有好处。

10. 如果这项建议获得接受,裕廊校园和武吉知马校园将可充作其他用途。至于建议它们可供什么用途本来不在我所提呈事项的范围之内,但我却禁不住要说,我对裕廊校园所得到初步印象是:实验室设备的水平不高,那里的学生宿舍和体育运动设备显然没有充分利用这些设备随时可供其他人士使用,而现有图书馆和非图书馆的学术建筑物都可供某种学府使用。例如华文特别研究中心,教育学院或成人教育中心。武吉知马校园似乎素质比较高,外表看来容易改用,教育学院或某种未及学位水平的职业教育学院在这校园里开办是可以设想的。

一间或是两间大学?

11. 在我同两间大学的代表进行讨论的时候,这个问题曾被提出。南洋大学代表大力主张两间大学,而新加坡大学代表则似乎支持另一种主张。这些反应正如所料,由于它们反映出两间大学的既定利益和实力,撇开政治上的考虑不谈(因为这不在于我的职责范围),我对这个问题的看法如下:

12. 首先,这个问题越快解决越好。捉摸不定的局面对学术人员——尤其是在

一九八零年几乎没有学生的南大教职员——的士气和献身精神都有损。此外，不肯定的局面拖得越久，双方的态度就会来得更加强硬，而各持己见的人也会更不愿意接受改变。

13. 主张保留两间大学的人，在我看来，似乎持下列五个主要理由：

- (a) 在大学水平上保持某些形式的竞争是好的，因为它能促进双方的效率和工作素质，而即使这将导致某些方面的重复，培养出念同样学科但在不同情形下塑造出来的毕业生也还是好的（请参阅下文“c”）。
- (b) 如果现在就进行合并，以后如果决定把新大学分开，那将是一项花钱的荒谬的事情。
- (c) 东方国家正在壮大起来，而其影响力也日益提高，因此，南大更应朝向东方而不应朝向西方，以提供“文化根基”或平衡新大文化影响力。有人以相关的口吻说南大已经在新加坡和马来西亚某一部分人士的心目中占了一个特别和宝贵的地位。
- (d) 南大已经在某些方面（如华文研究、数学和电脑学等学科）建立了优良声誉，南大的这项长处以及它在商科方面所做的工作在新加坡今后任何大学教育的扩展中不应该废弃而应该发扬光大。
- (e) 严格地说，联合校园只是一种临时措施，其用意在于恢复南大对有意申请入学者的吸引力，并克服语文问题。当这个阶段达到时，这间大学将重回裕廊校园。有人指出近日有人建议把商业管理和会计集中在裕廊*，而这将是长久应用这间校园的一个好办法。

14. 依我看来，这些论点，不论是个别还是总的来说，似乎不足以支持在任何一个或两个校园里保留两间大学的政策。我现在就这些论点逐一提出我的评语。

- (a) 南大和新大近年来在争取学生的情形显示：申请入学者，尤其是那些离校考试成绩比较好的，大多数都宁可选新大。联合校园的设立，主要的理由就是有关方面认识到这个事实和它的可能永久性。在这种偏爱继续存在的同时，南大似乎没有什么希望能够以接近平等的地位和新大竞争。因此，这样的竞争多半是没有益处的，因为新大已经稳稳地处在更有利的地位。根本没有什么可激励它上进，而南大则没有能够和它争一日长短的希望。这样，如果要提高新加坡大学教育的一般水平，不论是一间或是两间大学，目标应该是在于国际水平上的竞争。这一点我回头再来谈。有关“不同模

* 我到访后六个星期，有人告诉我说当局已经决定从1980年、81学年开始，所有商业管理和会计课程都改在裕廊校园进行。

型”的教育这一点,是一个完全不同的概念。它对理科、工程以及其他完全依赖自然定律的学科并没有意义。不过,对于关系到人文价值的灌输和发扬的文科和社会学,它当然有其意义,因而与第(iii)点有关,正如下列第(iii)点的论证所示,只要谨慎从事,这个利益未必是会失掉的。

- (b) 关于第13(b)点,我不能把它看成是有份量的论调,因为这等于说既然可能离婚,就不应该结婚。
- (c) 有关在学府的工作方面反映文化和其他影响的概念;我完全有同感。这些正是维持高等学府的社会所要培养和保存的。但是,如果要试图在现有两间高等学府当中选择比较弱而且又显然不那么受欢迎的那一间来进行这种工作,但却对另一间不予理会,那准会挫败本章。这个目的如要获得实现,那么,这方面的学习,不但应该在比较弱的那间,而且也应该在比较强的那间学府有所交代,再者,对于那些目前对南大怀有特别感情者的抱负如能给予有想像力和同情的响应,那他们的期待应该可以在一间统一的大学里实现,而且甚至也许可在更大的程度上实现。因此,我认为这个论点对有关的问题并没有多大的意义。
- (d) 每一间大学都有其特有的优点,而这些优点又对新加坡极其重要这个事实,只有在任何统一之举会侵蚀这些优点并造成宝贵特征的丧失这种情形下,才可以用来作为保留两间大学继续分开的论调。关于那个细节所举的例子我没有研究。所以我没有理由可以在事前下论断。不过,在我看来,这些优点并不显然地必会丧失。我在本报告书里其他地方已经提到一些论调,多方面的资源汇合是有它的好处的,而且商业行政不应在地理上和组织上与应用科学和经济学分开。
- (e) 这个论点所持的理由不外是说,除非南大得以重返裕廊校园上课,否则就是对先前同意把它搬到武吉知马者的一种背信行为。这也许是,但是,我的研究范围是在于新加坡今后的大学需要,而且在探讨时还得尽量避免受到过去的决策约束。

15. 新加坡拥有一间大学的好处,就是大规模经济所带来的那些好处,在每一个研究领域都有更大、更强的院系,并且在多门学科教学和研究方面享有更大的机会。从我获得的资料显示,目前两间大学都似乎没有一个足以应付其工作范围所需要的图书馆。虽然我没有亲自证实这一点,但是必定有许多书籍和刊物因重复而造成浪费的现象。同样的,在一个统一的学府里,中央行政费用将可能是总开支的一小部分而已。对许多其他服务如电脑服务,学生福利等也是一样。

16. 虽然这个论点也适用于院系方面,但和以下这个事实比较起来,其意义就显得没那么重要了。这个事实就是,在某些学科方面,目前的教职员人数太少,不足以对有关学科作充分的教导。把这些院系合并了一个时期后,再加上由成长所带来的扩展,就能够把这种缺点纠正过来;并且创造发展其实力和素质的可能性,同时提供更多深造假期的机会,以及吸引外来的教职员。此外,专科选择的范围就可以扩大,更多的教职员将构成取得更优良仪器和设备各方面的理由,而新加坡在单门学科和多门学科领域方面的研究能力也会因此加强。这些论点适用于科学、工程和医科研究方面,这是显而易见的。但是,值得讨论的是,虽然分开的文学院各系在财经方面的不经济程度没那么严重,可是关于学科的教导、选择、图书馆设备等方面的论点,却是同样适用的。

17. 现代社会是由许多相互作用的部分组成的复杂机构,因此应该让大学生知道这一点是重要的。只要举一个例子,就可以充分说明这一点。金融事务、工艺经济、商业决策,劳资关系,市场等问题,至少和技术实用性一样,能够影响到创造业的表现。因此,在工程师和工艺专家的教育方面,应该注入若干这些非技术性科目的知识。反过来说,对今后攻读会计和商业行政的毕业生,也应该把技术知识作为他们教育课程的一部分,使他们对这方面有一些认识。如果要达致这些目标,那么,各教职员之间的自由交往、沟通和合作所产生的地理障碍,应该减到最低限度。也就是说,所有院系的教职员应该在同一个校园里。

18. 关于一间大学会不会扩展得太大,因此会不会存有某种最适宜的规模这个问题,经常都被人提出来,并且也在我的讨论中稍为谈到,在这里重复有关的论点是没有必要的,因为对新加坡当前情况真正有切合关系的唯一问题是:同两间规模较小、联合人力和物力相似的学府比较起来,一间拥有一万二千到一万四千个学生的单一大学,在教学和研究工作方面,是不是必有缺陷?有充分的证据证明,事实并不是这样的。

19. 因此,根据我的判断,维持两间大学的论点,不论是设在两个校园或一个校园(一样荒谬的提议),是极端没有说服力的,而造成只在肯特岗建立一间单一的强大学的论点却强而有力。我因此提出这样的建议。

南洋大学秘书长提出的替代办法

20. 南洋大学秘书长分别寄送一份提议书给我,其要点如下:

(a) 在武吉知马联合校园的目标完成后,在裕廊校园创设一间新的大学。

* 基于这个理由,我希望会计系和商业行政系订在1980年搬迁到裕廊之举,将不会是永久

- (b) 这间新大学所扮演的角色,将和新加坡大学所扮演的角色是相辅相成的,它将集中全力开办人文、社会科学、会计和商业行政等学科,而这些学科将不再在新加坡大学开办。
- (c) 为了确保人力物力能得到最符合经济原则的利用,两间大学必须在设备、课程和专门计划的分享利用方面相互合作,并且谋求设立联合“大学际的研究中心和学院”。相互确定资格被认为是这方面的一项必要特点。现有的联合招生、联合考试和联合招聘教职员的办法,预料将保留一段时期,直到新的大学已足够强大,有能力吸引自己的学生和具有所需才干的教职员,因而能够自立时为止,到了这个阶段,两间大学避免重复开办相同的课程的政策就可以放宽。

21. 南洋大学秘书长显然认为在“长远”看来,新加坡将需要两间大学。我不清楚“长远”一词所指的到底是多少年,但是我所收到的证据只显示;我们不能够对超过二十年以后的大学学生人数作出任何可靠的估计,而且报告书所提到的一万二千到一万四千的学生数字,意味着在十八岁的分龄组别中,将有十巴仙在这段时期结束时进入大学,而这也是符合政府的政策的。因此,在秘书长的提议和我的报告书之间的建议之间引起争论的中心问题是:“在今后的二十年里,新加坡由一间大学提供服务比较好呢,还是由两间大学提供服务比较好?”

22. 我不打算在这里重复已经提出的论点,但是,我只须这么说,秘书长所作的建议,其含意必定是这样的:

- (a) 在未指明但却是相当长的一段时期内,两间大学都不会有全部的大学科目。由于这样,事实上将有一间科学、工艺及卫生学院和一间文科、社会科学及商业学院,而这两间学院却相距十五哩。
- (b) 这样一来,依据教育原则不宜在组织上和地理上分开的同类和有相互关系的学科将继续分开设立,而这种分开的延长是不必要的。
- (c) 在20(c)项所提及的节省将很难达致,因此,我认为作为解决大学教育方案,这个建议比不上我所提出的建议。

调查团?

23. 在我到这里来之前以及在我访问期间内,有人曾建议应该请一些高等教育专家来深入研究和新加坡大学教育有关的一切问题,然后发表一份全国的报告书。这样的—一个调查团需要相当的时间来筹备,开会和完成工作,当大家都看清楚主要问题到底是什么的这个阶段,我怀疑它的效果是不是会完全有利。事实上,这样的一个调查团的设立很可能成为拖延事情的一个借口,甚至使到这个棘手问题不能在

一九八零年就如我所信的那样得到果敢的解决。

24. 讲完了这些之后,我认为在拟定和实施政策方面为统一大学校长提供某些外来的指导和支持是有良好理由的。这也许需要动用到受大家公认为某方面(如工程、商业研究、会计等等)的专家。他们必须准备根据新加坡的特别需要仔细研究某一个科目的组织和发展,以及它和同类研究的交错关系。这类专家可以容易地找到,其中有一些很可能已出任过校外主考人。如果能够把他们组成一个学术专家委员会为校长提供意见,那是有它的好处的,可是,要把委员会委员集在一起可能不是一件容易的事,因为他们当中有许多——即使不是全部——必须长途跋涉。因此,在必要的时候随时委任他们为顾问会比较实际;当然,这件事需要进一步的讨论和思考。

丹顿爵士签

1979年12月11日

(取自《星洲日报》)

Report of the Nanyang University Commission 1959

To: His Excellency The Governor of Singapore.

Your Excellency,

We were appointed by the Government of the Colony of Singapore in January 1959, with the following terms of reference:-

“To look into the academic standards of Nanyang University and the adequacy of the teaching staff and equipment and of the means adopted by Nanyang University for ensuring satisfactory standards of academic work and to make recommendations.”

We now have the honour to submit our report which embodies our unanimous opinions, findings and recommendations.

The Members of the Commission arrived severally between 12th February and 17th February. The first official meeting of the Commission was held on the 17th February and the last on the 12th March. Despite many difficulties we were able to work in an atmosphere of earnest enquiry characterised by a willingness to see one another's point of view. Our work was greatly facilitated by the numerous individual and collective representations received and by the many public-spirited persons who appeared before the Commission to give freely of their knowledge and opinion.

We would like to thank both the Government and Nanyang University for providing us with very comfortable quarters and excellent suites of offices at the Teachers' Training College and at the University. We would also like to place on record our special appreciation of the resourceful assistance of the Secretary to the Commission, Mr. Kwan Sai Kheong, and of the valuable services of the other members of the staff placed at our disposal; without them it would not have been possible to present this report on time.

We have the honour to remain,

Your Excellency's obedient servants,

S.L. PRESCOTT (Chairman)

WILLIAM HUNG

HSIEH YU-MING

CHIEN SHIH-LIANG

A.F.P. HULSEWE

12th March, 1959.

CHAPTER ONE

Introduction

1.1 In presenting the Report of the Nanyang University Commission we wish to make first some general observations on the complexity and difficulty of the task which confronted us and the circumstances under which we worked.

1.2 The Commission was composed of members severally representing the university traditions of a variety of cultures: American, British, Chinese and Dutch. In consequence, while having in common a general understanding of the concept of a university and sharing a common conviction of the importance of high academic standards as the essential characteristic of a university institution, there was bound to be some diversity in the personal view-points of the members of the Commission, who were themselves products of the universities of their own experience. In actual practice, the organisation, administration, methods and courses of study of the universities of the basic America, British, Chinese and European patterns are widely different, although all are aimed at the same target, namely, the training of the talented youth of the community. The exercise of mutually understanding the traditional views of each of the members of the Commission was an interesting task in itself; the application of the results of such mutual understanding to the examination and analysis of the situation obtaining at Nanyang University was a task of considerable complexity and intricacy.

1.3 To ensure that the recommendations of the Commission were complete in every detail would have taken far longer than the four weeks available. It proved impossible to extend the time as all of us had commitments elsewhere which could not be avoided. It would have been very desirable if it had been possible for us, having assembled in Singapore and having collected all the information available, conducted the necessary interviews and completed the preliminary discussions, to have returned to our home countries to collate and digest the data, returning to Singapore again at some later date for final discussions and the preparation of the report. The urgent requirement for an early submission of the report prevented this method being used.

1.4 It has been suggested to us from time to time that we should examine in detail all the present courses and, where there are marked deficiencies which would need to be made good before the students could graduate, make changes in the curriculum to be introduced in this the first final year of the four-year course. However desirable such a procedure might be theoretically, in practice it is quite unrealistic and impossible to implement. Furthermore, it cannot be too forcibly pointed out that in the consideration of university training and academic standards, it is not so much a matter of the detail of the courses actually taught or of the range of knowledge assimilated for regurgitation in the examination, as the thoroughness with which students are helped and encouraged to acquire a deep understanding of the principles, methods and techniques of the disciplines

studied. Or put in other words, university education is characterised as the training of the mind to seek for facts from the various sources which may be available and to handle the facts so elucidated by building new concepts and new general principles. The mere acquisition of know facts and theories is never sufficient at the university level. University training should be such that students will not just acquire text-book knowledge, but will be able to deal with new information that may be forthcoming. It is essentially a training in method and not in facts. This digression has been necessary to emphasize that any idea of supplementation in the final year of discovered deficiencies in the curriculum is not only unrealistic, but will not in the long run be to the real advantage of the students or the University. In general, academic standards can often be gauged more accurately by the attitude of, and the amount of research undertaken by, the university staff than by a detailed consideration of the courses actually taught to the students. Many of our observations would therefore appear to be concerned with the University generally, but such observations as we may make will, in our opinion, be basic and fundamental to the academic standards and standing of the University. All members of the Commissions are concerned to emphasize that a university is essentially and basically different from any other type of educational institution.

1.5 The shortage of time available to the Commission has meant that it has not been possible to give long interviews to all who might have wished to see us. A viewpoint or observation does not become more accurate or more important by continued repetition. We have tried, however, to dig deeply and cast our net widely. As far as we can ascertain, we have not missed any important objective expression of opinion.

1.6 Although no mention of secrecy was made in our advertisement inviting representations from the public, it became obvious that if valuable information and evidence were to be available to us, it was necessary that we should be able to guarantee that all representations and submissions would be confidential. In a subsequent press release it was announced that all submissions would be treated in the strictest confidence. In consequence, in the preparation of this report no sources will be cited; all confidential material will have been destroyed before the Commission dissolves, and the usual appendices listing the names of the people interviewed will be omitted. This will be an unusual feature of the report, but without this decision little evidence would have been available on which to base our judgment. This report and its recommendations can therefore be guaranteed only by our reputations, by the fact that we have deliberated without fear or favour, and that in the complex situation of Singapore we can be objective because we have nothing to lose or gain.

1.7 It is unfortunate that the final appointment of the several members of the Commission was somewhat delayed. Although a request for the collection and collation of relevant information was made to the University as soon as the chairman's appointment

was official (on 5th January), some time elapsed after our arrival in Singapore before the information asked for was available to us, and even then it was not as complete as could have been expected (e.g., the dates of the degrees of staff members were omitted from the official lists). This, to our mind, is somewhat surprising. We understand that the appointment of a Commission was first mooted in the autumn of 1957, and it would have been prepared by the University authorities in final and finished form by the time the members arrived in Singapore. The work of the Commission would have been considerably facilitated if relevant information had been spontaneously assembled and presented to us. In the experience of most university authorities the careful preparation and presentation of a full submission by a university requires at least six months, and most commissioners in the normal course of events insist on receiving such submissions at least six weeks before the commission officially assembles.

1.8 Another feature that made the task difficult is that members of the Commission were not able to see the University in full session. Classes do not re-assemble until the 2nd week of March, when we should be occupied principally with drafting and revising this report. It has not been possible, therefore, to observe the practical work actually undertaken by students, nor the methods of formal and informal instruction used. Such students as we have been able to see have impressed us with the clarity of their ideas and their general eagerness to prepare themselves to take their proper place in the community of Singapore. Although it was pointed out last August that it was highly desirable that the Commission should sit when the University was in full session, again, by reason of other factors not under our control, this was not possible.

1.9 It was with some surprise that the Commission discovered on arriving in Singapore that an Ordinance to establish the Nanyang University under the law of Singapore had passed the Second Reading and the Select Committee stage. The method of government of the University is fundamental to its very life and health and such an enactment, in our opinion, would have followed more appropriately the consideration of our report. We were also surprised to learn that, during the sitting of the Commission, the University authorities decided to admit some 500 freshman students for the current year, and some 200 other students for a preparatory class.

1.10 The task facing the Commission was therefore complicated by a variety of factors, but more difficult still was the actual definition of our task. While our terms of reference were stated in the terms of academic standards and presumably general standing, there has been an implicit assumption in all the submissions and in the thinking of all the people we have met, formally and informally, that we were to comment on the recognition of Nanyang University Limited as a university and the degrees it had contemplated awarding. This raises the question of "What is meant by recognition?" and the further question "By whom or what authority is the recognition accorded?" Is

it the recognition of the Nanyang University or is it the recognition of the degrees awarded to graduates? The complexity of the meaning of these questions can perhaps be made clear by a consideration of how and to what extent universities elsewhere come to be "recognised".

1.11 In the British tradition a new university is established as a public institution by an Act of Parliament or by Royal Charter, and as its academic standards and standing are safeguarded from the very beginning because it is made to operate under the tutelage of a well-established university (implying, e.g. the continued use of external examiners), the question of "recognition" does not arise. Because of its status in law, the new university is recognised as a university from the beginning, and because of the continued supervision of the new institution by older establishments, which will ensure the maintenance of the generally accepted standards, the degrees of the young university will from the beginning be automatically accepted on a par with those of other British or Commonwealth institutions without any further specific act of recognition.

1.12 On the other hand, the method for establishing a university in the United States is, comparatively speaking, freer, although a state charter may be needed before the new institution can start to operate. However, there exists no official machinery for the recognition of degrees, nor for its corollary, the maintenance of standards. In order to qualify for positions, holders of university degrees have to pass further examination - state or federal, or both - in law, medicine, engineering, accountancy, government service, etc. A watchful supervision by various private professional groups encourages the attainment of proper standards, and their approval or disapproval of the standards in specific institution serves as a guide to prospective students.

1.13 The confusing situation is that while Nanyang University, both in the manner of its foundation and in the organisation of its instruction, has followed the average pattern of the American university or that of a Chinese university with an American prototype, the new Ordinance has given it a legal status somewhat similar to that of the University of Malaya.

CHAPTER TWO

Organisation, Administration and Control

2.1 The present scheme of the organisation as submitted by the University is attached as Appendix A, and a description of the various committees of the University is attached as Appendix B; reference should also be made to the Articles of Association of Nanyang University Limited. It is not intended to describe in detail the present organisation, but a few comments may be worthwhile. An official statement claims that "Nanyang University is modelled somewhat on the best universities in China", but we failed to find any evidence of a good Chinese university being organised as a

limited company. The general organisation appears to be without parallel in any university anywhere. The receipt and investment of money is apparently handled by a Finance Committee of the Council, and the buildings and grounds by a Buildings Committee. No member of the academic staff appears to have a seat on either of these committees. The rest of the affairs of the University are in the hands of the Executive Council. There is no President at the present time, although we understand that repeated attempts have been made to secure one. An acting President has not been appointed; in consequence, although the Executive Council is stated to be performing the functions of a President, the absence of this office makes the organisation quite dissimilar to that obtaining in either America or China. Furthermore, all financial transactions are handled by the Finance Committee of the Council and are not under the control of the Executive Council, and the accounts are kept not at the University but at the Chinese Chamber of Commerce. In the same way, as far as we can ascertain, building matters are similarly not in any way controlled by the Executive Council.

2.2 We are of the opinion that this separation of the control of financial and building matters from the general rule of the Executive Council (the so-called "Presidential" Committee), and the absence of either a President in the American sense, or a Vice-Chancellor in the English sense, has led to a considerable degree of disorganisation and a general lack of any semblance of integration in the conduct of the affairs of the University.

2.3 The present Executive Council consists of the Dean of the College of Arts, Dr. Chang Tien-Tse, who is also the Chairman, the Dean of Studies, Dr. Chen Chung-Nan, the Dean of the College of Science, Dr. Choong Shin-Piaw, the Dean of the College of Commerce, Mr. Hsu Paquan, the Secretary-General, Mr. Pan Kuo-Chu, and four members of the University Council, Messrs. Yeo Chan-Boon, Ng Aik-Huan, Lin Kok-Gin and Dr. Chuang Chu-Lin. The Secretary is Mr. Yeh Ko-Jen.

2.4 All the internal affairs of the University are managed by the Executive Council, but the Chairman is not a member of the University Council; in consequence, the channel of communication from the Executive Council to the University Council is via the Secretary-General who, while no doubt exceedingly able, suffers from the great disadvantage of not being academically trained. It should also be pointed out that while other committees are organised as subsidiary to the Executive Council, all the actual decisions appear to be made at this latter level. The Secretary-General is also, strangely enough, a member of such a purely academic committee as the committee for examining the qualifications of the academic staff.

2.5 Under the Secretary-General's department is included the purchase of scientific apparatus, library books, furniture, etc., and all monetary matters within the University not handled by the Chamber of Commerce. We believe that the Secretary-General is

a full time officer of the University staff, but we omitted to ascertain his salary grading within the University scale.

2.6 No further comment will be offered on the committees, except that we could find no agreement as to whether in fact these committees did or did not meet regularly, although in general we gained the impression that they were not noted for their efficiency, nor was there any clear understanding of their respective functions, nor of the general chain of command within the University. A committee system on paper means nothing; if it is to work at all, it must have responsibility, it must meet regularly and be accorded definite powers. As an example, reference may be made to the departmental committees mentioned as existing in Appendix B. Ample evidence was presented to convince us that some of these do not exist, and that such important items as the design of the syllabus and curriculum, the standardisation of the marking of examination papers, and the avoidance of wasteful duplication and needless repetition in the subject matter of the numerous elective courses appeared never to have been discussed at the departmental, or, in some cases, at any level in the described committee system.

2.7 While we understand that the system has been designed "against dictatorship and for getting the opinion of various persons", and that "the Executive Council has been undertaking his (the President's) actual duties", it is quite clear to us that the result has been a kind of dual control, resulting in a considerable degree of disorganisation. We consider this quite disastrous at the present time, because the balance of powers rests in the hands of the Secretary-General, whose lack of training in academic affairs is one of the factors which have retarded the development of Nanyang University on sound academic lines. This semi-dual control has led to a complete lack of clarity in the administration and a most unhealthy situation generally within the University.

2.8 A few examples may help to make our meaning clear. There seems to be nothing to correspond to an approved budget in the normal understanding of the word. Although it has been stated that a budget is approved each year, we cannot help feeling that, if such were the normal procedure, we should have been presented with an unsolicited copy. As it is, although classes begin shortly, the budget for this year has not been made generally available. As will be mentioned later, the actual design of the Science block, both old and new, seemed to us to suffer from some definite deficiencies; yet we were not able to determine where the responsibility for these deficiencies lay. While quite clearly the old section would appear to have been designed without expert scientific advice, it was hard to elucidate how far the present staff had been consulted in the new extension. We also failed to discover any fixed policy with regard to the number of students admitted in relation to the number of staff and facilities available for their instruction. This is an important administrative and policy question, because we would hold the view that, in the face of the staff available, the recent decision to

admit in all some seven hundred new students in 1959 was unwise. While there may have been some advantages in the early days of not having an accounting organisation within the University, we consider that, if the University is to be administered without fear or favour, it is not practical to avoid a fully organised Bursar's department, functioning under a president with a Finance Committee. This is the only way to ensure that purchases of books and equipment are made from the agency that can supply the service required with the greatest efficiency and expedition. Bills must also be paid promptly. The only case we investigated of a number presented to us convinced us that a considerable improvement could be made in this direction. We would further suggest that the highest executive authority in any university, be it "President", "Chancellor", or "Vice-Chancellor", must be ultimately responsible for the correct business conduct on the part of the university, and steps must be taken to ensure that large purchases are made by tender, or some other system of competitive purchase, and that specifications of the requirements are carefully prepared and fully met.

2.9 Enough has been said to suggest that members of the Commission are not satisfied that the present organisation of the Executive Council, with a Chairman and a Secretary-General is an efficient method of administration, particularly as it places too much power in the hands of a non-academic person who is not well-versed in the business of a university. Although it might be argued that this is a matter separate from academic standards and therefore not strictly within our terms of reference, we must state categorically that in our opinion many of the ills of the University can be directly attributed to the method of executive control, leading as it has done to misunderstandings, the formation of a pressure group, the fomenting of jealousies and a struggle for power that is felt progressively throughout almost the entire staff. Further, we are of the opinion that this state of affairs has militated against the recruitment and retention of a first class staff, and contributed, at least in part, to the poor morale of the present members of the staff. We were disappointed to find that instead of a staff with high morale, imbued with a clear vision of excellence in academic matters and a determination to fight at all costs for proper standards and high principles, we frequently met the attitude that it is all so hopeless, that the patrons must be pleased at all costs, and that those who criticise will suffer for it. This may appear an exaggeration of the actual situation. We do not believe it is, nor do we believe that it is the intention of the men of enterprise and enthusiasm who founded Nanyang University Limited that this state of affairs should exist. We believe that it has arisen by accident, as it were, because the University has been organised along lines which would never have been adopted if any of those responsible had had experience of running a university.

2.10 Many representations have been made to us that a Senate should be created, and we note with gratification that provision has been made for this in the new Ordinance.

This can only mean that the present Board of Studies (Appendix B) is not functioning effectively. It should meet regularly, not "from time to time". The statement that "meetings are called from time to time to discuss and decide on the organisation of . . . research" is quite misleading. To our knowledge, no organised research is undertaken in the University at all.

2.11 We whole-heartedly agree with the intention to establish a proper representative academic body which should have full responsibility for academic decisions. While it is proper that the University Council should lay down the broad policy of the institution and may, as in the British system, have the final responsibility of confirming some of the decisions on academic matters taken by the Senate, it is quite impossible to conceive of a full university worthy of the name where the Senate does not have considerable delegated power or where a decision of the Council can run counter to the expert advice of the Senate. In a university organised in this way, we believe that the relationship between the Senate and the Council should be a partnership marked by a sense of co-operation, mutual respect, friendship and understanding. A university can exist and be worthy of the name without a body of lay councillors; it can even exist without undergraduate students; it can never exist without a staff organised as a worthy and responsible academic assembly having considerable freedom in the determination of academic policy.

2.12 We are of the opinion that such officers as Secretary (or Registrar) and Treasurer (or Bursar) should be full time officers of the University appointed to assist the President by the Council on his recommendation; they should have such academic qualifications as may fit them for university administration. The president must be the only channel of communication between the Senate and the Council; the Council should not take action on academic matters until these have been fully discussed by the Senate and the recommendations therefore are available to inform and guide the Council.

CHAPTER THREE

The Nanyang University Ordinance, 1958

3.1 From the previous chapter it will be apparent that the Commission's view on university government is that the continuation of the present method of government will seriously impair the growth of Nanyang University. While the new Ordinance is an improvement on the original draft, making good, for example, the serious omission of the members of the Senate from membership of the University, the Ordinance in its present form is still deficient in certain respects.

3.2 It might have been desirable if the Commission could have concentrated on the preparation of a completely revised Ordinance. This was, of course, impracticable

as there were so many other tasks that had to be undertaken. We shall give our general impressions of the Ordinance as it stands and will make certain specific recommendations that will need to be incorporated in a new Ordinance if the University is to be able to function as a university. But sooner or later, preferably sooner, the new Ordinance will have to be carefully revised by a committee of people who know the legal procedures of Singapore and who have a thorough understanding of university practice.

3.3 Our impression is that the intention behind the legal phraseology is not only confused, but corresponds to no known standard or form of university organisations. Examples of this confusion will be given:

- (1) Clause 6: There is an obvious confusion between the objects of a university and its legal powers.
- (2) Clause 6 (1)(n): It seems strange that the university should have power to provide residence for "officers" and yet not have power to regulate and provide for their welfare and discipline. This clause could be interpreted as making it possible to provide residence on the university campus for the Chairman and Vice-Chairman of the Council, the Secretary and the Treasurer, honorary or otherwise, and even the auditors, without also regulating their welfare and discipline.
- (3) Clause 6 (1)(p): We are inclined to think that the actual university buildings and land used by the University in the performance of its essential function should not be subject to mortgage or, for that matter, sale.
- (4) We consider that Clause 6 (2) is strangely worded and may presumably be necessary because of legal procedure in Singapore, but on first reading it would appear that a good lawyer could argue that the University has objects and powers to set up anything anywhere that might be quite inconsistent with the function of a university or, further, sell the present University buildings in Singapore and build a university in some other part of the world.
- (5) Members of the University Senate are also members of the University. It would appear that in the second paragraph of Clause 7 the word "servant" needs some reconsideration. Members of the staff of a university are not usually defined legally as "servants" and servants of the university are not normally members of the university (this is after all a clause providing exceptions to the provisions of the first paragraph of the same clause). The list of definitions in Clause 2 includes neither "servants" nor "officers". Hence the meaning of this second paragraph is not clear. We also feel that the phrase "remuneration to members of the university for services rendered" is an unusual phrase, particularly when clause 6 gives full power to "enter into contracts and appoint such staff as may be required." We are inclined to think that the interest payable

to members of the University who have lent money to the University should be limited to the ruling bank rate.

- (6) Clause 21: The Council may make, vary, or repeal, etc. *standing orders* on any matter within the scope of their authority. The Council may also make *rules* in Clause 29. We are not clear what the difference is between these two terms, nor which one of them has precedence legally over the other; some further clarification is needed here. In both cases standing orders or rules should be defined as not being repugnant to the Ordinance or the statutes made under the Ordinance.
- (7) We note that the rules listed in the Second Schedule can only be rescinded by a two-third majority of the General Meeting of the University. This we regard as quite undesirable. Certain of these rules are quite inconsistent with normal practice in a university. We do not like the poll method of conducting business, although it may be proper in the case of a business organisation. If a member of the University is of unsound mind (rule 14), we agree that he should not vote, but neither should his "committee, receiver, curator bonis or other legal curator". After all, the General Meeting of the Nanyang University is the important body which makes or amends statutes, and therefore the highest legal authority under the Ordinance. Nor do we approve of proxy voting. In the drafting of rule 22 (2) the President should have been included as having the power to summon a council meeting as his authority to do this is contained in Clause 13.

3.4 Enough has been said to indicate that the members of the Commission are most concerned that a suitable, workable and proper revision of the Ordinance should be enacted as soon as possible. Quite obviously we cannot amend all the inconsistencies and enough has been said above to indicate those special points where considerable care will need to be exercised in a full revision.

3.5 We are of the opinion that in such a revision the following minimum amendments should be made:

- (1) In Clause 8(5): Insert "unanimous vote of the" before the word: "Council".
- (2) In Clause 12(1): Delete the phrase "shall be the head of the University and".
- (3) In Clause 12(5): We consider that this clause should be deleted.
- (4) In Clause 13: After the word "Council" in the first line, insert "after consultation with members of the Senate".
- (5) In Clause 13(1): After the word "Ordinance" delete the remainder of the paragraph and substitute "the statutes and rules made thereunder or by resolution of the Council and shall have power to convene any Authority."
- (6) In Clause 14: After the word "Council" in each subclause, insert the words "after consultation with the President."

- (7) In Clause 15: Delete the phrase "and who may be an honorary or salaried officer" (It will be clear from what has already been said that our opinion is that this position should be a salaried one and that this officer also should be appointed by the Council after consultation with the President.).
- (8) Clause 19(1)(b): We are of the opinion that consideration should be given to a reduction in the number of members from 20 to 10.
- (9) In Clause 19 (1)(c): "two" should be changed to "three", and a new provision (e) should be made for all the foregoing members to co-opt up to four additional members from outside the University who might be reasonably regarded as being experts in education.
- (10) In Clause 21, second paragraph: After the word "Ordinance" insert "or of any statute or rule made thereunder." Add a further clause: "Provided also that no resolution shall be passed by the Council relating to any matter within the powers of the Senate, unless the Senate has first been given the opportunity of recording and transmitting its opinion thereon."
- (11) In Clause 22: Delete the phrase "delegate ... committee." Insert in its place "appoint standing committees of the Council".
- (12) In Clause 24: Insert "the Professors" between "Faculty" and "and". After "certificates" add "the Senate shall have the right to make representations on any matter whatsoever affecting the affairs of the University".
- (13) In Clause 29: After the word "Ordinance" in the first sentence, add "or to the statutes made thereunder."
- (14) Clause 29(c): Amend to read "for the appointment of Standing Committees of the Council."
- (15) Rules 26 to 30 and 32 in the Second Schedule should be deleted. (We are fundamentally opposed to rule 32 as it is important that the Senate should be a body that can determine its own order of business, time of meetings, etc. The term "principal" in rule 32(3) is, we presume, merely an undetected clerical error.)
- (16) Appropriate amendments should be made to other clauses affected by the foregoing amendments.

CHAPTER FOUR

Staff

4.1 Nanyang University is divided into three colleges, which are each subdivided into several departments. The staff teaching in these divisions fall into four categories, viz. Professor, associate professor, lecturer and assistant. The departmental staffing position is as follows:

	Prof.	Assoc prof.	Lect.	Asst.	Total
<i>College of Arts</i>					
Dean	1	-	-	-	1
1. Modern Lang. and Lit.	4	3	5	2	14
2. Chinese Lang. and Lit.	4	3	4	1	12
3. Education	2	1	1	-	4
4. Hist. & Geog.	1	2	-	-	3
5. Econ. & Pol. Sci.	6	1	1	-	8
	18	10	11	3	42
<i>College of Commerce*</i>					
Dean	1	-	-	-	1
1. Business Admin.	2	-	-	1	3
2. Banking	1	-	-	1	2
3. Accountancy	3	-	1	4	8
Part-time lecturers	-	-	(4)	-	(4)
	7	-	1(5)	6	14(18)
<i>College of Science</i>					
Dean	1	-	-	-	1
1. Mathematics	4	2	1	2	9
2. Physics	2(?)	4	1	2	7(9)
3. Chemistry	3	2	1	2	8
4. Biology	5	-	1	3	9
	13(15?)	8	4	9	34(36)
University total	38(40)	18	16(20)	18	90(96)

4.2 The slight uncertainties in these figures are due to the fact that the material submitted to the Commission is not exactly dated. However, they refer to the year 1958 and compare quite well with the figures quoted in the speech of the Chairman of the Executive Council on 18th July, 1958. He mentioned 38 professor, 16 associate professor, 15 lecturers, 16 assistants and 8 part-time lecturers. After this statement was made, about seven persons left the staff, and these were presumably partly or wholly replaced.

4.3 With a total student-enrolment reported as 1,339 students (612 in the College of Arts, 221 in the College of Commerce, 506 in the College of Science), the ratio between staff members and students is as follows:

	Prof.	Assoc. prof.	Lect.	Asst.	Staff
Arts	1:34	1:61	1:56	1:204	1:15
Commerce	1:32	-	1:221	1:37	1:16
Science	1:39	1:63	1:127	1:56	1:15
University	1:35	1:74	1:84	1:74	1:15

4.4 The preceding general figures only provide a partial view of the situation, as the ratio-figures do not give an indication of the "teaching-load". In some cases, this was seriously exceeded, e.g., in the Department of Modern Languages and Literature. A desire to reduce this burden is undoubtedly one of the reasons why the University wishes to increase the staff. However, an even more compelling factor is the enrolment of approximately 500 new students in the spring of 1959 and the expectation that more than 200 will be admitted to the preparatory course all this will bring about a shortage of personnel, and, according to one of the mimeographed documents submitted by Nanyang University and dated 1959, the University wants to invite the following new personnel to join its ranks:

(1) *College of Arts*

1. Dept. of Modern Languages and Lit.	7 prof., assoc. prof. or lect. for English
	1 prof., assoc. prof. or lect. for French
	2 prof., assoc. prof. or lect. for Malay
	2 assistants
	<hr/> 12
2. Dept. of Chinese Language and Lit.	5 prof., assoc. prof. or lect.
	1 assistant
	<hr/> 6
3. Dept. of History and Geography	5 prof., assoc. prof. or lect.
	2 assistants
	<hr/> 7
4. Dept. of Economics and Political Science	4 prof., assoc. prof. or lect.
Total for College of Arts:	24 prof., assoc. prof. or lect.
	5 assistants
	<hr/> 29 new members of staff

(2) *College of Science*

1. Dept. of Maths.	1 prof., assoc. prof. or lect.
2. Dept. of Physics	3 prof., assoc. prof. or lect.
	1 assistants
	<hr/> 4
3. Dept. of Chemistry	1 prof., assoc. prof. or lect.
	1 assistants
	<hr/> 2
4. Dept. of Biology	1 assistant
Total for College of Science:	5 prof., assoc. prof. or lect.
	3 assistants
	<hr/> 8 new members of staff

(3) College of Commerce

1. Dept. of Accountancy	1 prof., assoc. prof. or lect. 2 assistants <hr/> 3
2. Dept. of Banking	3 prof., assoc. prof. or lect. 2 assistants <hr/> 5
3. Dept. of Management	1 prof., assoc. prof. or lect. 1 assistants <hr/> 2
4. Dept. of International trade	1 prof., assoc. prof. or lect.
Total for College of Commerce:	6 prof., assoc. prof. or lect. 5 assistants <hr/> 11 new members of staff

4.5 This means that at very short notice, a total of no less than 35 professors, associate professor or lecturers and 13 assistants, i.e. 48 persons in all, will have to be found; a spokesman of the University stated to the press (*Singapore Standard* of 17th February, 1959), that these additional staff-members were badly needed, and a further press report (*Straits Times* of 4th March) stated that 50 members of staff had been appointed. In the Annual Report referred to above, the Chairman mentioned an increase in personnel of 41 per cent during the period 1957 to 1958; if the authorities should be successful in acquiring the 48 persons mentioned above, this will mean an increase of more than 50 per cent. Whatever the means which will be adopted to obtain these additional staff-members, serious doubt must be expressed as to the possibility of integrating them into the programme in the very short time at the disposal of all concerned. Moreover, permanent changes of such magnitude will hardly be conducive to providing the ever-swelling mass of students with a good education.

4.6 Staff members of Nanyang University are recruited by means of advertisement; these are stated to be inserted in "the leading Chinese and English papers of Singapore, the Federation of Malaya, Hong Kong, Taiwan and the Philippines". On the other hand, suitable persons are also contacted through personal enquiries. Whilst on the whole this system is said to have worked not unsatisfactorily, complaints have been laid before the Commission that the methods used have not always been proper. It is noted that there are no graduates of the University of Malaya on the full time staff of Nanyang University.

4.7 As far as the Commission was able to ascertain, it was only in the course of 1958 that a Board of Review of Teachers' Qualifications was set up, whilst its rules

were only drawn up on 10th September, 1958. This Board comprises—or more probably will comprise—between nine and eleven members, viz. the Deans of the three College, the Dean of Studies, and the Secretary-General, all ex-officio, with members of the Colleges (full professors only) in proportion to be established by the Executive Council and elected by the full staff by secret ballot. A previous, or still existing, committee with similar duties seems to have the Chairman of the Executive Committee among its members.

4.8 According to the resolution of 10th September, 1958, the qualifications demanded for staff-members are very high and a great deal of information is desired from the candidates (see Appendix C). Ideally, this sounds very good. But present circumstances must also be taken into consideration, particularly as recruitment is virtually restricted to South-East Asia because of the political situation. Moreover, it seems open to doubt whether it is really advisable to appoint staff-members in complete agreement with these rigid stipulations.

4.9 In several submissions made to the Commission, serious doubts have been expressed regarding the proper functioning of this Board of Review. On the one hand, it does not seem to have been always consulted, or to have taken its functions seriously enough, thus allowing the appointment of inadequately qualified personnel; on the other hand, it never seems to have reviewed the qualifications of members already on the staff. Opinions were repeatedly heard that an investigation of the latter might lead to unpleasant discoveries, and several methods for correcting what was deemed a most unhealthy state of affairs were also suggested.

4.10 It has become apparent to the Commission that no fixed policy exists as regards the appointment of new staff-members. In most cases it seemed that it was not the organisational requirements of the University which were decisive, but rather the immediate need of supplying additional teaching-personnel to a rapidly growing student-body. On the other hand, the availability of likely new staff-members seems to work as an indication of the maximum number of new students to be admitted. Whilst it is freely conceded that Nanyang University is still of very recent establishment, it appears to the Commission that the desire to cater for the largest possible number of students and, accordingly, to recruit academic staff as it were "in bulk", is not the way to establish an institution of learning on a solid foundation. We fully appreciate the existence of a great demand for knowledge and higher education in this area, as well as the University's wish to respond to this demand, but we doubt whether the evident lack of foresight and planning is not placing the whole venture in jeopardy.

4.11 The relation between staff-members and Nanyang University is established by a contract containing eleven clauses. The duration of the contract for all members is one year; on expiration it may or may not be renewed. Apart from the stipulation

(article 10) that the contract will be dissolved if the enrolled member cannot obtain the permission of the Immigration authorities to enter Singapore, the text contains no rules concerning the giving of notice to end the contract by either party. These two facts, viz. the short period of engagement for one year only, and the absence of any obligation to give notice at a stipulated moment before the expiration of the contract, have greatly contributed to the feeling of uncertainty and insecurity which the Commission could not help observing among the staff. In particular, it was the lateness of the notice of dismissal which was found to have the most depressing effect. It was, however, pointed out to the Commission that notice at any moment earlier than the end of the year (in fact between the middle of December and the end of that month) would tend seriously to impair the staff-member's eagerness to work.

4.12 We believe that to a certain extent there exists a close connection between the urge to recruit staff in large numbers at short notice and their supposedly lower average standard, which necessitates both short trial-periods and a means for speedy dismissal. The reputedly unsatisfactory working of the Board of Review would of course be another factor. The present system is bound to function a vicious circle: the University, afraid of being saddled with staff of an inferior quality, insists on one-year contracts, whilst the shortness of tenure and the complete insecurity of the staff engender a sense of uneasiness, which tends to kill any incentive to solid work, either in teaching or in research.

4.13 Both as regards the period of tenure and as regards the obligation to give notice of the impending expiration of the contract, suggestions have been laid before the Commission. Most of these propose a trial-period of one or two years, to be followed by another period of temporary appointment ranging between three and five years, and finally a permanent appointment; notice should be given three months prior to the expiration of contract—an obligation which rests of course on both the contracting parties.

4.14 In one of the papers submitted by the University we find the following salary scales mentioned: -

Deans	\$1,000 per month
Professors	700 per month
Associate Professors	600 per month
Lecturers	500 per month
Assistants	400 per month

A 10 per cent increase is stated to be given on re-engagement "for the second year", whilst "beginning from the 4th year there is a further 5 per cent increase". Department—and Division—Heads are to be given an extra \$100 per month, whilst a few other officers also receive extra remuneration. Finally, extra hours of teaching

beyond the twelve hours stipulated in the contract are to be remunerated at the rate of \$50 per weekly hour per month. Not having been provided with the accounts of Nanyang University, we are not in a position to state whether all the figures quoted above are in exact accordance with the facts; however, \$700 quite evidently is the initial salary of a full professor.

4.15 Now the complaint is quite general that the salaries paid by Nanyang University are far too low; one of the founder members of the University and a member of the present Executive Council, Mr. Yeo Chan-Boon, even stated, according to a report in the Chinese press in January 1957, that many staff members left because the salaries were inadequate. It should be pointed out that four years ago (in April 1955) the teachers in Chinese schools under the "full-aid scheme" could already reach the following maximum salaries: -

- (1) "Untrained" men, having passed Senior Middle III or Senior Normal III: up to \$490—gross \$637.
- (2) "Normal-trained" men, having passed 3rd Year Normal (Chinese Branch, T. T.C.) up to \$690—gross \$840; married \$931.50.
- (3) "Certificated teachers", possessing a Certificate in Education (Chinese Branch, T.T.C.) up to \$780—gross \$930; married \$1,053.

Other parallels suggest themselves readily. In a great many submissions laid before the Commission the suggestion was made that the staff salaries at Nanyang University should be readjusted, so as to conform with the local situation; in several cases was laid on the necessity to provide treatment comparable to that of the staff of the University of Malaya.

4.16 Whatever the solution to be adopted, we believe that the possibilities for research by keen members of the staff should not be cut off because of their inability to buy the necessary books. It will always remain a moot point whether the first duty of the staff of a university must be to teach or to work for the advancement of knowledge. But there need be no doubt about the fact that the university teacher who is unable—due to whatever circumstances—to advance his own knowledge by study and research will not be able to teach his students more than what is already to be found in books. In other words, the teacher must be enabled to work if he is to be able to teach.

4.17 The last remark in the previous paragraph is a much needed introduction to the statement that we consider the contractually required "teaching-load" of 12 hours per week *for all grades* of staff-members (article 3 of the contract) too heavy. We fully realise that there are such things as routine courses and general surveys for which a great amount of preparation is not required, but such courses form only part of the curriculum. Our considered view on this point is given support in practically all the submissions laid before us as well as in the personal interviews. A generally expressed

wish is that the required hours of teaching should not exceed nine hours per week. In view of the contractual obligation of staff-members to sit on various committees within the University (article 4 of the contract), this number seems to be the absolute maximum.

4.18 We are aware of the motives which inspired the sixth article of the contract under review, which states that Nanyang University is a purely scholarly organisation, without any political colour or any party-standpoint, and that any infringement of this spirit in word or in deed may lead to immediate and unconditional dismissal. For the growth of a healthy spirit of the University, however, it would seem advisable that this stipulation should be handled with the utmost care, as its stringent application might bring about results contrary to those that are evidently expected. We feel that there are more positive methods within the authority of the University than exclusion pure and simple. Participation of staff-members in party politics outside the university is not evil in itself, unless it militates against the welfare of the university.

4.19 We noted the extensive housing facilities provided by the Nanyang University for its staff-members free of charge up to the present. The contract (article 8) stipulates that staff-members have no choice in the allocation of housing and furniture. This is, of course, quite reasonable, but the complaint was repeatedly made that large families were put in relatively small houses. Apart from the fact that cramped housing conditions may be a constant source of irritation—a disposition of the mind certainly not conducive to good teaching—we consider it more serious that in most of the houses there is no provision for a study. This is another instance of the lack of careful planning of all phases of university work and life which makes itself felt in several other respects. The lack of a private place to work and think in is most deeply felt by the members of the Arts and Commerce Colleges, for the members of the Science College can at least take refuge in the laboratories. Nowhere, however, have any provisions been made for private individual work-rooms, not in the homes as mentioned above, not in the departmental buildings, not in the overcrowded Library.

4.20 The contract provides under article 9 that the University will pay for 1st class steamer-transport for a professor, his wife and two children (who travel on half-tickets). A similar provision, but referring to 2nd class transport, is made for associate professors and lecturers, whilst for assistants only the individual fare is paid. Although one of the mimeographed documents provided by the University mentions a free return fare at the end of the period of contract, the actual blank contracts in Chinese submitted for the Commission's inspection do not contain this important clause. From statements laid before the Commission it would seem that the return fare is usually paid by the university, but that nevertheless cases have occurred where this was not done. This must be considered an unacceptable procedure.

4.21 In view of the fact that most of the members of the staff are expatriates it

must be considered an omission on the part of the University authorities that the contract contains no provisions concerning leave abroad after a specified period of uninterrupted service. Many of the submissions dwell on this point, and suggest that leave with paid travelling expenses should be given after 4 or 5 even 7 years. It might be pointed out that in most organisations with a large expatriate staff, provision for leave with pay after a stipulated period of service is usually included in the terms of employment.

4.22 In this connection it must be mentioned that in a number of submissions the desirability of introducing a sabbatical leave has been stressed; in this way the home-leave could and should be employed for the advancement of knowledge to the benefit of the University.

4.23 Considering the shortness of the period of tenure, it need cause no wonder that the contract is silent on the points of age limit, retirement and pensions. Both in view of the future and of the age of a number of present members of the staff, provisions in this respect are sorely needed. Various suggestions have been laid before the Commission, advocating an age-limit of 60 years—pointing out that the age-limit at the University of Malaya is 55—or an age-limit established in accordance with the general age-limit for Government servants. Adoption of these proposals would of course imply that certain members of the staff who have already passed this age should be allowed to retire. As regards retirement in general, it has been suggested to the Commission that only staff-members who have completed ten years of service should be eligible for a pension. At present no provisions seem to have been made for the establishment of a general Pension. Provident or Welfare Fund; we are of the opinion that steps to remedy this situation should be taken in the near future.

4.24 In the foregoing pages reference has repeatedly been made to the necessity for research. We wish to reiterate that, in our opinion, it is the scholarly work of the staff-members that establishes the fame of a university. We hope that the authorities of Nanyang University will remedy the present unstable position of the staff-members so as to allow them to study in peace, and at the same time provide them with the necessary facilities to carry out research.

4.25 Here a word of warning may not be out of place. Too often the suggestion has been voiced in these parts that the students should be encouraged to do “creative work” and research. However, the task of the undergraduate student is to study - to study intelligently and critically under the guidance of the staff, to try and obtain a solid foundation of knowledge and insight, which will enable him *eventually* to apply the powers he has acquired to individual research, eventually, i.e., once he will have graduated. Of course, within limits even the undergraduate will be able to engage in research, be it in preparing for seminar-work or by making his first individual experiments in the laboratory. For the time being, more extensive student research should not be

encouraged at Nanyang University, firstly because it does not and must not belong to the work of the undergraduate, and secondly, because the University is not yet in a position to open a graduate school. If the authorities of Nanyang University clearly perceive the serious weaknesses prevailing in several of the University's departments, they will be wise to refrain from further complicating an already complicated situation by the establishment of graduate studies. When the present rapid but not always healthy growth has given place to a more normal and solid development, the time will have come to consider such a project, but not earlier.

4.26 Nearly all the submissions coming from inside and outside the University have stressed the urgent necessity for staff-members to participate in the administration of the university as regards purely academic matters. Although we realise the difficulties which the present organisers faced when, without expert advice, they tried to set up Nanyang University, including the recruitment of staff and the organisation of courses, we feel compelled to point out that in a university run along well-established lines, academic matters are left in the first place to the academic staff, the Council being concerned only with the final phases of the deliberations and recommendations of the staff. Once the number and type of colleges to be established have been decided, the internal organisation of these colleges and their departments (courses, curricula, syllabuses, etc.) is left entirely to the staff.

4.27 In financial matters, the final decisions should belong to the authority of the Council, but in the deliberations which lead to proposals involving expense it can have no say.

4.28 In matters of higher appointments, it is the staff who deliberate and propose. In other words, appointments to new chairs and to vacancies, as well as promotions, are matters for deliberation by the committees created each time for a specific purpose from among the academic members most closely concerned. Recruitment clearly belongs to those matters where the opinion of the staff has to be given the fullest possible weight; it cannot be left to the discretion of a *standing* committee, which includes several non-academic persons who, moreover, are not members of the staff.

CHAPTER FIVE

Courses and Facilities

5.1 In order to attain the aims of university education (see Appendix D), the undergraduate curriculum must be planned in such a way as to fulfil the following requirements. First, there must be a judicious allocation of the student's time in the curriculum between general education and the education in his major course. Second, courses must be arranged in logical sequence and the subject matter for each course carefully selected. Third, the general education and the education in the major course

of the student must be so integrated that they are complementary parts of the whole process of professional education.

5.2 Implementation of the plan requires not only its official adoption by the faculty and the administration, but also the successful solution of the difficult problem of evolving a method of teaching to enable the student to think for himself and develop his powers to attack and solve problems on his own in a professional manner.

5.3 A survey of the curriculum of Nanyang University led the Commission to the conclusion that there is still a great need for improvement. One of the shortcomings of the present curriculum is that it is too heavy. According to the regulations of Nanyang University, the minimum number of credits required for graduation is 142 for Arts and Commerce students and 152 for Science students. These numbers are considerably higher than the corresponding numbers for Universities in America, the Republic of China and the Philippines as can be seen from the following table:

Number of Credits Required for Graduation at Different Universities

Universities	College		
	Arts	Science	Commerce
Nanyang	142	152	142
in America	120	120	128
in the Republic of China	132	132	132
in the Philippines	120	120	121-123*

(*123 credits for accounting majors and 121 credits for majors in other fields.)

We are of the opinion that the number of credits required for graduation at Nanyang University should be reduced to a number within the range of 128-132. The reason why we suggest 128 rather than 120 as the minimum is because both Chinese (8 credits) and English (8 credits) are required courses in the freshman year of Nanyang University.

5.4 Another defect of the present curriculum is that it includes many courses which should not be there, although certain courses which are indispensable for a good training are missing. Space does not permit the enumeration of individual cases, it is sufficient to say that the courses which should be dropped are either special courses which would be more appropriate for a graduate school or courses which have no bearing on either the general education or the professional training of the student. A third defect is that certain courses are not arranged in logical sequence. In some cases the need of a prerequisite has been overlooked.

5.5 Thus far, we have discussed only the curriculum of courses. Far more important than course names and the hours assigned to each are (1) the thorough integration of

content throughout the course sequence and (2) the extent to which the student learns to think and apply principles, theories, and basic techniques or skills to the experimental or non-experimental solution of problems. A review of the syllabuses together with the curriculum of Nanyang University made us feel that it may not be out of place to give at this point a brief account of our opinion about course content and method of teaching.

5.6 Because of the limited time available for each course and in the interest of good education, one must be willing to discard traditional course content which is purely descriptive and factual, and focus attention, from the beginning to the end, on having the student master fundamental principles, theories and techniques, and learn how to use them in the solution of problems. One must sacrifice extent of coverage for depth of understanding, and each course should be devoted to subject matter which will be used in later learning in and after college. Such facts and instances as are introduced should serve primarily as the basis on which the student induces principles and theories, or for the purpose of illustrating a principle or testing a theory. We are therefore of the opinion that the present curriculum should be carefully re-examined and changes made wherever needed, so that the revised curriculum, if adopted and properly implemented by members of the faculty, will fulfil the requirements set forth at the beginning of this chapter.

5.7 We come now to the physical facilities. The founders of the University are certainly to be congratulated on the spaciousness of the site, which provides ample scope for future development. In the short period of three years the University has completed in its building programme a library, one building each for the Colleges of Arts and Commerce, two buildings for the College of Science, more than one hundred houses and flats for its staff members, and numerous student dormitories with accommodation for some 2,000 students. The buildings, as a group, look very impressive. They add to the beauty of the campus. On close examination, however, many of the buildings appear to have been designed in haste without adequate planning. For example, there is considerable waste space in the library building and yet the space provided for the stacks and the reading rooms is insufficient to meet the present needs of the University. The new science building has just been completed, but the provision of special services and other installations appears to be inadequate. Several student dormitories were found to have their windows facing east and west instead of north and south as they should. Moreover, the buildings are badly constructed, and some of them are already showing signs of deterioration, although they were only recently completed. These and other matters indicate some lack of planning and supervision on the part of the architect, the contractor, and the University authorities. We are therefore of the opinion that in future, before a new building for a particular purpose is designed, a committee should be set up with members who have experience and knowledge in that particular field to study the actual

needs and prepare a report which should form the basis of the architectural design.

5.8 The University has spent a considerable sum on books, periodicals, laboratory equipment, apparatus, instruments and chemicals. Here again, good planning before purchase seems to have been lacking. In order to raise the standards of Nanyang University to those of a first-class university, more and better facilities for teaching both the experimental and non-experimental courses will have to be provided. We are of the opinion that expert advice from both within and without the University should be solicited to work out a list of laboratory equipment, books and periodicals which should be added to the present stock, so that adequate facilities for good undergraduate teaching may be provided.

5.9 In the preceding paragraph, no mention was made of the need for research facilities. However, this should not be interpreted to mean that we underestimate the importance of research in university education, or that we think that Nanyang University should always be kept at the level of a small Liberal Arts College in America. On the contrary, we unanimously believe that in a university good teaching can only be done in an atmosphere of inquiry and research, and that the provision of research facilities is necessary to attract and retain staff of the right calibre. At the same time, we are of the opinion that the provision of adequate facilities for teaching must have priority.

5.10 We are of the opinion that in the departments of language studies, too much weight is attached to literary criticism at the expense of the prerequisite of linguistic proficiency.

5.11 As regards Chinese studies, we are faced with the difficulty that there are as yet no universally accepted standards for evaluating their content and method. We are inclined to think that many of the teachers in these disciplines have a wide acquaintance with classical literature and literary tradition. To judge by the several syllabuses, however, it seems that insufficient attention is being given to the results of research by recent scholars.

5.12 We are agreed that there is an urgent need for improvement and augmentation of the Malay division, both in breadth and in depth, making full use of the abundance of autochthonous materials.

5.13 We are fully aware of the different standpoints which exist concerning the usefulness of a separate Department of Education. From our past experience we must express our absolute preference for the system whereby an additional Diploma of Education is acquired in a relatively short space of time after completion of the studies of some major subject. We would therefore advocate that at the end of the year 1959 the Department of Education be changed into a Division of Education to provide the training needed in such a diploma-year.

CHAPTER SIX

Examinations

6.1 The commonest and possibly the best way of getting good students into a university is to require every incoming student to pass an entrance examination, which, if properly conducted, will pick out the students who have competence in oral and written expression, efficient reading and study skills, and broad preparation in the fields of study which a university requires. Therefore the requirements for admission to a university should be carefully prepared with the specific aim of providing adequate preparation for studies required in the university and a congruous continuity in the students' educational experience.

6.2 The admission of students into the University is governed by The Nanyang University Regulations. Students with any one of the following qualifications are eligible to sit for the entrance examination:

- (1) Senior Middle Certificate or Tree-Year Senior Normal Certificate;
- (2) Two-Year Senior Certificate with more than two years' teaching experience;
- (3) Cambridge Overseas School Certificate with adequate knowledge of written and spoken Chinese;

Students who pass the examination at the end of the preparatory course conducted by the University are exempted from the entrance examination.

6.3 We believe that the preparatory class for the small group of under-qualified students should be abandoned at the earliest possible date. It would be no small mistake to assume that within one academic year the teaching staff in a university, who are unprepared and perhaps not so enthusiastic about this special type of work, could transform low grade material into that of university calibre. It is an unfamiliar task to the teaching staff and a financial drain on the University. Mention should also be made that preparatory classes were found to be impracticable in the past by many national and private universities in China.

6.4 We consider it important that the syllabuses for the entrance examination should be carefully prepared, listing texts and supplementary reading material so as to give candidates a clear idea of what is expected of them. The examination questions should be set with the specific aim of testing whether the candidates have the ability to think and the skill of applying formulae and general principles to the solution of problems.

6.5 We are of the opinion that enrolment of new students should be regulated as follows:

- (1) The maximum number of students to be admitted to each department should be decided according to the staff and the facilities available in that department.
- (2) If fewer students qualify for admission than there are places available, then

only as many as are eligible, but not more, should be admitted.

- (3) If more students qualify for admission than there are places available, then only so many should be admitted as there are places available.

6.6 We are of the opinion that each student, upon being admitted to the University, should be assigned to a member of the faculty who would act as his adviser. The duties of the adviser are to assist the student in selecting his subjects, in the interpretation of course requirements, and in the selection of a well-balanced programme. It is the primary duty of the student, however, to meet the requirements of the course in their proper sequence, so that he may not, in his fourth year, find himself ineligible for graduation. This system of student advisers may later be developed into a proper tutorial system, depending on the availability of staff of the right calibre.

6.7 We are agreed that, in order to achieve a uniform standard in the final examinations both in the University itself and in relation to other overseas university, a formal Board of Examiners should be appointed to set the examination papers and assess the results. We consider it essential that an external examiner system as used in the University of Malaya should be introduced.

CHAPTER SEVEN

Student Life

7.1 The years of an undergraduate in a university represent his transition from youth to adulthood. During these years he must learn by experience how to live and work together with others; hence a wholesome campus life is an invaluable preparation for service and leadership in society. Since the building up of a good campus tradition is generally slow and its breakdown easy, it is of importance that the numerical growth of the student body should not be too rapid. Since man's service and leadership in society is now of expanding significance, his preparatory experience should not be restricted to the narrow limits of exclusively geographical, ethnic, linguistic, or religious grouping.

7.2 From these considerations, we regard it as an unsound policy to aim at quantity at the sacrifice of quality, to admit large incoming classes without very cautious consideration of possible effects on curricular and extra-curricular standards—however pressing the demand on the University for admitting more students, and however tempting a larger receipt in fees might appear to be a support to university finance. If there is no other revenue that can help to avoid a deficit, it would be better to increase the fees than to enlarge the size of the enrolment. The objection that a higher fee imposes a heavier burden on the students from poorer homes can usually be met by providing more scholarships and grants-in-aid, which if not available from donations,

should come from the increased fees. Some of the best private universities abroad take pride in matching a large and rapid rise in fees with a larger and more rapid increase in financial aid to students. Harvard, for instance, had in twenty-five years increased its fee receipts from US\$3,314,207 to US\$11,595,688 and its financial aid disbursements from about US\$500,000 to about US\$6,000,000—in other words, while fees had increased 350 per cent, aid had increased 1,200 per cent; now what Harvard gives to its students is better than half what it takes from them.

7.3 A desirable feature of having numerous and varying scholarships, grants-in-aid, loans, etc., is that they will facilitate the admission of various categories of students that will enrich campus life. Through living and working together, there will be a natural growth in mutual respect and understanding between the rich and the poor, between the native and the foreign-born, between one ethnic group and another, between the adherents of one religious faith and those of another. Provided that the curricular standard is also good, a campus life with extra-curricular activities of such happy friendliness will make it not only unnecessary but also undesirable for wealth families to send their sons and daughters abroad for college education, for in so doing they would be depriving their youths of that aspect of educative experience, a foretaste of the better community that they will have to help to build which no student life abroad can fully provide. Post-graduate training in more specialised and advanced subjects is, of course, another question: this may, with some advantage, be acquired abroad. Indeed, extraordinarily gifted graduates may very well be sent abroad for post-graduate work, either on the support of their families or on fellowships from the university. From among these the future university teachers may be recruited, and higher education in the area will no longer need to depend solely on imported personnel.

7.4 To return to undergraduate campus life, it cannot be overemphasized that it needs suitable housing quarters and wise faculty guidance. In order to integrate the day students with the campus life, many universities have found it desirable to provide a student-centre building even before all of the dormitory requirements are met. Further, such a building is basically necessary as a focal point in a fully developed student life in all its extra-curricular aspects. Apart from providing such a building and its maintenance, it is on the whole better to foster the spirit of responsibility and independence by not granting subsidies to the students' union or its numerous societies. The director of students' activities should preferably be a young man; he should be assisted by the committee on student welfare, which should include the director of physical education, the supervisors of hostels, and a few professors and representatives from the student body. Rules and regulations governing campus life should be carefully drawn up, and disciplinary measures against infringement should be fair and firm. Censorship of student opinion is impractical and difficult of enforcement. The present student publications

at Nanyang are very promising, though a reader might wish to see greater restraint in the criticism of University personnel or fellow students in print. In such as well as in other inconsiderate conduct there is always the need for more patient and skilful faculty guidance along the path that leads away from juvenile exuberance into matured wisdom, wherein one understands such matters as the obligations of courtesy and kindness, the power of integrity, and the dignity of humbleness.

CHAPTER EIGHT

Findings

8.1 In presenting this part of our report we wish to point out that we have purposely refrained from dwelling on those pleasant and admirable features we found in our altogether too few and too brief encounters with the University campus, the patrons, officers, teachers and students. These many features are not those that need improvement. Since we are invited to consider the academic standards and suggest improvements, we shall confine our findings to the few items below:

- (1) The overall impression of Nanyang University is that it has grown too fast without continuous expert planning over a long period before the admission of students.
- (2) The present method of organisation and administration of Nanyang University is not consistent with that of a modern educational institution of the university type.
- (3) The standard of the design of the laboratories and the library does not meet the requirements of adequate undergraduate training in a university.
- (4) Too great a proportion of the staff are, in our opinion, insufficiently qualified to give adequate undergraduate instruction in the University. The terms of employment seem to discourage many of the better qualified from accepting such employment and to demoralise many of those who do.
- (5) As a result there is in the atmosphere of the University a depressing lack of scholarly endeavour and investigation.
- (6) As far as the curriculum is concerned, both students and staff appear to be overloaded. The number of credits required exceeds that usually demanded. The courses of study show a lack of correlation and balance and frequently a lack of ordered sequence. Some essential courses appear to be missing and on the other hand there is an inclusion of unnecessary material. All courses would benefit by a thorough re-examination by the staff at the departmental level.

8.2 Following from the above findings, we regret that we must report adversely on the academic standards of Nanyang University; we further regret that we cannot at

present in good conscience recommend that the degrees of Nanyang University should be automatically recognised by the Government of Singapore as being comparable with the degrees awarded by other universities which are now so recognised.

8.3 We were not in a position to see the actual work of the students, but feel that we should report that such students as we have seen and interviewed have impressed us with their intelligence, keenness, enthusiasm and enterprise. Whatever may be decided about the future of the University and the recognition of its degrees by the Government, some transitional arrangements must be made to ensure that these students are not penalised.

8.4 After presenting these findings, we must state that they in no way reduce our admiration for the idealism of the founders of Nanyang University in the establishment of an institution of higher learning, aiming at the best training for Malayan students with Chinese heritage; where the performance has fallen short of the aim, there need be no serious disappointment: a new challenge will bring forth new achievements.

CHAPTER NINE

Recommendations

9.1 The following recommendations cannot be implemented without the provision of adequate finance.

9.2 We recommend that an *Ad Hoc* Committee be formed of not more than seven members, consisting of representatives of the Nanyang University and of the Government, to review our Report and to determine the extent and sequence of the re-organisation deemed necessary.

9.3 We recommend that the Nanyang University Ordinance, 1958 be amended after full consideration of the points mentioned in Chapter Three of this Report.

9.4 We recommend that the salary scales of the present full time staff should be raised immediately by approximately 50 per cent as a transitional measure. The present system of annual re-appointment should remain for the time being until the re-organisation of the University has been completed. All members of the present staff not re-appointed under new contracts should be given at the expiration of their contracts a return fare for themselves and their immediate family, and the equivalent of four months' salary as a retiring lump sum.

9.5 We recommend that in 1960 the number of students to be admitted should be reduced drastically as compared with that of previous years, and that in departments seriously affected by the re-organisation, no new students should be admitted at all.

9.6 We recommend that the *Ad Hoc* Committee should next work out new salary scales and terms of appointment including tenure, superannuation, etc., for all academic

and administrative staff including the President, to become effective as from 1st January, 1960. Present staff members will not be eligible automatically for the new salary scales; following the procedure to be described below, all positions for which the new salary scales are applicable should be re-advertised.

9.7 We recommend that the *Ad Hoc* Committee should then consider and determine the assured income of the University from private and Government sources for 1960, and fix the number of staff positions that can be established in view of the necessity of preparing, and abiding by, an approved annual budget which will make adequate provision not only for staff, but also for proper running expenses of the University in all its departments. We believe that it is better to have fewer well-staffed and well-equipped departments than to have many departments under-staffed and ill-equipped.

9.8 We recommend that the position of the President should be advertised and filled as soon as the staff establishment and the annual budget of the University have been determined. Until the inauguration of the new President, steps should be taken by the *Ad Hoc* Committee to appoint an acting President to take care of routine matters.

9.9 We recommend that after the inauguration of the new President, the other positions established in paragraph 9.7 should then be filled in an ordered sequence by public advertisement.

9.10 We recommend that in filling academic positions starting with that of the President, the expert advice of external academic assessors should be sought. Present staff members shall be eligible to apply for all positions.

9.11 We recommend that, until the inauguration of the new President and the establishment of the new Senate make it possible to have full discussions on the financial and academic problems facing the University, the total student body should, as far as possible, be progressively reduced.

9.12 Similarly, we recommend that the establishment of new colleges or departments should not be contemplated, and that the proposed reduction of the four-year course to a three-year course and the suggested introduction of an Honours year be held in abeyance until after the re-organisation has been completed.

9.13 We recommend that, after the inauguration of the new President and the setting up of the administrative machinery, the *Ad Hoc* Committee should be dissolved.

9.14 In order to facilitate the raising of the academic standards of Nanyang University as soon as possible, we would urge the University to adopt the external examiner system as used in the University of Malaya. We see no reason why a system could not be devised in which some or all of the external examiners of the University of Malaya are used.

9.15 Further, we realise that, with the necessary re-organisation of Nanyang University outlined in the above recommendations, it might be a few years before a

competent Commission could recommend the automatic acceptance of a Nanyang University degree as an eligibility qualification for entry into the public service. In the meantime, therefore, because we feel that the present students should not be further penalised, we would recommend to the Government that the entry requirements for the public service, including the Educational Service, should be temporarily relaxed so as to enable Nanyang University graduates to enter the public service after interview and the passing of such further tests as may be decided by the Public Service Commission, and that these graduates be placed initially in such salary grades as the Public Service Commission may deem appropriate. Their future promotion, even to the highest positions, will naturally depend upon their individual performance alone.

9.16 We would recommend further that the two universities in Singapore be encouraged to set up some type of informal Inter-University Academic Council to promote mutual understanding and stimulate co-operation.

9.17 We would like to see the present idea of a separate "Chinese University" and a separate "English University" replaced by the idea of two Malayan universities, one teaching principally in English, the other teaching principally in Chinese, sharing the same ideal of building up, through multilingual proficiency, sound scholarship and intellectual solidarity, a harmonious community characterised by mutual understanding and respect. In this way, we believe that the present traces of mutual distrust, bred in long educational isolation, will disappear completely in the new unity which will surely grow under independence and freedom.

(as submitted by Nanyang University)

UNIVERSITY ORGANISATION

General Meeting of Members

General Meeting of Regional Committees

University Council

Building Committee

Finance Committee

Executive Council

Dean of Studies Office

Secretary's Office

College of Arts

College of Science

College of Commerce

Registrar

Publications

General Affairs

Finance

Medical

Department of Chinese Language and Literature

Department of History and Geography

Department of Education

Department of Modern Languages and Literature

Department of Economics and Political Science

Department of Mathematics

Department of Biology

Department of Chemistry

Department of Physics

Department of Business Administration

Department of Banking

Department of Accounting

Department of International Trade

Library

Board of General University Affairs

Library Committee

Committee for Supervision of Students' Activities

Committee for Admission of Students

Disciplinary Committee

Scholarships' Committee

Board of Selection

University Publishing Board

Institute of South-East Asia

(as submitted by Nanyang University)

NANYANG UNIVERSITY**University Organisation***Regional Committees*

There are fifteen Regional Committees, one in each of the nine Malay States, one in Penang, one in Province Wellesley, one in Malacca, two in Sarawak and one in Singapore. General Meetings of the Regional Committees are called in each year to receive the Annual Report of the University and the audited accounts of the University from the University Council. Important resolutions relating to the policies of the University may be moved and passed at an Annual General Meeting of the Regional Committees.

The University Council

The Management of the University and of its property and affairs is vested in the University Council consisting of 25—250 members elected from among the members of the Regional Committees. The Council has entire control of the University, and governs, directs and decides all matters whatsoever connected with the administration of the affairs of the University and the accomplishment of the objects and purposes thereof.

The Executive Council

The highest executive organisation of Nanyang University is the Executive Council. The University has three colleges; namely the College of Arts, the College of Science and the College of Commerce. In addition there is the Office of Dean of Studies to take charge of the registration of students, curricula, examinations, publications and all other matters pertaining to the students' academic life. The University Preparatory Classes are also administered by this Office.

Board of Studies

Board of Studies consists of the Deans of Studies and of the three Colleges, the Departmental Heads, the Registrar, the Head of the Division of Publication and the Librarian, with the Dean of Studies as Chairman. It is the academic body of the University and has the control and general direction of instruction, research, examinations. Meetings are called from time to time to discuss and decide on the organisation of teaching and research in the University and all other matters relating to academic studies within the University.

Boards of the Colleges

A Board of a College consists of the Dean, who is Chairman, the Heads of the Departments, the professors and associate professors in the College concerned. Regular meetings are called in the first and last months of each semester to discuss and decide on the organisation of teaching and research and all other matters above the departmental level and within the purview of the College. Special meetings are called when such meetings are deemed necessary by the Dean.

Departmental Committees

A Departmental Committee consists of the Head, who is Chairman, the professors, associate professors, lecturers and assistants in the Department concerned. Meetings are called from time to time to discuss the organisation of teaching and all other matters within the purview of the Department.

The Library Committee

The Library Committee consists of the Chairman of the Executive Council, who is Chairman, the Librarian, who is Secretary, and two representative professors from each of the three Colleges. This Committee is responsible for the organisation and running of the University Library.

The Admission Committee

An Admission Committee is appointed by the Executive Council at the beginning of each academic year to review the Regulations Governing Admission to the University. This Committee consists of the Deans of Studies, and of the three Colleges, the Registrar, the Secretary-General and a certain number of professors who are directly concerned with the subjects to be tested at the Entrance Examination. The Dean of Studies acts as Chairman of the Committee.

The Committee for Supervision of Students' Activities

This Committee is responsible for the supervision and guidance of students' extra-curricular activities. There are two Divisions under this Committee, namely: the Division of Physical Education and the Division of Hostel Management.

The Scholarships' Committee

This Committee receives applications for the University's scholarships, considers their merits and decides on the award of such scholarships.

The Disciplinary Committee

This Committee deals with cases of serious infringements of important University Regulations by Staff members or students.

The Board of General Affairs

This Board deals with the general affairs of the University.

The Board of Selection

This Board considers applications for appointment to the teaching staff and also considers requests for promotion by staff members and recommends such appointments and promotions to the Executive Council.

The University Publishing Committee

This Board is responsible for the publications of books with a view to compiling a University series.

The Institute of South-East Asia

This is a unit within the University which carries out research on historical, social and economic affairs in South-East Asian territories.

The Secretariat

To the Secretariat is assigned the care of the University buildings, campus, properties and the University Clinic. The purchase of scientific apparatus, biological specimens, chemicals, library books, stationery, furniture etc. also come under the control of the Secretariat, as well as the handling of all the monetary affairs of the University.

1. All teaching assistants must possess either one of the following qualifications:
They must have——
 - (i) Graduated from well-known universities with Bachelor's degrees and distinguished academic records; or
 - (ii) Graduated from higher professional institutions and done research work or served at academic institutions for more than two years, with distinguished records of service.
2. All lecturers must possess one of the following qualifications:
They must have ——
 - (i) Obtained Doctor's degrees or Master's degrees from well-known universities, with distinguished academic records;
 - (ii) Served as lecturers at well-known universities for more than one year with testimonials; or
 - (iii) Served as teaching assistants at well-known universities for more than four years (including at least one year of service at the University) with good records of service and published books of a specialized nature.
3. All associate professors must possess one of the following qualifications:
They must have ——
 - (i) Obtained a Doctor's Degree from a well-known University and published valuable books, or obtained a Master's Degree with good teaching records;
 - (ii) Served as associate professors at well-known universities for more than one year, with testimonials; or
 - (iii) Served as lecturers at famous universities for more than three years with good records of service and published books of a specialized nature.
4. All professors must possess one of the following qualifications:
They must have ——
 - (i) Continued doing research work with important contributions to the academic fields after possession of the qualifications referred to in Section No. 1 of Clause No. 6 of these Rules;
 - (ii) Served as professors at well-known universities for more than one year, with testimonials; or
 - (iii) Served as associate professors at well-known universities for more than three years with good records of service and published important books.
5. Those who specialized in Sinology with teaching experience and have published important books, after consideration and approval of the Board, may be classified as possessing equivalent qualifications to those of professors, associate professors, or lecturers.

6. Each of the would-be teachers or teachers applying for promotion must submit the following documents:

- (i) A completed application form appropriate to the status for which he is applying, a curriculum vitae setting out his name, sex, nationality, age, academic records, experience, books written by him, present appointment, and the courses in which he specializes.
- (ii) Diplomas or certificates or academic records relevant to his qualifications. (Applicants for promotion will be exempted.)
- (iii) Books which have already been printed and published. (Textbooks or reference books for secondary school students or translated works will not be considered. Books submitted by teachers applying for promotion must be those published after their last application.)
- (iv) Testimonial of service, contracts or letters of appointment. (In case of loss, duplicate copies duly certified by the issuing authorities must be submitted instead. Testimonials submitted by teachers applying for promotion must be those of their service after their last applications or letters of merit issued by their departments in which they are serving.)
- (v) All other documents relevant to their qualifications.

7. The important points to be considered by the Board, as provided for by the provisions contained in Rule No. 3 and Rule No. 7 of the Rules Governing the Standards of Assessing the Teaching Staff's Qualifications, shall be as follows: -

- (i) In the case of an applicant with a Bachelor's Degree in his Graduation Examination Results and his position in such results shall be considered.
- (ii) In the case of his services at academic institutions and research centres, his research reports, books and letters of merit shall be considered.
- (iii) In the case of an applicant with a Master's Degree or Doctor's Degree, the value of his thesis and the academic position of the institution conferring such degree shall be considered.

The aim of university education is to equip students with the ability to grow throughout their lives in professional and personal stature and in usefulness as citizens. We should not seek to train students to be professional practitioners at graduation, but rather to educate them so that they will become professional men of full stature. Instruction should therefore be planned to help each student acquire the following:

- (1) An integrated understanding of fundamental knowledge and a familiarity with the basic techniques or skills in his major course and its related fields, and the ability to use this knowledge and these basic techniques or skills.
- (2) Genuine competence in the orderly way of analytical thinking which scientists and other professional men have always used in reaching sound, creative conclusions, to the end that after graduation the student can, by such thinking, reach his own decisions both in his professional work and as a citizen.
- (3) Ability to learn for himself with scholarly orderliness, so that after graduation he will be able to grow in wisdom and keep abreast of the changing knowledge and problems of his profession and the society in which he lives.
- (4) The philosophical outlook and breadth of knowledge which will enable him to recognize and deal with the human, economic, and social problems of his professional work.

REPORT OF THE NANYANG UNIVERSITY REVIEW COMMITTEE

Misc. 1 of 1960

Presented to the Legislative Assembly

by The Minister for Education

Ordered by the Assembly to lie upon the Table:

Printed by A. G. Banfield, Government Printer, Singapore

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MEMBERS OF THE COMMITTEE

Chairman	Gwee Ah Leng.	
Members	Ungku Abdul Aziz.	Foo Hee Lim.
	Rayson Huang.	Liao Sung Yang.
	Lien Shih Sheng.	B. R. Sreenivasan.
Secretaries	Jacen T. Hsieh.	Kwan Sai Kheong.

PREFACE

To: The Minister for Education, Singapore.

Sir,

We, the Members of the Committee appointed by you on 23rd July, 1959 to “review the report submitted by the Prescott Commission on Nanyang University and to determine the extent and sequence of the re-organisation deemed necessary”, have the honour to present our Report.

The first meeting of the Committee was held on 27th July, 1959 and the last on 20th November, 1959. Details of the Committee’s sittings, visits to Nanyang University and interviews held are listed as appendices to the Report. A number of tables containing important data pertaining to the University are likewise attached to the Report.

From our terms of reference, it might have been expected that our Report would make frequent reference to the Report of the Nanyang University Commission, particularly the chapters containing the Commission’s findings and recommendations. In practice, we found that, inasmuch as all the documents relating to the Commission’s investigations had been destroyed, it was necessary for us to cover much the same ground in our own investigations. In consequence, we found it more convenient to present our Report in an independent form. We believe that where we concur with, and where we differ from, the earlier Report will be readily apparent.

We wish to thank all those who have assisted us in the course of our work. In particular, we wish to place on record our deep appreciation of the services of our Joint Secretaries, Professor Jacen T. Hsieh and Mr. Kwan Sai Kheong, whose indefatigable energy and expert knowledge have greatly facilitated our work.

GWEE AH LENG. (Chairman).

UNGKU ABDUL AZIZ.

RAYSON HUANG.

LIEN SHIH SHENG

FOO HEE LIM.

LIAO SUNG YANG.

B. R. SREENIVASAN.

20th November, 1959

CHAPTER ONE: INTRODUCTION

1. Nanyang University was established for a specific purpose — to meet the demand for higher education for students from the Chinese secondary schools. This demand had arisen as a result of the rapid expansion of Chinese education from the primary to the secondary stage. According to official reports, the total enrolment of students in Chinese schools for Singapore and the Federation of Malaya in 1941 was 121,200. By 1953, the year in which the idea of Nanyang University gathered momentum, this figure had increased to 319,057 of which 22,310 were in secondary schools. Today, the corresponding figures for Singapore alone are 140,661 and 18,388.

2. The opportunities for higher education which previously existed for students from the Chinese secondary schools lay mainly in the Chinese universities. With the change in the political scene in China after 1949, this major outlet was all but closed. The University of Malaya, which had insufficient accommodation even for the students from the English secondary schools, was open only to those who could satisfy its entrance requirements in English. Entry to the Commonwealth universities was restricted by the same language difficulty and by the expense of going overseas. The demand was thus for a local university which would accept the qualification obtained from the Chinese secondary schools as a basis for entry. It was to meet this demand that Nanyang University was founded.

3. Today, Nanyang University is in its fourth year of existence, and the first batch of graduates will soon be leaving the University. It has an enrolment of 1,700 students, a staff of 128 teachers, and buildings and equipment costing \$12.3 millions. It represents the realisation of an ideal to which people from many walks of life have contributed generously. The demand for higher education for students coming from Chinese secondary schools still exists, and the conditions which led to the foundation of the University have not changed.

4. We consider that our task is to decide what measures are to be taken during the next three or four years to improve the University so that it may perform a constructive role for the promotion of higher education in this country. We are agreed that during this period steps should be taken to bring about a close association between Nanyang University and the University of Malaya. The details regarding this association can best be worked out by a joint working party consisting of representatives from the two Universities and the Government of both territories. As to the nature of this association, opinion is divided. Ungku Aziz and Dr. Sreenivasan are of the opinion that Nanyang University should be integrated with the University of Malaya as soon as possible. The rest of the Committee are of the opinion that it is desirable to have more than one university in this country, provided they are orientated towards a Malayan content and that this association should be one which would co-ordinate the two universities to the

best advantage. However, the Committee are unanimous in the opinion that by the end of this period of re-organisation, Nanyang should have evolved into a university where students from all Malayan secondary schools can obtain an education.

CHAPTER TWO: ADMINISTRATION

5. The administration of Nanyang University has inherited certain features from the system of management in many local Chinese schools. This is a system where the financiers of the school or their nominees form the Board of Management which is responsible, not only for the appointment and dismissal of staff, but also for the educational policy of the school. With men of vision and good sense on the Board of Management, it is possible for such a school to achieve a high degree of efficiency. On the other hand, it is not uncommon for a Board of Management with good intention but little knowledge of education to interfere with the staffing and the educational policy of the school to such an extent that progress is seriously hampered.

6. We are of the opinion that a university is too complex an organisation for such a system of administration to work satisfactorily. A well established system of university administration is one consisting of a lay Council and an academic Senate, with the Council having overall control of the general policy and the Senate being responsible for academic matters. We regard this system as best suited to Nanyang University, and recommend that immediate steps be taken to change the administrative structure of the University accordingly.

7. We are in favour of establishing a Court for Nanyang University. This body would bridge the gap between the General Meeting of the Members of the University, which includes thousands of active supporters, and the Council, which is necessarily limited in size. The Court will also serve to widen the scope of public participation in the maintenance and direction of the University. The powers and composition of the Court, as of other authorities of the University, are provided for in our proposals to amend the Nanyang University Ordinance. (see Chapter Eight and Appendix A).

8. In conformity with local terminology, we consider that the titular Head of the University should be called the Chancellor. The administrative and academic Head of the University would then be designated the Vice-Chancellor, and the principal administrative and financial officers the Registrar and the Bursar respectively. We also consider that positions of honour such as Pro-Chancellors should be created.

9. We believe that the appointment of the Vice-Chancellor is a matter of the utmost urgency. It is unlikely, however, that the appointment can be made in the immediate future, as the post will have to be widely advertised and the final selection made with the greatest care and circumspection. For this reason, we recommend that a local person with the requisite qualifications and experience in education be appointed

immediately in an acting capacity for an interim period.

10. The appointment of the Registrar should also be made as soon as possible. As the officer working directly under the Vice-Chancellor with duties involving both administrative and academic matters, the Registrar should possess a good university degree and suitable administrative experience. Provisions for the appointment of the Registrar, as well as of other officers, are contained in the proposed amendments to the Ordinance in Appendix A, and the duties of all the principal officers of the University are set out in greater details in Appendix C.

CHAPTER THREE: FINANCE

11. Nanyang University has so far been supported almost entirely by public donations and students' fees. We do not consider it possible or desirable for this state of affairs to continue indefinitely. We are of the opinion that public donations are too precarious a source of income to rely upon to meet recurrent expenditure, and in support of this view we might mention that we have found great variations in the amounts donated in past years, and that many promises to pay large sums of money have not been fulfilled. It will be more appropriate, therefore, for such donations to be allocated towards capital items.

12. For these reasons, we recommend that the Government should subsidise the University in the following ways: firstly, by meeting the budgetary deficits and secondly, by providing bursaries for needy but deserving students and scholarships for outstanding graduates to undergo post-graduate training locally or abroad. In addition, the Government might also consider making capital grants to match public donations, so as to encourage and sustain public support for the University.

13. We cannot over-emphasize the importance of having a proper budget drawn up each year. We would even go further and advocate that an overall budget for 3 years, with detailed figures for the year immediately ahead, should be prepared and approved at least 6 months before the beginning of each financial year, so as to provide a blueprint around which all activities in the University must perforce revolve. Such a budget will present a clear picture of the intended programme so that the administrative as well as the academic staff may plan their work accordingly in the most efficient manner possible. Furthermore, the existence of such a budget will stimulate and maintain the confidence of the Government and the public by keeping them informed of the planned and orderly development of the University.

14. We have examined the financial position of the University, and have drawn up an overall budget for the next 3 years, as set out in Appendix B, based upon estimates of income and expenditure likely to arise consequent upon the re-organisation we deem necessary. It will be seen from this budget that the estimated deficit, which we

have recommended Government should meet, will be \$606,570 for the first year, \$675,302 for the second year and \$745,034 for the third year after the re-organisation.

15. We have included Financial Provisions in our proposed amendments to the Ordinance. Chief among these provisions is the setting up of a Finance Committee with the responsibility of putting the current maintenance and the long term development plans of the University on a sound financial footing. We also recommend the early appointment of a Bursar, responsible to the Vice-Chancellor for the routine financial affairs of the University. We consider it essential that the Bursar should be a full-time, salaried officer with professional qualifications in accountancy.

CHAPTER FOUR: STAFF

16. The staff structure in Nanyang University follows broadly that of universities in China before 1949. In each department there is a Head, under whom are a number of professors, associate professors, lecturers and assistants. This structure is different from that of British universities of comparable size, where a professor is the Head of his department, and under him are senior lecturers, lecturers, assistant lecturers and demonstrators.

17. From information supplied by the staff themselves, we have found that among the professors at Nanyang University only about 20 per cent have doctorates, while among the associate professors only 17 per cent have doctorates and 40 per cent masters' degrees. It might be mentioned that in the United States, where many of the staff at Nanyang University acquired their qualifications, training for the master's degree consists usually of advanced courses, designed to bring the student to the threshold of research. Although in some universities a thesis is required for this degree, the work involved is more an academic exercise than original research, and not often published. It is also worthy of note that the doctorate, which normally represents two or more years of intensive and fruitful research, has come to be an essential requirement for appointment to a lectureship or assistant professorship in a university of any standing in most Commonwealth countries or in the United States. This has been particularly the case with appointments in the natural and social sciences.

18. The degrees held by a university teacher need not be given undue weight in assessing his academic ability, provided he can show, through his published works, his ability to engage in independent and original research. This evidence of academic calibre appears to be lacking in many of the senior members of the staff, whose publications, according to information supplied by the staff members themselves, consist largely of translations, reviews and popular articles, but very few papers presenting the results of original academic research. We feel strongly that the University should strive to secure a much larger number of senior teachers who are holders of advanced degrees, experienced

and actively engaged in academic research, and whose standard of scholarship has been shown through published works in their specialised fields of study.

19. To improve the academic standard of the University it is essential that the qualifications of the present and future members of staff be properly evaluated. It is therefore suggested that a Board of Selection to assess teachers' qualifications with the help of external experts of academic standing be established forthwith, by the Provisional Council (see paragraph 57) and that this assessment should apply to staff already on the establishment, as well as staff to be recruited in the future. Such a system of assessment will serve to maintain a certain standard, relative to well established universities in other parts of the world, and will moreover rule out to a large extent considerations other than academic, such as favouritism, which has been alleged to play a part in appointments in the past. We consider that failure to implement this recommendation will render futile any other attempt to improve the academic standard of the University.

20. The staff of Nanyang University are at present engaged on yearly contracts. This system has the advantage of allowing changes in staffing to be effected easily, but it retained for any length of time, it would be impossible for the staff to settle down to plan their work on a long term basis. They should have some measure of security to plan a stable curriculum and a programme of research. We therefore recommend that future staff should be engaged on a one-year contract in the first instance, to be followed by a three-year contract and then permanent tenure, with the retirement age fixed at 60, provided the Council may, at its discretion, extend it to 65.

21. We are of the opinion that the present salary scales for the staff of Nanyang University are too low, and that they should be more closely related to the income obtainable by local graduates in other walks of life. We are also in favour of continuing the present provident fund scheme, but with increased benefits, for permanent members of the staff. We understand that members of the staff have been provided with free housing and all municipal services. We are opposed to this system, as it tends to obscure their total emoluments and to create dissatisfaction when members of the same category are differently housed. Moreover, we can find no precedent where such complete facilities are provided free. We therefore recommend that housing and municipal services should be charged at flat rates according to the type of accommodation. Detailed recommendations in respect of salaries, provident fund and rent are set out in Appendix B.¹

22. We consider it essential that staff should be recruited according to a fixed establishment for each department, and that the Head of department should be well qualified and experienced, so as to be able to direct and co-ordinate the work of the different sections in his department and be responsible to the Senate for the running of the department. For this reason, we have recommended a separate salary scale for this

post, which we consider should be advertised as such.

23. We find that an overwhelming proportion of the staff come from Taiwan. This preponderance is perhaps unavoidable as long as the principal language of instruction remains Chinese. In the next Chapter, we make certain recommendations concerning the use of English in the University. As the standard of English improves with the years, the more senior students should be able to carry on with English as the language of instruction for subjects where it is desirable to teach in English. Moreover, in most departments, all the text-books used are in English and, indeed, they are the only text-books available. This has led us to the conclusion that the language difficulty need not restrict the field of recruitment for staff, and that the University should look to other sources of supply. In order to attract teachers from a wider field and encourage the secondment of staff from other universities on an exchange basis, special allowances could be offered as a short-term inducement whenever it is found necessary.²

24. We believe that it should be the ultimate aim of the University to obtain the majority of the staff locally. This is not to say that employment of expatriate staff should cease altogether, as frequent infusion of new ideas from abroad is desirable in any university. For a university to exist effectively, however, it must share the aspirations of the local people, and to do so, it is necessary that the staffing should be essentially local. To this end, we recommend that the University should adopt a vigorous scheme to build up a nucleus of local staff by recruiting all available local talent for the teaching posts, by absorbing its most promising graduates on to the staff as graduate assistants, and by encouraging them, after a short period of service, to go for post-graduate training either locally or abroad.

1. Ungku Aziz and Dr. Sreenivasan are of the opinion that Nanyang staff should be given salaries similar to those in the University of Malaya, where at present gross monthly salaries for married staff are at the following rates: -

Professors	...	...	\$1,900 - 2,100
Senior Lecturers	...	...	1,530 - 1,780
Lecturers	...	...	1,107 - 1,580
Assistant Lecturers	...	...	965 - 1,059

To offer them lower salaries is to imply that they are recruited in a cheaper market. The stigma of lower quality is inescapable. Furthermore, unless higher salaries are offered, it is unlikely that the staff who will bring about the evolutionary changes during the four-year period will ever be recruited. This unlikelihood is increased by the possibility that in several years' time the University, in its plans to expand its teaching staff, is likely to prefer larger numbers at the lower salaries to the same number at the higher salaries which, we are agreed, would be necessary to attract applicants from a wider field than Taiwan.

- 2 Ungku Aziz and Dr. Sreenivasan consider that if the salary scales recommended by them are adopted, special allowances will not be necessary.

CHAPTER FIVE: CURRICULUM

25. The curriculum of Nanyang University shows a lack of systematic planning. There is insufficient co-ordination between various related courses, and it would appear that individual experience and preference influence to a large extent the organisation of the curriculum. Certain courses are offered without reference to prerequisites or to other courses in the same field, and frequent changes are made to keep pace with unexpected developments in the staffing situation. Another unsatisfactory feature is the assignment of courses to teachers who have had no special training in such subjects, thereby imposing hardship on the teachers concerned and causing serious disadvantage to the students. Some of these defects are no doubt the result of the rapid expansion of the University and the unstable staffing situation, and should largely disappear with the implementation of our recommendation for a fixed establishment under able departmental heads. We wish to emphasise, however, the need for a well planned curriculum to be laid down and followed, so as to ensure that the subject matter in the courses offered will remain fairly constant.

26. The credit system adopted in Nanyang University follows broadly the Chinese university system, which in turn was patterned on the American system. In this a student, by attending prescribed courses, secures the number of credits required for graduation. A course consisting of 3 one-hour lectures per week for one term earns for the student, provided he passes his examination, 3 credits. The same number of hours of practical work would be accorded 1 credit. There are two terms in the year, and except for subjects in the major course of study, a student need not pass all the subjects in any particular year in order to proceed to the next year. He can, in fact, make up for such credits during subsequent years. In this way, we have found some students in the final year who have yet to complete their first year course in one or more subjects.

27. A disproportionately large number of credits appears to have been allocated to the first year. While this imposes an unreasonably heavy burden on the first year students, it also results in some students taking far fewer courses in the final year than would be deemed desirable. The subject matter, too, appears to be too minutely subdivided, so that the student is lost in a maze of detail without getting a clear concept of the fundamentals on a broad basis. We are therefore of the opinion, firstly, that the number of credits required for the first year should be reduced and, secondly, that the major courses should be re-grouped to form fewer courses covering a wider field. This applies in particular to the Arts and Commerce courses.

28. The proposed reduction in first year credits can best be effected in the 16 compulsory credits required for languages, 8 for English and 8 for Chinese, which we regard as excessive. We are of the opinion that before a student embarks on a university career, he should have a sufficient command of the language used in the university as

a medium of instruction to enable him to follow the courses of study. Training in language proficiency for this purpose should not form a significant part of the university course proper. We therefore recommend that the 16 compulsory language credits for the first year should be reduced to 8.

29. Mention has already been made of the extensive use in most subjects of textbooks and reference material in English and the fact that these are the only ones available. However, we have found the general standard of English of students in the first and even later years to be quite inadequate, so much so that most of the students do not possess the ability to comprehend with ease the standard texts and reference material in their particular field of study. The students' deficiency in the English language has therefore hampered their work throughout their academic career. The solution of this problem would appear to lie in raising the standard of English required for entrance. Students who fail the Entrance Examination only in English should be required to attend a one-year Pre-University Course devoted mainly to the study of English. Such students would, after satisfactory completion of this intensive course in English, proceed to their university course proper without sitting for the Entrance Examination again. This Pre-University Course should properly be conducted by the secondary schools, but until the schools are in a position to conduct such a course, it would be necessary for the University to assume the responsibility. (see paragraph 43).

30. Malay was introduced as an elective two years ago in all faculties, and has been taken up with enthusiasm by the students. However, the standard achieved in the second year has been found to be well below that of the School Certificate and even that of the Government Standard One Examination. University courses in Malay should be offered at a level higher than that of the School Certificate. As an encouragement to learn the national language, the University should offer extramural classes so that all students will have the opportunity of studying the language. To do this effectively, a Professor of Malay should be appointed.

31. In view of the fact that the language programme for Nanyang University is already heavy compared with most other universities, it is recommended that the present beginners' courses in Latin, German and French should be discontinued. Modern languages at university level may, of course, be offered if there is sufficient demand from students with the necessary foundation.

32. The system of examinations, as set out in the Academic Regulations of Nanyang University, is unduly complicated. There are two examinations per term, a mid-term and a terminal examination. The marks obtained at these examinations, as well as marks obtained in informal class tests conducted at the discretion of the teacher, are computed by means of a series of averages to arrive at an average terminal result. This is again combined with the marks obtained in the final graduation examination to

arrive at a final average graduation result. We are of the opinion that while marks obtained in informal class tests are useful guides to a student's progress and may, in borderline cases, be used to determine pass or failure in terminal examinations, such marks should not form an integral part of the graduation result. We are further of the opinion that a student should obtain passes in all the subjects at the same time in order to pass the graduation examination.

33. In addition to the regular examinations, make-up examinations are held at the beginning of each term for students who failed in the previous term. The percentage of passes at such make-up examinations in all subjects is remarkably high. We have examined answer scripts selected at random from both regular and make-up examinations, and are alarmed at the leniency of the marking. We have even found one instance where the entire set of papers was marked three times, with the result that the final marks in a number of cases were pushed up to more than double the original marks. The standard of marking must be tightened up. In this connection, we are pleased to note that the Academic Regulations provide for the setting up of a panel of external examiners, and that this will be put into practice in the forthcoming graduation examination. We believe that such a system will help the University to establish its place in the academic world, although the choice of external examiners is likely to be very limited in view of the fact that students are allowed to answer questions either in Chinese or in English.

CHAPTER SIX: FACILITIES

34. The recent addition of a new block of laboratories has eased the pressure on laboratory space. The Biology department, however, is still handicapped by insufficient accommodation, and the Arts Faculty requires more lecture rooms. Otherwise, there is adequate provision of lecture rooms and laboratories for the present enrolment.

35. The provision of equipment, however, has not kept pace with the increase in accommodation. We consider that the equipment in all the science departments requires to be substantially increased.

36. Part of the Library building is at present used to house the administrative offices. We consider this arrangement unsatisfactory and that, as soon as possible, the Library should have the full use of the entire building. This will make possible the provision of additional reading rooms, which are at present inadequate for the number of students using the Library. We are informed that the building of an Auditorium and Administrative Block is under consideration.

37. The latest figures available show that there are a total of 100,336 volumes in the Library, 60,107 volumes in Chinese, 349 volumes in Malay, 25,309 volumes in English and other European languages, and 14,571 volumes of journals and periodicals. We consider this inadequate, particularly in the English, Malay and journals sections.

We take this view not only because of the extensive use of textbooks in English, but also because of the heavy demands on the English section of the Library as shown in statistics compiled by the Librarian. The monthly average number of English books taken out by students up to July this year is 1,215.7 as compared with the corresponding figure for Chinese books of 1,292.3. If we take into account the disparity in the total numbers of books available in each language and the fact that the heaviest demand for Chinese books is in Chinese Literature, the much greater preference for English books on the part of the students is clearly seen.

38. We consider that the Librarian should have had considerable experience in a university library, preferably a person with qualifications in librarianship.

39. Hostel accommodation for students appears to be satisfactory, except for the lack of student common rooms. We consider the early provision of this facility essential to a healthy community life among the students. For the same reason, we are of the opinion that the present paucity of facilities for sports and recreation should be remedied as soon as possible.

40. We consider it essential that research facilities should be provided for the staff. We are also agreed that there is at present inadequate provision of officers and common rooms for the academic staff.

CHAPTER SEVEN: STUDENTS

41. There are at present 1,700 students at Nanyang University, with 454 in the first year, 417 in the second year, 358 in the third year and 471 in the final year. Of the total enrolment, 47 per cent are studying Arts, 36 per cent Science and 17 per cent Commerce. It is estimated that the number of students from the Federation exceeds 50 per cent of the total enrolment. We are of the opinion that the enrolment should be fixed according to the staff and the facilities available, and that the present enrolment should not be exceeded for the next few years.

42. Over 94 per cent of the students are from Chinese secondary schools. This is to be expected at this early stage of the University's development, as indeed it was to meet the demand for higher education of the students from these schools that the University was founded. We are of the opinion, however, that it should be the aim of the University to make it possible for students from all streams of secondary education to enter the University. Only in this way can the University fulfil the role of a truly Malayan university.

43. We note that a Preparatory Class for 300 students has been in existence for the purpose of coaching students who have failed the Entrance Examination. Students in this class are admitted to the University the following year on passing an examination in the Preparatory Class, without having to sit for the Entrance Examination again. We

consider this system unsatisfactory, as it leads to the acceptance of students assessed by two different examinations which are not necessarily of the same standard. We therefore recommend that the Preparatory Class be replaced by the Pre-University Course which we have earlier recommended. It is necessary that we should point out the essential difference between the two systems: whereas the Preparatory Class is designed to coach students who have been found to be below the general standard required for entrance, the Pre-University Course is meant for those who fail only in English but are otherwise acceptable. (see paragraph 29).

44. We believe that the opportunity for higher education should not be restricted to a fortunate few by unduly high fees. We therefore recommend that the present tuition fee of \$720 per year be reduced to \$540.

45. A number of Nanyang students are already in receipt of Government bursaries. We consider that this scheme should be extended so that no deserving student is denied the opportunity for higher education solely because of lack of means. We should also like to see the provision of scholarships to enable promising graduates to take up post-graduate studies locally or abroad.

46. It is desirable that there should be more opportunities for the students and the staff to get together informally. Our recommendation concerning staff and student common rooms will no doubt be helpful in this direction. Another measure which should be considered is to have a member of the staff resident in each hostel to be guide and counsellor to the students.

47. We are pleased to note the many extra-curricular activities of the students in both cultural and sporting fields. With the provision of additional facilities for the latter, we are confident that an even more active and purposeful student life will develop at Nanyang University.

48. Regarding employment prospects of Nanyang graduates, a good many people have the impression that the passing of the Nanyang University Ordinance implies recognition of the degrees to be conferred by the University as being on a par with those of other universities for entry into the public service. We have ascertained from the Government that this is not so. The present level of training given at Nanyang University is inadequate in many respects. Nevertheless, we think that selected graduates of Nanyang University should be given a trial in Government service in posts for which Pass degree graduates are eligible. This should follow an individual assessment of the candidates by the Public Service Commission. Ungku Aziz, Mr. Foo, Dr. Huang and Dr. Sreenivasan wish to make it clear that this recommendation should not be construed as tantamount to equating the present Nanyang degree with that of a Pass degree as accepted by the Government of Singapore.

49. It is clear that only a small number of Nanyang graduates can be taken into

the public service, and that the majority will have to find employment in commerce and industry. The University has not made any survey of the potential market for its own graduates, but we understand that a number of enquiries from business firms have been received and, on the basis of these enquiries, the University authorities are confident that employment for Nanyang graduates will not be a major problem. In fact, we have been informed by the Executive Council of the University at an official interview that the demand exceeds the supply. This confidence is not shared by us, nor by such students as we have interviewed.

CHAPTER EIGHT: ORDINANCE

50. The Nanyang University Ordinance was first tabled in the Singapore Legislative Assembly on 5th November, 1958. Adopted by the Assembly on 4th March, 1959, it received the Governor's assent on the 16th of the same month. It came into operation by notification in the *Government Gazette* on 27th May, 1959.

51. Many of the deficiencies in the Ordinance are the results of the extraordinary circumstances under which the University was founded and constituted as a limited company in 1953. It was not until about two years ago that measures were initiated to incorporate it by legislation. An attempt appears to have been made to bridge the gap between the Memorandum and Articles of Association of a limited company and an ordinance specially devised for constituting a university. The attempt has not been entirely successful.

52. We have the impression that the Nanyang University Ordinance, 1959, has been based on the University of Malaya Ordinance, 1949. In proposing the amendments to the Ordinance as set out in Appendix A to this Report, we have kept the following points in mind:

- (a) The Nanyang University Ordinance should proceed further to borrow liberally from the University of Malaya Ordinances, 1949 and 1958, in order to incorporate, as far as it is feasible, the best features of our two institutions of higher learning for the future development of Nanyang University.
- (b) In our attempt to improve the basic structure of Nanyang University, we have tried at the same time to preserve those aspects of the original Memorandum and Articles of Association derived from the fact that the University is a private and independent endeavour initiated, supported and maintained by a large number of public-spirited men.
- (c) On the other hand, we recognise that Nanyang University, as any university of good standing should be, is essentially an institution serving the need of the public and entitled to public support, and for this reason, public participation in the maintenance and direction of the University is not only desirable but necessary.

53. We have found that many necessary Statutes, Acts and Regulations will still need to be enacted so as to ensure the smooth and effective operation of the Ordinance. Besides the financial provisions mentioned earlier, provisions for Boards of Studies, Boards of Selection, Boards of Student Welfare and other boards are considered by this Committee as equally important.

54. We consider that the Council should have equal representation from the Court, the Senate, the Government and the Guild of Graduates. We have provided for the Chancellor to appoint not more than four persons on the recommendation of the Council. In view of the fact, however, that the Guild of Graduates comes into existence only in 1960, we do not think the full complement of four persons should be elected by them immediately. We have therefore provided that the Guild of Graduates should have one representative in 1960, two in 1961, and three in 1962 as an interim measure. The deficiency in the Council thus created can be remedied by giving the Chancellor power to have seven appointees in 1960, six in 1961 and five in 1962, so that by 1963 the Ordinance can be in full operation regarding the membership of the Council. In the first year, the Chancellor will appoint his nominees at his own discretion since the Council, as envisaged by us, will not be in existence, but in subsequent years he will be guided by the Council. The purpose of letting the Chancellor appoint members to the Council is to achieve a balance by adding such experts as may be necessary for the Council to function efficiently.

55. We feel that this Committee as it is constituted is not in a position to prepare a draft of the amended Ordinance in its proper form ready to be presented for legislative consideration. We have therefore confined ourselves to suggesting amendments which we consider necessary, to be put into shape by qualified legal draftsmen before presentation to the Legislative Assembly.

56. We assume that, with the amendment of the Nanyang University Ordinance as proposed by us, the necessity for the continued existence of Nanyang University Limited will cease, and the company will be wound up as soon as possible. Provision will have to be made so as to establish continuity between Nanyang University Limited and the Nanyang University until such time as the former is finally wound up.

57. In order that the University can carry out its reorganisation before the amended Ordinance comes into operation, we recommend that the Acting Vice-Chancellor should take immediate steps to form a Provisional Council. This is best done by consultation with the Ministry of Education and the Management Committee of Nanyang University. On the establishment of this Provisional Council, the Management Committee and the Executive Council of Nanyang University should transfer all their powers to the Provisional Council and then dissolve. The Provisional Council should then establish the Board of Selection and then the Provisional Senate. After the amended Ordinance comes into

operation, these provisional bodies should cease to function as the properly constituted bodies come into existence.

CHAPTER NINE: SEQUENCE

58. The Committee are of the opinion that the re-organisation of Nanyang University can best be carried out as follows:

- (1) Appointment of Acting Vice-Chancellor after consultation between the Management Committee of Nanyang University and the Ministry of Education. (paragraph 9).
- (2) Establishment of Provisional Council after consultation among the Management Committee, the Ministry of Education and the Acting Vice-Chancellor. (paragraph 57).
- (3) Assumption of powers of Council as defined in section 14 of proposed amendments to Ordinance by the Provisional Council. (paragraph 56 and Appendix A).
- (4) Dissolution of existing Management Committee and Executive Council. (paragraph 57).
- (5) Establishment of Board of Selection with expert external assessors by the Provisional Council. (paragraph 19 and 57).
- (6) Establishment of Provisional Senate by the Provisional Council. (paragraph 57).
- (7) Appointment of staff in accordance with establishment proposed in Appendix B. (paragraph 19).
- (8) Enactment of amended Ordinance. (Chapter Eight and Appendix A).
- (9) Dissolution of Nanyang University Limited. (paragraph 56).
- (10) Establishment of Court, Guild of Graduates and other statutory bodies. (paragraph 7 and Appendix A).
- (11) Appointment of Chancellor and Pro-Chancellors. (paragraph 8 and Appendix A).
- (12) Establishment of Council. (paragraph 6 and Appendix A).
- (13) Transfer of powers to Council by Provisional Council. (paragraph 57).
- (14) Establishment of Senate. (paragraph 6 and Appendix A).
- (15) Transfer of powers to Senate by Provisional Senate. (paragraph 57).
- (16) Establishment of Joint Working Party consisting of representatives from Nanyang University and University of Malaya and the Governments of both territories to plan the future relations of the two universities. (paragraph 4).
- (17) Revision of Curriculum. (Chapter Five).
- (18) Establishment of Pre-University Course. (paragraph 29 and 43)

PROPOSED AMENDMENTS

To The Nanyang University Ordinance, 1959

1. Section 2. Amend definitions of "Authority" and "teacher" and include definition of "Officer" and "Act":

"Authority" means the Court, the Council, the Senate, the Guild of Graduates and such other bodies as may be prescribed by Statute.

"Act" means an Act made in accordance with this Ordinance or any Statute.

"teacher" means a person appointed to be a teacher by the Council in accordance with this Ordinance and includes a Professor, Associate Professor and Lecturer.

"Officer" means the Chancellor, a Pro-Chancellor, the Vice-Chancellor, a Dean of a Faculty, the Registrar, the Bursar, the Librarian or the holder of any office created by Statute.

2. Section 3. Delete and substitute:

The Chancellor, the Vice-Chancellor and the members for the time being of the Court and the Council shall be a body corporate by the name of the Nanyang University and by that name shall have perpetual succession and a common seal with power to break, change, alter and make anew the said seal from time to time at their discretion and by the same name shall and may sue and be sued in all courts and in all manner of actions and suits and shall have power to do all other matters and things incidental or appertaining to a body corporate.

3. Section 4. Delete and substitute:

The University shall, subject to the provisions of this Ordinance, have power:-

- (a) to provide courses of instruction, to make provision for research, and to take such other steps as may appear necessary or desirable for the advancement and dissemination of knowledge;
- (b) to confer degrees and diplomas upon persons who have followed approved courses of study in the University and have satisfied such other requirements as may be prescribed by Act;
- (c) to recognize the degrees and diplomas of other institutions of higher learning;
- (d) to confer degrees upon teachers of the University who have satisfied such requirements as may be prescribed by Act;
- (e) to confer honorary degrees on persons who have contributed to the advancement or dissemination of knowledge;
- (f) to hold examinations and to grant certificates to persons who have attained proficiency in different branches of knowledge;
- (g) to institute chairs, lectureships, and other posts and offices and to make appointments thereto;
- (h) to erect, equip and maintain libraries, laboratories, museums, lecture halls, halls of residence and all other buildings required for the purposes of the University, whether in Malaya or elsewhere;
- (i) to institute and award fellowships, scholarships, exhibitions, bursaries, medals, prizes, and other titles, distinctions, awards and forms of assistance towards the advancement and dissemination of knowledge;

- (j) to raise money for any of the above purposes or other purposes of the University by mortgaging any or all of the property of the University;
- (k) to invest in land or securities whether trust securities or not such funds as may be vested in it for the purpose of endowment, whether for general or special purposes, or such other funds as may not be immediately required for current expenditure with power from time to time to vary any such investment and to deposit any moneys for the time being uninvested with any bank either upon fixed deposit or upon current account;
- (l) to enter into contracts, to establish trusts, and to appoint such staff as may be required for the purposes of the University;
- (m) to establish pension or superannuation or provident fund schemes for the benefit of its employees or any section of such employees, and to enter into arrangements with any government, organisation, or person for the establishment of such scheme;
- (n) to regulate and provide for the residence of officers, teachers, staff and students of the University and the welfare and discipline of teachers, staff and students;
- (o) to demand and receive such fees as may from time to time be prescribed by Act;
- (p) to establish branches of the University elsewhere provided that the parent University remains in Singapore;
- (q) to do all such acts and things, whether or not incidental to the powers aforesaid, as may be requisite in order to further the advancement and dissemination of knowledge.

4. Section 6. Delete.

5. Section 12. Delete and substitute:

- (1) There shall be a Chancellor who shall be the Head of the University and shall preside when present at any Convocation and shall have such other powers and perform such other duties as may be conferred or imposed upon him by this Ordinance or any Statute or Act.
- (2) The Chancellor shall hold office for a period of five years from the date of his appointment: Provided that he may at any time during his period of office by writing under his hand addressed to the Council resign his office or be removed by the Court after consultation with the Council.
- (3) The Chancellor shall be appointed by the Court on the nomination of the Council, in accordance with such procedure as may be prescribed by Statute.
- (4) A person shall be eligible for reappointment to the office of Chancellor.

6. Insert new section:

- (1) The Chancellor may appoint such persons to be Pro-Chancellors as he may consider proper.
- (2) If for any reason the Chancellor is unable to exercise any of his functions under this Constitution or any Statute or Act, he may authorize any of the Pro-Chancellors to exercise such functions on his behalf.
- (3) Every Pro-Chancellor shall hold office during the pleasure of the Chancellor.

7. Section 13:

Delete “President” and substitute “Vice-Chancellor” wherever it occurs in the Ordinance. In subsection (1) after the word “Council” in the first line insert the words “after consultation with the Senate”. Delete the comma after the word “and” in the 5th line and the words “in the event of the Chairman and Vice-Chairman of the Council being absent, he shall preside at all meetings of the Council and he”.

8. Sections 14 and 15 amend as follows:

Section 14

- (1) There shall be a Registrar who shall be a full time officer of the University and who shall be appointed by the Council after consultation with the Senate.
- (2) The Registrar may at any time be removed by the Council.
- (3) The Registrar shall have such powers and duties as prescribed by this Ordinance or the Statutes made thereunder or are assigned to him by the Council.

Section 15

- (1) There shall be Bursar who shall be a full time officer of the University and who shall be appointed by the Council.
- (2) The Bursar may at any time be removed by the Council.
- (3) The Bursar shall perform such functions as shall be assigned to him by the Council including the receiving of subscriptions, donations and legacies to and for the benefit of the University and the issue of receipts therefor.

9. Section 16: Delete.

10. Section 18: Delete and substitute:

“The Court shall consist of the Chancellor, the Pro-Chancellors, the Vice-Chancellor, the members of the Council for the time being, the members of the Senate for the time being, the Patrons and the Governors as defined in Section 8 of the Ordinance and such other persons as may be prescribed by Statute.”

11. Add new section defining the powers of the Court as follows:

The Court shall, subject to the provisions of this Ordinance, have power-

- (a) to receive an annual report on the University from the Vice-Chancellor;
- (b) to receive the audited annual accounts of the University from the Chairman of the Council;
- (c) to receive such special reports as the Council may decide to submit to the Court;
- (d) to receive copies of all Statutes;
- (e) to pass such resolutions relating to any reports or accounts submitted to the Court and any Statute sent to the Court as the Court may think fit;
- (f) to exercise such other functions as may be conferred on the Court by Statute.

12. Section 19: (1) Delete and substitute:

The Council shall consist of:

- (a) a Chairman elected by the Council from among its own members who do not belong to categories (b), (c) and (d) below;
- (b) the Vice-Chancellor;
- (c) four persons appointed by Government;
- (d) four persons elected by the Senate from among its own members;

- (e) four persons elected by the Court from among its own members;
- (f) four persons elected by the Guild of Graduates from among its own members; and
- (g) not more than four persons appointed by the Chancellor on the recommendation of the Council:

Provided that the Guild of Graduates may have only one representative in 1960, two in 1961 and three in 1962;

Provided also that the Chancellor may have not more than 7 appointees in 1960, not more than 6 in 1961 and not more than 5 in 1962.

Section 19: (2) Delete "(c)" and substitute "(d)".

13. Section 20: Delete the word "two" in the 3rd line and substitute "four" and delete the word "one year" in the last line and substitute "two years", and add:

Provided further that of the 7 persons appointed by the Chancellor in 1960, one shall retire at the end of 1960, another at the end of 1961, and yet another at the end of 1962. The retirement shall be decided by lot.

14. Section 21: Delete and substitute the following:

The Council shall be the executive body of the University and may exercise all the powers conferred on the University save in so far as they are by this Ordinance or the Statutes, Acts and Regulations conferred on some other Authority or body or on some officer of the University: Provided, however, that no resolution shall be passed by the Council relating to any matter within the powers of the Senate unless the Senate has first been given the opportunity of recording and transmitting to the Council its opinion thereon.

15. Section 22: Delete the words "delegate all or any of their powers, authorities or discretions to an executive committee" and substitute "appoint standing committees of the Council."

Delete the word "rules" in line 4 and substitute the word "Statutes."

16. Section 24. After the word "Faculty" in the second line insert the words "and the Heads of Departments, the Librarian and one Associate Professor or Lecturer from each Faculty elected by the Faculty" and delete the rest of the sentence.

17. Add a new section to read as follows:

- (1) The University shall in the first instance be divided into Faculties of Arts, Science and Commerce, but the number and the names of the Faculties may be prescribed by Statute.
- (2) A Faculty shall be responsible to the Senate for the organisation of instruction in the subjects of study within the purview of the Faculty and may exercise such other functions as may be conferred on it by Statute or Act.

18. Section 27. Delete "Council" in the last line and substitute "Court".

19. Section 29 and 30: Delete and substitute the following:

- (1) Subject to this Ordinance Statutes may be made to deal with any or all of the following matters:
 - (a) the powers and duties of the officers of the University;
 - (b) the composition, powers, duties and procedure of the Authorities of the University;
 - (c) the methods of appointment and the conditions of service of the officers and teachers of the University;

- (d) the determination of the degrees, diplomas and other academic distinctions to be conferred by the University;
- (e) the conditions of admission and of residence and the discipline and welfare of students;
- (f) all other matters which under this Ordinance may be regulated by Statute;
- (g) matters incidental to or consequential upon any of the matters aforesaid.

20. Section 31. Delete and substitute:

- (1) The Chancellor may, subject to the provisions of this Ordinance, make, revoke or amend any Statute.
- (2) The proposal for the revocation, the draft of any new Statute or of any amendment to any Statute shall be prepared by the Council and submitted to the Court and if the Court shall approve such proposal or draft, such proposal or draft shall be forwarded to the Chancellor who, if he shall approve the same, shall thereupon revoke, make or amend such Statute in accordance with such proposal or draft.
- (3) If the Court shall not approve such proposal or draft it shall be referred back to the Council with such observations or amendments as the Court may propose. The Council shall after first consulting the Senate in any case under subsection (4) of this Section consider the observations and amendments proposed by the Court and thereafter may again submit such proposal or draft with or without amendments. If the Court shall approve such proposal or draft then submitted it shall forward the same to the Chancellor who shall proceed thereon in the manner prescribed by subsection (2). If the Court shall not approve of such proposal or draft as then submitted to it, it shall forward the same to the Chancellor with such observations and amendments as it may propose and the Chancellor shall thereupon consider such proposal or draft and any observations and amendments proposed in respect thereof by the Court and shall, if he shall approve the said proposal or draft, revoke, make or amend such Statute in accordance with such proposal or draft without any amendment or with such of the amendments proposed by the Court as he shall approve.
- (4) The draft of a new Statute, or of any amendment to a Statute dealing with any of the following matters, that is to say: -
 - (a) the powers and duties of the Dean of a Faculty;
 - (b) the composition, powers, duties and procedure of the Senate, a Faculty, a Board of Studies, or a Board of Selection, or the Board of Student Welfare;
 - (c) the determination of degrees, diplomas and other academic distinctions to be conferred by the University;
 - (d) the methods of appointment and the conditions of service of the teachers of the University;
 - (e) the conditions of residence and the welfare and discipline of students;
 - (f) all other matters within the jurisdiction of the Senate under this Ordinance or any Statute,

shall not be submitted to the Court until it has been referred to the Senate and the Senate has reported to the Council its observation thereon.

- (5) Nothing in any Statute shall be repugnant to this Ordinance.

21. Section 32. Delete and substitute the following:

Subject to this Ordinance and the Statutes, Acts may be made for all or any of the following matters:

- (a) the principles governing the award of degrees, diplomas and other academic distinctions;
- (b) the number and scope of examinations and the admission of candidates thereto;
- (c) the admission of students to the degree and diploma courses of the University and to residence in the University;
- (d) the methods of appointment and the conditions of service of persons in the employment of the University; and the establishment and regulation of pension, superannuation and provident schemes for the benefit of the employees of the University or any section of them;
- (e) the conditions of residence and the welfare and discipline of students;
- (f) the fees to be charged for courses of study, for residence, for admission to examination, for degrees and diplomas, and any other fees that may be levied by the University;
- (g) the management of the library, the lecture halls, the laboratories, research institutes, halls of residence, and all branches of university activity not specially provided for in this Ordinance or by Statute;
- (h) the constitution, powers and duties of any board, committee or other body not specially provided for in this Ordinance or by Statute;
- (i) the appointment, powers, duties, remuneration and conditions of service of examiners and the conduct of examinations;
- (j) all matters which by this Ordinance or any Statute may be prescribed by Act;
- (k) all matters within the powers of the University and not otherwise provided for by this Ordinance.

22. Add the following sections:

Section 33:

- (1) The draft of any Act dealing with any matter in paragraphs (a), (b), (c), (e), (g) and (i) of Section 32 or with any other matter within the jurisdiction of the Senate shall be proposed by the Senate. The Council may approve the draft or refer it back to the Senate with observations or proposals for amendment, and no such Act shall be made until the Senate has agreed to its terms.
- (2) Nothing in any Act shall be repugnant to this Ordinance or to any Statute.

Section 34:

- (1) The Court, the Council or the Senate may make Regulations for its own procedure.
- (2) The Council may, after consulting the Senate, make Regulations for the procedure of Boards of Selection.
- (3) The Senate may make Regulations for the procedure of a Faculty or a Board of Studies.
- (4) The Senate may make Regulations prescribing courses of study or syllabuses of examinations.
- (5) Regulations may be made by any Authority if it is so empowered by this Ordinance, a Statute or an Act.
- (6) Nothing in any Regulation shall be repugnant to this Ordinance or to any Statute or Act.

Section 35:

- (1) When any Statute, Act or Regulation is made, amended or revoked at any time, every such Statute, Act, Regulation, amendment or revocation shall within one month after the same shall have been made or done be published in such official Gazettes and in such newspapers circulating in such places as the Council may, with the approval of the Chancellor, direct.
- (2) The Statutes, Acts and Regulations of the University in force at the date of publication shall be published annually in book form and copies shall be available for purchase at a reasonable price by members of the public.
- (3) Nothing in this section shall apply to any Act or Regulation containing only instructions to examiners or invigilators or to any other Act or Regulation which the Council with the approval of the Chancellor resolves not to publish.

FINANCIAL PROVISIONS

Section 36:

The Council shall appoint a Standing Finance Committee for regulating and controlling the finances of the University.

Section 37:

- (1) The Council shall, not less than six months before the end of the financial year, approve detailed estimates of revenue and expenditure of the University for the next financial year.
- (2) Before the date fixed for the meeting of the Council for the purpose of approving such estimates the Standing Finance Committee shall prepare draft estimates for submission to the Council, and the copy of such estimates shall be delivered to each member of the Council not less than seven days before the date fixed for such meeting.
- (3) The Council may in its discretion approve, modify or reject all or any of the items appearing in such draft estimates or refer any item back to the Standing Finance Committee for its consideration or add any item thereto.

Section 38:

- (1) Where additional financial provision is required in any year the Council may from time to time approve supplementary estimates for the purpose showing the sources from which any additional expenditure incurred by it may be met.
- (2) Subject to the provisions of this section the provisions of section 37 shall apply to any supplementary estimates in like manner as they apply to the annual estimates.

Section 39:

- (1) For the purposes of this Part the financial year shall be the calendar year, or such other period as the Council may determine.
- (2) The accounts of the University shall, as soon as may be, be balanced for the preceding financial year and an annual statement or abstract thereof shall be prepared.
- (3) The annual statement or abstract referred to in subsection (2) shall be prepared in such form and shall contain such information as the Council may from time to time direct.

Section 40:

- (1) It shall be the duty of the Bursar
 - (a) to prepare for the consideration of the Vice-Chancellor the estimates of income

and expenditure for each financial year;

- (b) to receive moneys paid to the University and to credit such moneys to the proper heads of account;
- (c) to make payments as authorized by the Council; and
- (d) to keep the accounts of the University in such form as the Council may from time to time direct.

Section 41:

- (1) The Council may, on behalf of the University, accept by way of grant, gift, testamentary disposition or otherwise, property and moneys in aid of the finances of the University on such conditions as it may determine.
- (2) The Bursar shall cause to be kept a register in which shall be entered all donations to the University including the names of the donors and any special conditions on which any donation may have been given.

Section 42:

All property, moneys or funds given for any specific purposes shall be applied and administered in accordance with the purposes for which they may have been given and shall be separately accounted for.

Section 43:

Any contract involving the expenditure by the University of more than five hundred dollars shall be in writing signed on behalf of the University by any person acting under the express or implied authority of the University:

Provided that any contract involving expenditure by the University of more than two thousand dollars and any contract which if made between private persons would be required by law to be under seal shall be executed by affixing thereto the common seal of the University.

Provided, further, that any payment under any contract for building purposes involving a total expenditure of two hundred thousand dollars or over shall not be made unless supported by a certificate from the independent quantity surveyor duly appointed by the Council.

GENERAL PROVISIONS

Section 44:

A Board of Studies may be appointed by the Senate for either of the following purposes:

- (a) to deal with matters pertaining to one or more of the Departments whether of the same Faculty or not;
- (b) to consider proposals referred to it by the Senate for the establishment of a new Department or Faculty; and

in either case to report thereon to the Faculty or Faculties. The composition and powers of a Board of Studies may be prescribed by Statute or Act.

Section 45:

A Board of Selection shall be appointed whenever it is decided to fill a Chair and, subject to any Statute, shall consist of: -

- (a) the Vice-Chancellor, who shall be chairman;
- (b) two members of the Council appointed by the Council who shall hold office for the period for which they have been appointed to the Council;
- (c) the Dean of the Faculty or the Deans of the Faculties to which the Chair will be allocated; and

(d) one member of the Senate appointed by the Senate.

External experts shall be appointed by the Senate to advise the Board of Selection on the suitability of candidates for the post to be filled.

Section 46:

The Board of Student Welfare shall consist of the Vice-Chancellor and such other persons as may be appointed by the Senate, and it shall have such powers as may be prescribed by Statute.

23. Wherever the words "President", "Secretary" and "Treasurer" occur, substitute the words "Vice-Chancellor", "Registrar" and "Bursar" respectively.

ESTIMATED INCOME AND EXPENDITURE

AFTER RE-ORGANISATION

EXPENDITURE	1 st Year	2 nd Year	3 rd Year
	\$	\$	\$
*Salaries	1,880,370	1,942,902	2,005,434
Staff Travelling Expenses	75,000	75,000	75,000
Hospitalisation Expenses	14,400	14,400	14,400
Medical Supplies	7,200	7,200	7,200
Printing and Stationery	31,200	31,200	31,200
Lesson Notes	30,000	30,000	30,000
Technical and Research Materials	25,200	27,600	30,000
Municipal Services	86,400	86,400	86,400
Telephone and Postage	5,400	5,400	5,400
General Repairs	9,000	11,400	13,800
Vehicles Upkeep	8,400	9,600	10,800
Sports Equipment	16,800	17,000	18,200
Rates and Taxes	28,800	28,800	28,800
Entertainment	6,000	6,000	6,000
Miscellaneous	30,000	30,000	30,000
	2,254,170	2,322,902	2,392,634

1,750 Students.

Tuition Fees — \$945,000

Percentage of Expenditure	41.92	40.68	39.50
<i>Per Capita</i> Cost	\$1,288	\$1,327	\$1,367

* These figures are based on the majority recommendation. (see footnote to paragraph 21)

ESTIMATED INCOME AND EXPENDITURE

AFTER RE-ORGANISATION

INCOME	1 st Year	2 nd Year	3 rd Year
	\$	\$	\$
Tuition Fees —			
1,750 Students @ \$540	945,000	945,000	945,000
Hostel Fees —			
1,500 Students @ \$240	360,000	360,000	360,000
Science Fees —			
650 Students @ \$50	32,500	32,500	32,500
Medical Fees —			
1,750 Students @ \$12	21,000	21,000	21,000
Sports Fees —			
1,750 Students @ \$12	21,000	21,000	21,000
Lesson Notes —			
1,750 Students @ \$18	31,500	31,500	31,500
*Rent and Municipal Services re Staff	201,600	201,600	201,600
Sundry Revenue	35,000	35,000	35,000
	1,647,600	1,647,600	1,647,600
Deficit	606,570	675,302	745,034
	2,254,170	2,322,902	2,392,634

* 11 Bungalows @ \$200 per month.

14 Semi-Detached Bungalows @ \$150 per month.

125 Flats @ \$100 per month.

(N.B. — Total number of Flats available: 176).

*SALARIES	1 st Year	2 nd Year	3 rd Year
	\$	\$	\$
Administration			
Vice-Chancellor — \$2,000	24,000	24,000	24,000
Registrar — \$1,100×50	13,200	13,800	14,400
Bursar — \$1,100×50	13,200	13,800	14,400
Medical Officer — \$1,100×50	13,200	13,800	14,400
Assistants 5 — \$500×20	30,000	31,200	32,400
Clerical Staff 30 — \$200(average)×10	72,000	75,600	79,200
Central Provident Fund	15,000	15,480	15,960
	180,600	187,680	194,260
Faculty of Arts — 800 students			
Dean — Allowance \$250	3,000	3,000	3,000
Heads of Department 5 — \$1,500	90,000	90,000	90,000
Professors 5 — \$1,100×50	66,000	69,000	72,000
Associate Professors 12 — \$900×40	129,600	135,360	141,120
Lecturers 21 — \$700×30	176,400	183,960	191,520
Graduate Assistants 23 — \$500×20	138,000	143,520	149,040
Central Provident Fund	56,400	58,284	60,168
	659,400	683,124	706,848
Faculty of Science — 650 students			
Dean — Allowance \$250	3,000	3,000	3,000
Heads of Department 4 — \$1,500	72,000	72,000	72,000
Professors 6 — \$1,100×50	79,200	82,800	86,400
Associate Professors 12 — \$900×40	129,600	135,360	141,120
Lecturers 15 — \$700×30	126,000	131,400	136,800
Graduate Assistants 18 — \$500×20	108,000	112,320	116,640
Central Provident Fund	48,360	49,908	51,456
	566,160	586,788	607,416

* These figures are based on the majority recommendation. (see footnote to paragraph 21)

*SALARIES	1 st Year	2 nd Year	3 rd Year
	\$	\$	\$
Faculty of Commerce — 300 students			
Dean (Allowance) — \$250	3,000	3,000	3,000
Heads of Department 3 — \$1,500	54,000	54,000	54,000
Professors 1 — \$1,100×50	13,200	13,800	14,400
Associate Professors 5 — \$900×40	54,000	56,400	58,800
Lecturers 7 — \$700×30	58,800	61,300	63,840
Graduate Assistants 8 — \$500×20	48,000	49,920	51,840
Central Provident Fund	20,880	21,564	22,248
	251,880	260,004	268,128
Library			
Librarian — \$1,100×50	13,200	13,800	14,400
Cataloguers 3 — \$500×20	18,000	18,720	19,440
Clerical Staff 12 — \$200(average)×10	28,800	30,240	31,680
Central Provident Fund	5,880	6,096	6,312
	65,880	68,856	71,832
Sundries			
Hostel Supervision	15,000	15,000	15,000
Working Students	50,000	50,000	50,000
Miscellaneous Wages	84,000	84,000	84,000
Central Provident Fund	7,450	7,450	7,450
	156,450	156,450	156,450
Total Salaries	1,880,370	1,942,902	2,005,434

* These figures are based on the majority recommendation. (see footnote to paragraph 21)

* *Recommended Scale of Emoluments*

			\$			\$
Vice-Chancellor	...	...	2,000	Increment	—Maximum	2,000
Registrar	...	...	1,100	"	50	1,350
Bursar	...	...	1,100	"	50	1,350
Librarian	...	...	1,100	"	50	1,350
Medical Officer	...	...	1,100	"	50	1,350
Professor and Head of Department			1,500	"	—	1,500
Professor	...	...	1,100	"	50	1,350
Associate Professor	...	...	900	"	40	1,100
Lecturer	...	...	700	"	30	850
Graduate Assistants	...	...	500	"	20	600

- Deans to be appointed from among Professors with Allowance of \$250 per month.
- Heads of Department to be recruited as such. Acting appointments may be filled from the professorial ranks with an Allowance of \$150 per month.
- Provident Fund — Payable to Central Provident Fund - 10% from University subject to maximum of \$100 per month and 5% from Staff members.
- Medical Attention to be provided by University Medical Officer.
- Hospitalization and surgical charges to be met half by the University — Professors and above 1st Class — Others 2nd Class.
- Expatriate Travelling expenses to be provided as follows:
 - Professors and above — 1st Class Sea Passages to and fro.
 - Associate Professors and Lecturers — 2nd Class Sea Passages to and fro.
 - If engaged after probationary period of 1 year, additional passages for wife and 2 children under 12 years.
- Rent and Municipal Services to be charged to Staff as follows:
 - Detached Bungalow \$200 per month. Flat \$100 per month.
 - Semi-Detached Bungalow \$150 per month. Room \$50 per month.

* These figures are based on the majority recommendation. (see footnote to paragraph 21)

APPENDIX C

UNIVERSITY OFFICERS

The Chancellor

The Chancellor is the titular Head of the University. He possess powers and functions including the nomination of members to the Court, and the making, revoking and amending of Statutes. In this last function he is advised by other bodies in the University. He also presides at Convocations for the conferment of degrees. He is appointed by the Court on the nomination of the Council and holds office for five years or until he resigns or until he is removed by the Court after consultation with the Council.

The Pro-Chancellors

The Pro-Chancellors are appointed by the Chancellor and hold office during the pleasure

of the Chancellor. In the absence of the Chancellor any Pro-Chancellor may be authorised by the Chancellor to exercise any of the latter's powers or perform any of his functions.

The Vice-Chancellor

The Vice-Chancellor is the chief executive and academic officer of the University. He is ex-officio a member and, unless there is provision for the appointment of another person as Chairman, he is Chairman of every University Authority and Committee. He exercises general supervision over the arrangements for instruction, research, finance, administration, welfare and discipline in the University. He should be able to initiate and guide policy and is concerned with every aspect of University policy. He is ultimately responsible for carrying out the decisions of the various University Authorities. The Vice-Chancellor's term of office and other conditions of service are determined by the Council.

The Deans

Each Faculty elects from amongst its own members a Dean who holds office for two years. The Dean is Chairman of the Faculty. His duties include correlation and implementation of policies determined by the Faculty. He acts as spokesman for the Faculty in the Senate. As a member of the Senate Estimates Committee he would consult with Heads of Departments on their financial and staffing needs and would present their case to the Committee and advise the Committee accordingly.

The Registrar

The Registrar is the administrative officer of the University directly responsible to the Vice-Chancellor. He is the Secretary to the Council and the Senate and he or his deputy is the Secretary to all other Authorities and Committees in the University with the exception of the Finance Committee which is a Committee of the Council and any other Committee in respect of which provision has been made for another person to act as Secretary. In this capacity, he is aware of all the decisions made by the various bodies and he is responsible to the Vice-Chancellor for ensuring that these decisions are carried out. He is also the custodian of the records and documents of the University. The Registrar should possess a University degree and requisite administrative experience.

The Bursar

The Bursar is the financial officer of the University directly responsible to the Vice-Chancellor. He is the Secretary to the Finance Committee of the Council. His duties include the preparation for the Vice-Chancellor of the estimates of income and expenditure, the collection of all fees, rent and other monies due to the University, the making of payments authorised by the Council and the keeping of the accounts of the University. The Bursar should be a qualified Accountant.

The Librarian

The Librarian is responsible for the administration of the Library. He is a full member of the Senate and in this capacity advises the Senate on matters affecting the Library and may initiate matters of policy.

THE UNIVERSITY AUTHORITIES

The Court

The Court is a large body with widely representative membership including the Chancellor, the Pro-Chancellor, the Vice-Chancellor, members of the Council and Senate and the Patrons and Governors and other persons. Its main function is to provide a forum in which on the one hand the University can be made aware of the needs and aspirations of the people of the Country and kept in close touch with public opinion, and on the other hand the public can be kept informed of the true purpose of the University and the work carried out. The Court receives the annual report and the audited annual accounts of the University from the Council of the University and may pass such resolutions relating thereto as it thinks fit. It also recommends to the Chancellor the making and amending of Statutes. The Court elects a number of the members to the Council.

The Council

The Council is the executive body of the University and exercises all powers of the University other than those vested in some other Authority or body. It is a comparatively small body (approximately 21 members) and includes in its membership persons from the Governments, from the Court, from the Senate, from the Guild of Graduates and persons appointed by the Chancellor. The Council elects its own Chairman from amongst its members who are not University staff or appointed by the Governments. Its functions include buildings, investments, appointment of staff, the approval of estimates, the provision of finance for the running of the University, making of contracts, the creation of new departments of study. In matters of finance it is advised by its Finance Committee to which it may delegate certain powers and functions. The general administration of the University is under the control of the Council.

The Senate

The Senate is the academic body of the University and has the control of the academic policy of the University including the control and general direction of instruction, research and examination, and the award of degrees, diplomas and certificates. Its membership includes the Vice-Chancellor as Chairman, the Deans of the Faculties, the Heads of Departments, the Librarian and a number of elected members of the academic staff. The Senate advises the Council on the making of any Statute or Act which affects courses of study or relates to student residence, welfare or discipline. The Senate further has power to make regulations for governing courses of study or syllabuses of examinations. It has control of the admission of students to courses and examinations of the University, the appointment of external and internal examiners, the award of Fellowships, Scholarships and prizes, the use of the buildings of the University intended for teaching and research, the control and general direction of libraries and museums and art galleries of the University. In addition, the Senate may make recommendations to the Council for the institution, alteration, or abolition of teaching posts and as to the qualifications of teachers.

The Faculties

A Faculty is a group of departments of study in related fields. It is responsible to the Senate for the organisation of instruction in the subjects of study within its purview. The Faculty has power to deal with and finally dispose of matters of an internal nature and would only make recommendations to the Senate on matters affecting the Faculty.

LIST OF OFFICIAL MEETINGS OF THE COMMITTEE

(All meetings of the Committee were held at the Conference Room, Ministry of Education, Kay Siang Road; the list does not include sub-committee meetings).

- | | |
|----------------|-----------------------------------------------------------------------------------|
| 1st meeting... | Monday, 27th July, 1959 from 12 noon to 2.10 p.m. |
| 2nd " ... | Monday, 3rd August, 1959 from 2.30 p.m. to 6.00 p.m. |
| 3rd " ... | Wednesday, 5th August, 1959 from 6.30 p.m. to 8.15 p.m. |
| 4th " ... | Monday, 10th August, 1959 from 2.30 p.m. to 6.30 p.m. |
| 5th " ... | Wednesday, 12th August, 1959 from 5.30 p.m. to 8.30 p.m. |
| 6th " ... | Wednesday, 19th August, 1959 from 5.30 p.m. to 8.30 p.m. |
| 7th " ... | Wednesday, 26th August, 1959 from 5.30 p.m. to 8.45 p.m. |
| 8th " ... | Monday, 31st August, 1959 from 2.30 p.m. to 7.00 p.m. |
| 9th " ... | Wednesday, 2nd September, 1959 from 5.30 p.m. to 8.45 p.m. |
| 10th " ... | Wednesday, 9th September, 1959 from 5.30 p.m. to 8.00 p.m. |
| 11th " ... | Wednesday, 16th September, 1959 from 5.30 p.m. to 8.30 p.m. |
| 12th " ... | Wednesday, 23rd September, 1959 from 5.30 p.m. to 8.00 p.m. |
| 13th " ... | Wednesday, 30th September, 1959 from 5.30 p.m. to 9.00 p.m. |
| 14th " ... | Monday, 5th October, 1959 from 5.30 p.m. to 8.30 p.m. |
| 15th " ... | Wednesday, 7th October, 1959 from 5.30 p.m. to 8.30 p.m. |
| 16th " ... | Monday, 12th October, 1959 from 2.30 p.m. to 6.30 p.m. |
| 17th " ... | Wednesday, 14th October, 1959 from 5.30 p.m. to 8.30 p.m. |
| 18th " ... | Monday, 19th October, 1959 from 5.15 p.m. to 9.00 p.m. |
| 19th " ... | Wednesday, 21st October, 1959 from 5.15 p.m. to 9.00 p.m. |
| 20th " ... | Monday, 26th October, 1959 from 5.15 p.m. to 9.00 p.m. |
| 21st " ... | Wednesday, 28th October, 1959 from 5.15 p.m. to 9.00 p.m. |
| 22nd " ... | Monday, 2nd November, 1959 from 5.15 p.m. to 9.00 p.m. |
| 23rd " ... | Wednesday, 4th November, 1959 from 5.15 p.m. to 8.00 p.m. |
| 24th " ... | Monday, 9th November, 1959 from 5.15 p.m. to 9.00 p.m. |
| 25th " ... | Wednesday, 11th November, 1959 from 5.15 p.m. to 9.00 p.m. |
| 26th " ... | Monday, 16th November, 1959 from 5.15 p.m. to 9.00 p.m. |
| 27th " ... | Friday, 20th November, 1959 from 1.00 p.m. to 3.00 p.m. at
the Medical Centre. |

LIST OF OFFICIAL VISIT TO NANYANG UNIVERSITY

(This list does not include visits by Sub-Committees and individual members).

- | | |
|---------------|-----------------------------------------------------------|
| 1st Visit ... | Monday, 17th August, 1959, from 3.00 p.m. to 5.30 p.m. |
| 2nd Visit ... | Monday, 24th August, 1959, from 3.00 p.m. to 6.30 p.m. |
| 3rd Visit ... | Monday, 7th September, 1959, from 3.00 p.m. to 6.30 p.m. |
| 4th Visit ... | Monday, 14th September, 1959, from 3.00 p.m. to 6.30 p.m. |
| 5th Visit ... | Monday, 21st September, 1959, from 3.30 p.m. to 6.30 p.m. |

LIST OF PERSONS INTERVIEWED

1. The Chairman and members of the Executive Council, Nanyang University.
2. The Secretary General and the Dean of Studies.
3. The Deans of the three Colleges.
4. The Heads of Department and members of Staff of each department.
5. Student representatives.
6. Dr. Charles Gamba, Lecturer in Economics, University of Malaya.

APPENDIX G

LIST OF MEMORANDA AND COMMUNICATIONS RECEIVED

1. Memorandum from the staff of Nanyang University.
2. Memorandum from the students of Nanyang University.
3. Memorandum from the Educational Society of Nanyang University.
4. Letter from the Permanent Secretary, Ministry of Education, Singapore.
5. Letter from the Secretary, Public Service Commission, Singapore.
6. Letter from Mr. Chang Tuan Sin.
7. Letter from Mr. Wen Cheng Nan.
8. Letter from Mr. K. S. Wong.
9. Letter from Mr. Wu Tee Jen.
10. Numerous anonymous letters.

APPENDIX H

LIST OF REFERENCE MATERIAL CONSULTED

I. Official Publications

- Report of Nanyang University Commission, 1959.
- Report on Higher Education in Malaya by the Maclean Commission, 1939.
- Report on University Education in Malaya by the Carr-Saunders Commission, 1948.
- Report on Chinese Education by the Fenn-Wu Commission, 1951.
- Report of the All-Party Committee of the Singapore Legislative Assembly on Chinese Education, 1956.
- Report of the Commission of Enquiry on the University of Malaya, 1957.
- Report of the Joint Committee on the Constitution of the University of Malaya, 1958.
- Report of the Joint Committee on Finance on the University of Malaya, 1958.
- Nanyang University Ordinance, 1959.
- University of Malaya Ordinance, 1949.
- University of Malaya Ordinance, 1954.
- University of Malaya (Amendment) Ordinance, 1958.
- Education Ordinance, 1957.
- "Towards a more just society" - statement of policy by the Singapore Government, 1959.
- Text of speech by Mr. Yong Nyuk Lin, Minister for Education at the Legislative Assembly meeting on 17th July, 1959.

II. University Records

Memorandum and Articles of Association of Nanyang University Ltd., 1953.
University Calendar, 1959.
Academic Regulations.
Recruitment of Staff Regulations.
Specimen letter of appointment for staff.
Faculty members directory.
Statistics of teaching load.
Syllabuses for the Entrance Examination.
Enrolment statistics, 1956, 1957, 1958, 1959.
Organisation, Courses and Syllabuses in various departments.
List of compulsory and elective courses.
Prospectus and Syllabus for the Diploma in Education.
Minutes of Faculty meetings.
Examination questions, 1958 and 1959.
Selected examination scripts.
Statistics of examination results, 1958.
Regulations governing the award of Scholarships.
List of scholarship award, 1957 and 1958.
Library Report, 1959.
List of Journals and periodicals in the Library, 1959.
Audited accounts, 1956 and 1957.
University budget, 1959.

III. Miscellaneous

"The Tasks Ahead" - P.A.P.'s Five Year Plan 1959 - 1964.
"History of the Foundation of Nanyang University" published by the Nanyang Cultural Press, Singapore, 1956.
Various University Calendars and Year Books.
Statistics of Singapore students in overseas Universities.
IV. University Publications
"Suloh Nantah".
"University Tribune".
"Radio Demonstration on Foundation Day".
"Education Journal".
"Commerce".
"Drama Research".
"Chemistry".
"Essays on the Trip to India by students in the Department of History and Geography, 1959".
"Social Science studies".
"Science Journal".
"Banking Department Magazine".
"Bulletin of the Institute of Southeast Asia".

BREAKDOWN OF STAFF ACCORDING TO QUALIFICATIONS*

FULL-TIME

	No.	No with docto- rates	No with Master degrees	No with Bachelor degrees	Other Qualifi- cations	Locally domi- ciled	Expa- triate	Age: Over 50
COLLEGE OF ARTS								
Professors	18	3	5	9	1	-	18	10
Assoc. Professors	11	3	4	4	-	2	9	5
Lecturers	14	-	4	5	5	1	13	3
Assistants	5	-	1	4	-	-	5	-
Total	48	6	14	22	6	3	45	18

COLLEGE OF SCIENCE

Professors	13	5	7	1	-	-	13	11
Assoc. Professors	7	-	3	4	-	1	6	1
Lecturers	4	-	-	4	-	-	4	-
Assistants	17	-	1	16	-	1	16	-
Total	41	5	11	25	-	2	39	12

COLLEGE OF COMMERCE

Professors	8	-	5	3	-	-	8	3
Assoc. Professors	-	-	-	-	-	-	-	-
Lecturers	1	-	1	-	-	1	-	-
Assistants	8	-	-	8	-	-	8	-
Total	17	-	6	11	-	1	16	3

LIBRARY

Staff	3	1	-	1	1	-	3	1
Total	3	1	-	1	1	-	3	1

PART-TIME

COLLEGE OF COMMERCE

Lecturers	4	-	2	2	-	3	1	1
-----------	---	---	---	---	---	---	---	---

COLLEGE OF ARTS

Lecturers	1	-	1	-	-	-	1	-
Total	5	-	3	2	-	3	2	1

* This table is compiled from information supplied by the academic staff in answer to a questionnaire sent by the Committee to all members of staff. The numbers do not include those who did not complete and return the questionnaire, of whom there were 8 Professors, 1 Associate Professor, 1 Lecturer, 2 Assistants and 5 Part-time Lecturers.

BREAKDOWN OF STAFF ACCORDING TO LAST POST HELD*

Last Post or University	Present Post																Part-Time	
	Professors			Assoc. Profs.			Lecturers			Assistants			Total					
	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm	Arts.	Sc.	Comm.	Lib	Arts	Comm.
Taiwan	10	10	4	4	4	-	3	2	-	4	15	7	21	31	11	2	-	-
China	1	-	-	1	-	-	1	-	-	-	1	-	3	1	-	-	-	-
Thailand	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-
U.S.A.	1	-	-	2	2	-	1	-	-	-	-	-	4	2	-	-	-	-
Hong Kong	2	2	3	1	-	-	4	2	-	1	1	1	8	5	4	-	-	-
Malaya	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-
Philippines	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Singapore	1	1	-	1	1	-	2	-	1	-	-	-	4	2	1	-	1	4
Ceylon	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Indonesia	-	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-
Germany	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-
Japan	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Belgium	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Total	18	13	8	11	7	Nil	14	4	1	5	17	8	48	41	17	3	1	4

* This table is compiled from information supplied by the academic staff in answer to a questionnaire sent by the Committee to all members of staff. The numbers do not include those who did not complete and return the questionnaire, of whom there were 8 Professors, 1 Associate Professor, 1 Lecturer, 2 Assistants and 5 Part-time Lecturers.

STUDENT ENROLMENT FOR SECOND SEMESTER, 1959

	Faculty of Arts						Faculty of Science					Faculty of Commerce				Total for 3 Faculties
	Ch. Lang. And Lit.	History & Geog.	Education	Modern Language	Econ. and Pol. Sc.	Total	Maths.	Physics	Chemistry	Biology	Total	Business Admin.	Account	Banking	Total	
1 st Year																
Male	48	36	-	27	58	169	21	43	38	40	142	15	32	17	64	375
Female	19	6	-	9	4	38	2	2	6	22	32	3	4	2	9	79
Total	67	42	-	36	62	207	23	45	44	62	174	18	36	19	73	454
2 nd Year																
Male	36	44	-	17	47	144	24	56	38	28	146	12	19	9	40	330
Female	29	19	-	4	5	57	1	5	8	7	21	-	4	5	9	87
Total	65	63	-	21	52	201	25	61	46	35	167	12	23	14	49	417
3 rd Year																
Male	54	43	-	8	32	137	9	41	33	11	94	17	13	21	51	282
Female	32	13	-	2	4	51	3	2	9	3	17	2	1	5	8	76
Total	86	56	-	10	36	188	12	43	42	14	111	19	14	26	59	358
4 th Year																
Male	57	28	4	5	46	140	11	51	62	8	132	45	23	28	96	368
Female	35	18	6	5	5	69	3	3	18	3	27	5	2	-	7	103
Total	92	46	10	10	51	209	14	54	80	11	159	50	25	28	103	471
Total for 4 years																
Male	195	151	4	57	183	590	65	191	171	87	514	89	87	75	251	1,355
Female	115	56	6	20	18	215	9	12	41	35	97	10	11	12	33	345
Total	310	207	10	77	201	805	74	203	212	122	611	99	98	87	284	1,700
% of Total Enrolment	18.2	12.2	0.59	4.53	11.82	47	4.35	11.94	12.5	7.18	36	5.82	5.76	5.12	17	100

BREAKDOWN OF FIRST YEAR STUDENTS, 1959
ACCORDING TO PLACE OF BIRTH

	Males	Females	Total	Percentage of Enrolment
Federation of Malaya	224	39	263	56.20
Singapore	96	25	121	25.85
China	45	9	54	11.54
Sarawak	11	4	15	3.20
Indonesia	4	5	9	1.92
Thailand	2	0	2	0.43
Hong Kong	1	1	2	0.43
Others	2	0	2	0.43
Total	385	83	468	100.00

BREAKDOWN OF STAFF ACCORDING TO AGE*

	Present Post																	
	Professors			Assoc. Profs.			Lecturers			Assistants			Total			Lib	Part-Time	
	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.		Arts	Comm.
60 years and above	-	2	2	-	-	-	-	-	-	-	-	-	-	2	2	-	-	1
50	13	10	2	5	1	-	3	-	-	-	-	-	21	11	2	2	-	-
40	5	1	4	4	5	-	7	1	-	-	1	-	16	8	4	1	-	-
30	-	-	-	2	1	-	2	3	1	1	11	1	5	15	2	-	1	2
20	-	-	-	-	-	-	2	-	-	4	5	7	6	5	7	-	-	1
Total	18	13	8	11	7	Nil	14	4	1	5	17	8	48	41	17	3	1	4

* This table is compiled from information supplied by the academic staff in answer to a questionnaire sent by the Committee to all members of staff. The numbers do not include those who did not complete and return the questionnaire, of whom there were 8 Professors, 1 Associate Professor, 1 Lecturer, 2 Assistants and 5 Part-time Lecturers.

APPENDIX N

BREAKDOWN OF STAFF ACCORDING TO LECTURE HOURS*

Total lecture hours (excluding tutorials and practicals)	Present Post																
	Professors			Assoc. Profs.			Lecturers			Assistants			Total			Part-Time	
	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Comm.
Nil	-	-	-	-	-	-	-	-	-	5	17	8	5	17	8	-	-
Up to 2 hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.. .. 4 ..	-	1	-	1	-	-	3	1	-	-	-	-	4	2	-	-	2
.. .. 6 ..	2	2	1	-	1	-	-	1	-	-	-	-	2	4	1	1	2
.. .. 8 ..	-	4	2	2	2	-	-	1	-	-	-	-	2	7	2	-	-
.. .. 10 ..	11	2	1	-	1	-	2	-	1	-	-	-	13	3	2	-	-
.. .. 12 ..	3	1	4	3	1	-	7	-	-	-	-	-	13	2	4	-	-
.. .. 14 ..	1	3	-	4	2	-	-	1	-	-	-	-	5	6	-	-	-
.. .. 16 ..	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-
.. .. 18 ..	1	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-
.. .. 20 ..	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-
Above 20 hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	18	13	8	11	7	Nil	14	4	1	5	17	8	48	41	17	1	4

* This table is compiled from information supplied by the academic staff in answer to a questionnaire sent by the Committee to all members of staff. The numbers do not include those who did not complete and return the questionnaire, of whom there were 8 Professors, 1 Associate Professor, 1 Lecturer, 2 Assistants and 5 Part-time Lecturers.

BREAKDOWN OF STAFF ACCORDING TO TOTAL EMOLUMENTS*

Total Emoluments		Present Post																		
		Professors			Assoc. Profs.			Lecturers			Assistants			Total			Lib	Part-Time		
		Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.	Arts.	Sc.	Comm.		Arts.	Comm.	
Up to	\$150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
	\$300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	\$400	-	-	-	-	-	-	-	-	-	3	11	6	3	11	6	-	-	-	-
	\$500	-	-	-	-	-	-	4	-	1	1	6	2	5	6	3	1	-	-	-
.. ..	\$600	-	-	-	2	1	-	9	4	-	1	-	-	12	5	-	1	-	-	-
.. ..	\$700	5	1	1	8	6	-	-	-	-	-	-	-	13	7	1	-	-	-	-
.. ..	\$800	6	5	4	-	-	-	1	-	-	-	-	-	7	5	4	-	-	-	-
.. ..	\$900	4	4	2	1	-	-	-	-	-	-	-	-	5	4	2	1	-	-	-
.. ..	\$1,000	1	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-
.. ..	\$1,100	1	1	1	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-
.. ..	\$1,200	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Above	\$1,200	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Total		18	13	8	11	7	-	14	4	1	5	17	8	48	41	17	3	1	4	

* This table is compiled from information supplied by the academic staff in answer to a questionnaire sent by the Committee to all members of staff. The numbers do not include those who did not complete and return the questionnaire, of whom there were 8 Professors, 1 Associate Professor, 1 Lecturer, 2 Assistants and 5 Part-time Lecturers.

REPORT OF THE NANYANG UNIVERSITY CURRICULUM REVIEW COMMITTEE

NANYANG UNIVERSITY, JURONG, SINGAPORE. 1965

The Vice-Chancellor,
Nanyang University,
Jurong Road, Singapore 22.

Dear Sir,

We have the honour to present the report of the Curriculum Review Committee set up by the University on 20th January 1965.

We have approached the task of the Committee with diffidence and with respect for the University's integrity. We have had no wish to cause embarrassment to any member of your staff. Our recommendations have been made because we believe that the University has a future. In all humility, we hope our recommendations will help you to ensure the rapid growth and development of the University.

We are unanimous in wishing to draw your attention to one key feature of our recommendations. We believe that all the twelve Departments of the three Colleges and the Language Centre should have strong Professorial Heads. Every effort should be made to recruit the best persons possible.

We are aware how difficult it is to find suitable scholars to fill these posts. Perhaps it might be necessary to send a special emissary to Universities here and overseas in search of such eminent men. Such an emissary should be given considerable powers to appoint the right people on your Behalf. He should be given clear directives about the kind of scholars needed, the facilities available, the future plans of the University and about such other matters which will help him attract the persons needed. An emissary with such power and responsibility should be given at least six months to complete his task. We are convinced that this is the most effective way of obtaining the Professorial Heads you want.

We have received every co-operation from you and your colleagues and we have been particularly fortunate in your choice of Mr. Koh Thong Ngee as our Secretary, without whose help much of the work of the Committee would have been impossible.

Yours sincerely,

(Wang Gungwu) *Chairman*

(Thong Saw Pak) *Member*

(Koh Seow Tee) *Member*

(Lu Yaw) *Member*

(Wang Shu-min) *Member*

(Lim Ho Hup) *Member*

(Liu Kung-Kwei) *Member*

14th May 1965.

THE NANYANG UNIVERSITY CURRICULUM REVIEW COMMITTEE

MEMBERS

Professor Wang Gungwu (Chairman)	Professor of History, University of Malaya.
Mr. Koh Seow Tee	Lecturer, Singapore Polytechnic.
Mr. Lim Ho Hup	Director of the Economic Development Board, Singapore.
Professor Liu Kung-kwei	Professor of Accountancy; Head of Department of Accountancy; Acting Dean of Commerce, Nanyang University.
Mr. Lu Yaw	Principal Assistant Director of Education, Ministry of Education, Singapore.
Professor Thong Saw Pak	Professor of Physics, University of Malaya.
Professor Wang Shu-min	Visiting Professor of Chinese, University of Singapore

SECRETARY

Mr. Koh Thong Ngee	Acting Librarian, Nanyang University.
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CONTENTS

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- I Introduction
- II Recommendations on Language
- III Remarks on the Existing Curriculum
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CHAPTER ONE:

Introduction

1. The terms of reference of this Committee are: "To review the current organisation of courses of study and contents of individual courses in Nanyang University and to recommend to the University revised courses of study adapted to the needs of our society."

2. We examined in detail the present degree structure, all courses of study and the examination system, and made recommendations on all aspects of the curriculum as well as on matters concerning the teaching staff relevant to our recommendations on the curriculum. The contents of the Prescott Report and the Gwee Ah Leng Report on the University were noted and all relevant documents pertaining to our review were closely studied. Three academic sub-committees were set up to study the curriculum of each of the colleges and one other sub-committee to study matters concerning the teaching staff. We met several key members of the staff and, as most of our meetings were held at the University itself, there was ample opportunity to see the existing facilities for ourselves.

3. It appears to us that the University has so far served only a limited purpose. Attention has been paid to producing large numbers of graduates without adequate consideration of the prospects of employment for the graduates, or of high standards of teaching and research, or of the fundamental objectives of higher education in a plural society. It has so far catered only for students from the Chinese-medium schools in the country. We feel that this function is too narrow and a great deal can be done to re-orientate the University towards serving our society as a whole.

4. We feel that the nature of our society must be reflected in any institution of higher learning which purports to serve that society. In order to achieve this, the courses of study in the University must be adapted to ensure that students from all streams of education in the country may benefit from the University's existence.

5. Our society is greatly concerned with the prosperity and peaceful development of our new nation of Malaysia. In this context, there is an urgent need for people with a deep, rational and sympathetic understanding of the multi-racial basis of the country. The University should produce graduates able to guide the course of the country's development, and trained to administer the public services and manage the growth of commerce and industry, and specially equipped to meet the nation's need for rapid modernisation.

6. We therefore believe that particular attention must be paid to the problem of necessary language skills. It should be the aim of the University to produce graduates who are at least bi-lingual, if not tri-lingual, in the languages relevant to the development of the country.

7. We also came to the conclusion that the degree structure itself should be revised in order to bring out the best in all students and to produce the kind of graduates needed.

CHAPTER TWO:

Recommendations on Language

8. In view of the changing conditions in our society, language training has become one of the key issues in the future development of the University. We recognise that the University still has a role to play in providing higher education to graduate of the Chinese-medium schools in Malaysia and may still be expected to provide courses taught in the Chinese medium. It is clear, however, that it is not in the interest of the graduates themselves to be proficient only in Chinese nor is it in the interest of the country for the University to continue producing graduates of that kind. We feel strongly that the graduates should have fluency in the National Language as well as in English if the University is to play its full and effective role in the country. Therefore, we strongly recommend that every opportunity should be provided for the students to acquire proficiency in these languages.

9. We also recommend that entrance qualifications concerning languages be carefully and clearly defined so that students from all streams of education in the country are eligible for admission. Students admitted from the Chinese-medium stream must be required to attain fluency in the National Language or English. Students admitted from the English-medium stream should be required to attain proficiency in the National Language or Chinese. Students admitted from the Malay-medium stream should be encouraged to attain proficiency in Chinese or English. All students should be given the opportunity to study the three languages stated above.

10. The present freshman language courses in Chinese and English required throughout the University are not satisfactory. We recommend that language courses should be carefully drawn up to meet the needs of different groups of students. Students with proficiency in Chinese should not be required to take freshman Chinese, but should be required to take suitable courses in the National Language. Students with proficiency in English should not be required to take freshman English, but should be required to take courses in Chinese. Students with proficiency in the National Language should be encouraged to take suitable courses in either Chinese or English.

11. Students should be made to use, through a system of regular written assignments, the language in which each course is conducted. In this way, they are expected to use the language concerned as a tool for the mastery of their chosen subjects. If students can see how a language is used in the context of the knowledge they wish to acquire as well as of the needs of the society they intend to serve, they will develop a keener interest in using the relevant languages during their stay at the University.

12. At present, language teaching, apart from Chinese, is provided by the Department of Modern Languages and Literature. The Department offers a large variety of courses in English at different levels and in English Literature. In addition, it offers a few courses in elementary Malay, French, German and Japanese. We consider this arrangement to be unsatisfactory for the following reasons:

- (a) The National Language is not given enough emphasis.
- (b) The Department offers what amounts to a degree in English literature. In view of the poor standard of English among students on entry, such a degree course is not of a sufficiently high standard to merit continuation.
- (c) The teaching of several languages in a Department which concentrates on English Language and Literature is not an efficient way to serve the language needs of the University as a whole. What is urgently needed is an institution established for the specific purpose of giving all students language proficiency at several levels in order to enable them to use the language as tools for research and for the service of the country.

13. We therefore recommend that,

- (a) The Department of Modern Languages and Literature be abolished.
- (b) A Language Centre be set up to serve the whole University.
- (c) The National Language be given full recognition by the immediate establishment of a Department of Malay Studies.

14. We recommend that the Language Centre be set up in the following manner:

- (a) The Language Centre shall offer no degree.
- (b) It should not be in the College of Arts, but should be a separate institution.
- (c) It shall be administered by a Head of the Centre who shall carry the status of a full professor.
- (d) It should be staffed primarily by language teachers whose recruitment should be based on the skills and experience they have had in language teaching.
- (e) It shall offer at least two kinds of courses,
 - (i) credit courses in languages chosen by various Department as partial fulfilment of their respective degrees;
 - (ii) non-credit courses leading to a certificate after at least two years, such certificates to be given to students who have satisfied all class, laboratory and examination requirements.
- (f) The Centre should be provided with the most up-to-date equipment and courses should be taught to small groups of students making the maximum use of the latest techniques.
- (g) Each course should be carefully designed to help specific groups of students in their chosen disciplines.

- (h) Where elementary and intermediate courses in Chinese and the National Language are concerned, the Centre should work in close co-operation with the Department of Chinese Language and Literature and that of Malay Studies.
- (i) The Centre shall administer a central language laboratory and such other language laboratories as are needed by the Colleges.

15. Language teachers, depending on qualifications and experience, may be appointed to salary scales comparable to that offered to the academic staff, but their scales should not be less favourable than that offered to senior language teachers of comparable standing in the Teachers Training Colleges in the country. In many cases, it may be enough to appoint part-time teachers at suitable rates.

16. We recognise that some students may not be able to take all the language courses they need during the academic terms. Such students should be given full opportunity to take their language courses during the long vacation. The language teachers, therefore, are expected to offer several intensive language courses in English, the National Language and Chinese whenever these courses are needed.

17. With the setting up of the Language Centre, the language teaching resources of the University will be as follows:

- (a) The Language Centre shall be responsible for teaching all elementary and intermediate language courses in the University. These languages may include the National Language, English, Chinese, German, French, Japanese and such other languages required from time to time. The Centre may also provide advanced courses in any language whenever necessary. In the case of Advanced Malay and Advanced Chinese, the courses should be offered in conjunction with the two Departments concerned.
- (b) The Department of Chinese Language and Literature shall continue to provide advanced courses. (see revised Curriculum in Chapter Six)
- (c) The Department of Malay Studies should be established to provide advanced courses leading to both the pass and the honours degrees. (see suggested syllabus in Chapter Six)

CHAPTER THREE:

Remarks on the Existing Curriculum

18. The degree structure is at present based upon a modified credit system which demands that each student obtains a total number of 128 credits spread over four years before he is granted a pass degree. The flexibility of the credit system, however, does not seem to have been fully appreciated.

19. There have been numerous changes in the course structure and the syllabuses of the University during its nine years of existence. These changes, largely due to the

quick turnover of teaching staff, have led to many anomalies and inconsistencies in several departments. Frequent changes not only affect teaching, but can have an unsettling effect on students.

20. The courses of study seem to be entirely dependent on formal lectures. There does not seem to be the personal and intensive contact between staff and students so essential in university teaching. Students are not given adequate written assignments and therefore have little opportunity to improve their skill in reading, in the selection of materials, and in the organisation and presentation of data and ideas. There is also an excessive dependence on textbooks and printed lecture notes. Many of the courses are not based on up-to-date publications, and very few of them make use of the materials in recent periodicals.

21. Some courses appear to be too broad to be adequately covered in one semester or even one academic year. Other courses which are offered for students in their third or fourth year appear to be too elementary. Some courses are broken down too far and are too narrow and specialised. As a result, there is a great disparity in the assignment of credits to each of the courses. It is unsatisfactory to have courses with the present range of credits from two to twelve.

22. Division of courses into required and elective categories also appear to be arbitrary. There is often a lack of a logical sequence in the arrangement of courses for the different years.

23. The first year programme for most departments is weighed down by general language courses in Chinese and English. As organised at present, these language courses are either too easy as university courses, or are not really suitable for a student pursuing a particular subject. Even worst they take far too much of a student's time and in any case, are unlikely to help him make up the deficiency in the two languages.

24. The courses in the present system depend on an excessive number of examinations. A great deal of time is spent preparing students for these examinations and marking examination papers. Frequent examinations discourage students from using their initiative in reading widely and in the important training in self-study. Further, in the examinations, students are given very little choice in examination questions. This also discourages students from exploring the full range of their chosen fields of study, while it compels students to memorise set answers.

25. We were particularly disturbed to discover that the University does not have a uniform grading system for the examinations. It appears that members of staff are unable to agree on the use of percentages. This leads to great inconsistency in marking and creates extremely difficult problems of assessing a student's academic achievements. The lack of statutory Boards of Examiners for each College is a most serious defect in the existing examination system.

26. The graduation examinations which now consist of three courses are unsatisfactory for two reasons. Firstly, the choice of the courses is quite arbitrary; the courses may be chosen from those taken in the second, third or fourth year of study. Secondly, the students sit for the examinations twice, once with questions set and marked by the lecturers concerned alone, and the second time with another set of questions set and marked by the same lecturers but moderated by the External Examiners. This duplication of the examinations is both wasteful and misleading. It is difficult to see how this form of external examinations can really help to determine the standards achieved and the relative merits of the students.

CHAPTER FOUR:

Recommendations on a New Degree Structure

27. In consideration of:

- (a) The importance of producing graduates best suited to the needs of our society; and
 - (b) The desirability of instituting a system which will bring out the best in the undergraduates and provide the most benefits to the graduates,
- we recommend that a new degree structure be included.

28. The new degree structure should provide for a pass degree and an honours degree. The honours degree shall be classified on the results of the honours examinations as follows:

Class I Honours

Class II (Upper) Honours

Class II (Lower) Honours.

29. The credit system, if carefully applied, is adequate for the purpose of a pass degree. In the new degree structure we recommend that the pass degree be entirely based on the credit system. After careful consideration of the range and contents of courses required, we agree that students completing 108 credits of full academic value may be deemed to have qualified for the degree. This should normally be done in three or four years. No student may be granted a degree if he fails to obtain the required number of credits after five years of study in the University.

30. We noted the introduction of the Higher School Certificate (Chinese) Examinations in 1963 in Singapore and are satisfied that this has brought about a higher standard of admission. We recommend that the normal entrance requirement be the Higher School Certificate or its equivalent. Students admitted with such qualifications should be able to obtain their pass degree after three years of intensive study. In exceptional cases, students admitted to the College of Science may be exempted from all the first year courses in Part I. Such direct entry students would be allowed to

complete the required 108 credits within two years, but they must go on to take the honour courses in their third year. Unless they have completed three years of study at the University, they may not be awarded any degree.

31. We recommend that there should be only two types of courses for the pass degree, three-credit courses and six-credit courses. Each course consists of a number of lectures and tutorials/seminars or practical classes. These are defined by the individual College in the relevant chapters of this Report.

32. In order to ensure adequate opportunity for academic discussion between staff and students, we strongly recommend the institution of tutorials/seminars. By tutorial/seminar, we mean a small group of not more than eight to ten students regularly gathered for study and discussion. The basis of this small group study should be written assignments by the students themselves. Staff and students should treat their regular meetings at the tutorials/seminars as the most important part of university education. At these meetings, the students' written assignments should be discussed fully, and students be encouraged to discuss all questions relevant to the topic at hand as well as to the course as a whole. These assignments should be carefully graded and the grades recorded. These grades should not count in the examination except where they can help the examiner determine the students' examination results.

33. The honours courses shall not follow the credit system. They should be offered only to students who have completed the required 108 credits within two years and to those who have done extremely well while obtaining their pass degrees within three years. Students who have done exceptionally well while obtaining their pass degrees within four years may also be considered.

34. Each course in the new degree structure should be followed by only one examination taken at the end of the course: a three-credit course by an examination of at least two hours and a six-credit course by an examination of at least three hours. Students who fail the examination for any course may, at the recommendation of the relevant Board of Examiners, be allowed to sit for a supplementary examination.

35. Students must obtain the minimum number of credits specified for each academic year. We recommend that a student who fails to obtain the required minimum of credits for that year shall be asked to leave the University.

36. For the pass degree, we recommend that the examinations for a number of courses should be moderated by External Examiners. These courses are specified in the relevant paragraphs of Chapters Six, Seven and Eight.

37. The honours degree examinations should consist of a number of papers to be taken at the end of the academic year. These examinations should be moderated by External Examiners and must be passed at one and the same time. The examinations should also include, wherever possible, a graduation paper or report which the student

must pass before he can obtain the honours degree. No supplementary examinations are allowed and no student may repeat the honours degree examinations.

38. We recommend the use in all courses not only of up-to-date books and monographs, but also of the latest articles in learned periodicals. Students must be discouraged from depending on the view of any one book or any one person in their studies. It is the essence of university education to give students full opportunity to consider the many sides to a question and the various interpretations possible. Special care should be taken to ensure that adequate library facilities be provided to meet the needs of all the courses of the new degree structure.

39. We strongly recommend a uniform marking/grading system for each College and, if possible, for the whole University. All percentages and marks should be translated into a non-numerical system agreed to by the College concerned. This is particularly important for the following reasons:

- (a) It is essential to use the same grading system for courses taken within and outside of a Department or College.
- (b) The new degree structure involves qualifying for honours courses and classifications of honours degrees. This depends greatly on a uniform grading system for assessing the work done over a wide range of courses.

40. We recommend the institution in each College of the following Boards of Examiners:

- (a) The Board of Examiners for First Year courses.
- (b) The Board of Examiners for specified pass degree courses moderated by External Examiners.
- (c) The Board of Examiners for the honours degree.

These Boards of Examiners shall each comprise all teaching staff responsible for the courses. The Boards shall make recommendations concerning examination results to the relevant College Faculty. These, in turn, are presented to the Senate for approval.

41. Each Department shall have at least one External Examiner. The External Examiner shall moderate the specified papers for the pass degree and those for the honours degree. Each Department, with the advice of the External Examiner or Examiners concerned, submits the results to the relevant Board of Examiners. In addition, the External Examiner shall write a confidential report and send it directly to the Vice-Chancellor.

42. We recognise that the curriculum of any Department has to be revised from time to time to meet changing needs. We therefore recommend that a Committee on Curriculum consisting of Heads of Departments be set up for each College to report on necessary amendments to the curriculum to the respective Faculty meeting.

CHAPTER FIVE:

Recommendations on Teaching Staff

43. We are convinced that our recommendations on the new degree structure must lead us to make other recommendations concerning the recruitment of suitable teaching staff. We feel strongly that courses should be taught by members of staff with the necessary research experience, preferably with publications in the field. By publications, we mean publications in learned journals or original studies published as books or monographs. It is normally unsatisfactory for teaching at the university level to be done by staff who are not actively conducting research in the field in which they are engaged to teach.

44. We recommend that the establishment in each Department should be determined by the actual teaching requirements in that Department. The number of staff should be closely related to the number of students in Department. The normal establishment should consist of a reasonable number of staff in each of the four categories: professors, associate professors, lecturers and assistant lecturers. A good working ratio for these four categories would be 1 : 2 : 5/6 : 2. The total staff-student ratio for the whole University should not normally exceed that of 1 : 10.

45. Academic status must be closely related to relevant research and teaching experience. We recommend the following minimum qualifications for the guidance of Boards of Selection:

- (a) An assistant lecturer should normally have a Master's degree. This should be a probationary appointment subject to review after three years of service.
- (b) A lecturer at the initial point of the scale should normally have a Master's degree plus three years of teaching experience or a doctorate from an established university; or a good first degree plus relevant professional qualifications.
- (c) An associate professor should normally have a doctorate from an established university plus at least five years of teaching experience at the university level, with publications in reputable academic journals or original works published as books or monographs.
- (d) A professor should normally be an outstanding scholar with university teaching experience and publications of recognised value.

All academic staff should show continued research activities and should be recruited with the expectation that their research will contribute to the reputation of the University.

46. We are convinced that at this stage of the University's development each Department needs a strong Professorial Head. This is particularly important in the light of the new degree structure recommended. It is expected that a professor recruited as Head of Department should have shown administrative ability.

47. We are concerned that the University obtain the best staff possible for the implementation of the new degree structure. Two factors must be given full consideration if the recruitment of staff of quality is to be ensured. Firstly, research facilities must be provided. Secondly, the salary structure must be attractive and there must be security of tenure.

48. We recommend that the recruitment of staff with research skill and potentiality be supported by research facilities. Books and equipment needed for research should be adequately provided. Active research is an essential feature of a good university. A university's reputation is made not only by producing good graduates but also by the contribution to knowledge of its academic staff. Staff of research ability would be difficult to recruit, and even more difficult to keep, if facilities for research are not provided and are not improving all the time. We believe that staff engaged in research are in a better position to win the respect and confidence of their students, and are themselves an inspiration to students of high academic quality.

49. The recruitment of staff with the high qualifications required must be based on a salary structure comparable to that in major universities in the world, and particularly to that in other universities in Malaysia. A realistic approach to revising the salary structure must take into account that salaries in other Malaysian universities are applied to a different establishment structure. We recommend that new salary scales be immediately drawn up, and staff be appointed as soon as possible to these new scales.

50. Salaries should be based on qualifications and experience and not on the number of teaching hours undertaken. We emphasise, however, that the normal total teaching load including formal lectures and tutorials/seminars, field work and laboratory classes should be about ten hours a week and should not exceed fifteen hours a week.

51. We are surprised to find that most of the staff in the Colleges of Arts and Commerce are not provided with their own rooms. We believe that academic staff must be provided with adequate teaching facilities. We recommend that each member of staff be given a room, and such a room to be utilised for tutorials/seminars, as well as to provide him with the privacy and the dignity so necessary to his work. In the case of staff in the College of Science, adequate laboratory space should be provided for research purposes.

52. Library facilities must be adequate, in the first instance, for teaching. Books required for teaching purposes should be given first priority. Staff responsible for teaching each course should be given considerable scope for ordering books essential for the course. Written assignments for small group study cannot be of the required standard unless the necessary books are available to both staff and students in adequate numbers.

53. Staff must be provided with the opportunity to keep in touch with the latest

development in their respective fields. We recommend that a scheme of overseas study leave be drawn up for staff members. We also recommend that staff be supported to attend conferences and such other international meetings relevant to their teaching and research.

54. The University cannot depend on outside teaching staff for an indefinite period of time. There must be every opportunity for the employment of young but highly qualified local graduates with a deep understanding of the conditions in the region. In this way, the University will play an increasingly valuable role in the service of our society. A university thrives on the energy and enthusiasm of its younger staff. In a growing society, the contributions of keen young staff to the university community must be constantly kept in mind.

55. We therefore recommend that the University continue to appoint a select number of graduate assistants from among its graduates of high academic quality but every opportunity should be provided for such graduates to receive research training leading to higher degrees. We note that there is no provision for higher degrees at the moment and recommend that such degrees be instituted as soon as possible.

56. Graduate assistants should not be overloaded with teaching, clerical and other duties as at present, but should be given adequate help and facilities for their research. They should also be provided with the opportunity to study in other established universities abroad. In this way, the University will be guaranteed a steady supply of highly qualified graduates for its future teaching staff.

CHAPTER SIX:

Recommendations on College of Arts

57. We recommend that the College of Arts be reorganised with the following departments:

- (a) Department of Chinese Language and Literature.
- (b) Department of Malay Studies.
- (c) Department of History.
- (d) Department of Geography.
- (e) Department of Government and Public Administration

58. We recommend that the existing Department of Modern Languages and Literature and the Department of Education be abolished and that the present Department of Political Science be modified and renamed the Department of Government and Public Administration.

59. After careful consideration of the functions of the Department of Modern Languages and Literature we have recommended the establishment of a Language Centre for the reasons given in Chapter Two of this Report. Consequently, we see no

need for a Department of Modern Languages and Literature to be retained in the College of Arts. We have also considered the role of the existing Department in producing graduates in English Language and Literature, but we are not convinced that the degree offered is of a sufficiently high standard. We therefore do not recommend the establishment of a Department of English Language and Literature. Instead, provision should be made for the study of English at an advanced level in the Language Centre itself. For such courses, no degree shall be awarded, but special certificates may be given to record the students' attainments. We believe that such certificates will help graduates of any Department who intend to study for higher degrees overseas. Such courses may also be offered as credit courses when they are required for the partial fulfilment for degrees in any of the three Colleges.

60. We recommend that the existing students in the Department of Modern Languages and Literature be asked to transfer to other Departments in the University along the following lines:

- (a) Credits should be given for courses common to the Departments concerned.
- (b) A limited number of courses may, at the discretion of the Heads of Departments concerned, be also credited.
- (c) Of the remaining credits, the Language Centre may award special certificates for the courses which it considers to be of a sufficiently high standard.

61. We strongly feel that the field of education should be that of professional training for teaching purposes and post-graduate research on the educational problems of the country. Where professional training is concerned, graduates of the University should spend one or two years in a professional institution. For research purposes, a post-graduate school of education may well be established. The present Department of Education does not meet either of these two needs. We therefore recommend that the Department of Education be abolished and the undergraduate degree courses in education discontinued.

62. The question of education as post-graduate training either for professional or research purposes is outside our terms of reference. We suggest that this question be studied separately in terms of the needs of our society. A Board of Studies could be set up to consider all the wide-ranging issues.

63. We recommend that the existing students in the Department of Education be asked to transfer to other departments in the University along the following lines:

- (a) Credits should be given for courses common to the Departments concerned.
- (b) A limited number of courses may, at the discretion of the Heads of Departments concerned, be also credited.

64. The Department of Chinese Language and Literature will be expected to

produce graduates with very high standards in the Chinese Language. It should, however, perform the task with the needs of our society clearly in mind. We recommend that the Department place greater emphasis on courses pertinent to the culture, literature and linguistic background of the Malaysian Chinese. The students should be prepared to adapt themselves to the language conditions of the country, and be equipped to study subjects like the nature, distribution and use of local Chinese dialects, Chinese society in Malaysia and the relationship between Chinese and Malay. It is hoped that graduates of the Department will play their part in contributing towards the maintenance of inter-communal harmony in the country. In this context, the University may consider changing the name of the Department to the Department of Chinese Studies.

65. In accordance with our recommendations in Chapter Two of this Report, we recommend the establishment of a Department of Malay Studies. The Department will be expected to offer courses leading to pass and honours degrees. Its purpose will be to provide students who have a good knowledge of Malay with the basic training for research in the language, literature and culture of the Malay peoples. Every effort should be made to attract staff and students of all communities to make the Department a most important cultural bridge both within and outside of the University. Immediate steps should be taken to appoint the Head of Department who shall be entrusted with the task of devising a suitable course structure.

66. We recommend that courses in the Department of History should deal primarily with the history of our region and that this be supported by the study of the histories of other parts of the world. We find the existing courses resting too heavily on the side of Chinese History. While we recognise the importance of Chinese history, we cannot agree that it should be given so much prominence at the expense of Southeast Asian and particularly Malaysian history. We also consider it essential for students to be introduced to historical documents. This could best be done by the use of documents easily available in the country.

67. We recommend that the Department of Geography should revise its courses in order that the different aspects of the subject can be seen as an integrated whole. The courses should be taught with the special features of our region in mind. There must be adequate facilities for practical classes in well-equipped laboratories, field work for the study and application of techniques of surveying, and frequent assignments to students to familiarise themselves with the physical and human environment of the country. It is very important for Geography to be taught as a science and the use of the latest scientific techniques should be encouraged.

68. We consider the whole field of political science to be too wide at this stage in the development of the University and recommend that the Department should concentrate on the fields of Government and Public Administration. In this way, it

may be expected to produce graduates who can be of better use to the public services.

69. We recommend that the new degree structure be set up as follows:

New Degree Structure — College of Arts

Year	Pass Degree ¹ (Three years) Credits	Pass Degree ² (Four years) Credits	Minimum Total Credits
I	27(9) ³	21(6) ³	24
II	27(9)	21(6)	45
III	24(12)	18(9)	66
IV	Honours Courses	18(9)	87
V	—	—	108

1 Or any other suitable variations over 3 years.

2 Or any other suitable variations over 4 years.

3 Figures in brackets represent elective as distinct from required credits.

70. For the College of Arts, each three-credit course consists of one lecture and one tutorial/seminar per week for two semesters, or two lectures and one tutorial/seminar per week for one semester. Each six-credit course consists of two lectures and one tutorial/seminar per week for two semesters. Each honours course in Arts is approximately the same as a six-credit course.

71. The tutorial/seminar is based on students' written assignments. For each three-credit course every student should normally write at least two essays or reports. For each six-credit course, he should normally write at least four essays or reports.

72. For each of the Departments, we have recommended a new course structure. These are listed in the following paragraphs. From the course structures, it will be clear that their success depends largely on intimate co-operation between the Department in the College and also on increased inter-college co-operation. (The courses for which examination to be moderated by External Examiners are marked with an asterisk.)

73. **Department of Chinese Language and Literature.** The following course structure is recommended:

Year I

Required Courses (27 credits)		Credits
Chin. 11	Modern Chinese Literature	3
Chin. 12	Chinese Classical Literature I (Lun Yu & Meng Tzu)	6
Chin. 13	History of Chinese Literature	6
Hist. 12	General East Asian History	6
Lang.	Malay I/Advanced Malay I (for 2 years)	6

Elective Courses (9 credits)

Chin. 14	Introduction to Linguistics	3
Chin. 15	Readings in Chinese Prose	3
Hist. 11	Modern Southeast Asian History	3
Geo. 12	Elements of Human Geography	6
GPA. 11	Introduction to Government	6
GPA. 12	Sociology I	6
Econ. 11	Economic Analysis I	6

Year II**Required Courses (27 credits)**

* Chin. 21	Chinese Etymology	6
Chin. 22	Chinese Fiction and Drama	6

OR

Chin. 23	Chinese Poetry	6
* Chin. 24	Chinese Classical Literature II (Shih Chi or Han Shu)	6
Chin. 25	History of the Chinese in Southeast Asia I	3
Lang.	Malay II/Advanced Malay II	6

Elective Courses (9 credits)

Hist. 23	Modern Chinese History	3
Hist. 28	Chinese History (Selected Period)	3
GPA. 25	Sociology II	6
Any of the elective courses in Year I not already taken		3/6

Year III**Required Courses (24 credits)**

* Chin. 31	Chinese Phonology	6
* Chin. 32	Chinese Classical Literature III (Shih-ching or Ch'u Tz'u)	6
* Chin. 33	History of Chinese Philosophy	6
* Chin. 34	Tz'u and Ch'u	6

Elective Courses (12 credits)

Chin. 35	History of the Chinese in Southeast Asia II	3
Chin. 36	Chinese Classical Literature IV (Chuang Tz'u, or Hsun Tzu, or Han Fei Tzu, or any other approved author)	6
Chin. 37	Chinese Literary Criticism	3
Chin. 38	Chinese Textual Criticism	3
Chin. 39	Malaysian Chinese Literature	3
Hist. 31	History of Malaysia	6
Hist. 32	History of Modern Japan	3
Hist. 33	Chinese History (Selected Period)	3
Geo. 26	Geography of Southeast Asia	6
Geo. 27	Geography of East Asia	6
GPA. 22	Government and Politics of Southeast Asia	3

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Honours Courses

- Chin. Hon. 1. Chinese Bibliography
 Chin. Hon. 2. Ancient Chinese Etymology
 Chin. Hon. 3. Special topics in Chinese Literature
 Chin. Hon. 4. Special topics in Chinese Philosophy
 Chin. Hon. 5. Special topics in Chinese Classics: Shang Shu, or Li Chi, or Ch'un Ch'iu Tso Chuan.

74. **Department of Malay Studies.** The following course structure is suggested for two reasons:

- (a) it illustrates the range of courses which the Department would cover;
 (b) it could serve as a guide for the Board of Selection in appointing the Head of Department.

Year I

Required Courses (27 credits)

Mal. 11	Malay Language I	6
Mal. 12	Introductory Survey of Malay Literature	6
Mal. 13	Modern Malay/Indonesian Prose (selected works)	6
Mal. 14	Malay Translation (from or into Chinese/English)	3
OR		
Hist. 11	Modern Southeast Asian History	3
Lang.	(Chinese/English for 2 years, level depending on entrance qualifications.)	6

Elective Courses (9 credits)

Mal. 15	Introduction to Linguistics (may be the same as Chin.14)	3
Geo. 12	Elements of Human Geography	6
GPA. 11	Introduction to Government	6
Econ. 11	Economic Analysis I	6

Year II

Required Courses (27 credits)

* Mal. 21	Malay Language II	6
Mal. 22	Malay Indonesian Comparative Linguistics	6
* Mal. 23	Classical Malay Literature (selected works)	6
Mal. 24	Introduction to Malay Culture and Society	6
Mal. 25	Advanced Malay Translation (from or into Chinese/English)	3
OR		
Hist. 21	Early Southeast Asian History	3
Lang.	2 nd year of language taken in Year I	6

Elective Courses (9 credits)

Mal. 26	One Malay Polynesian language for 2 years	6
Any course offered in Year I and Year II not already taken		3/6

Year III

Required Courses (24 credits)

Mal. 31	Malay/Indonesian Poetry	6
Mal. 32	Advanced Study of Malay Culture & Society, with special reference to Islam in Malaysia	6
OR		
Mal. 33	Introduction to Islamic Law	6
Mal. 34	Advanced Malay/Indonesian Comparative Linguistics	6
OR		
Hist. 31	History of Malaysia	6
Mal. 35	Islamic History	6
OR		
GPA. 12	Sociology I	6

Elective Courses (12 credits)

Mal. 36	Advanced Phonetics and its application to Malay	3
Mal. 37	2 nd year of Malayo-Polynesian language	6
Geo. 27	Geography of Southeast Asia	6
Geo. 34	Geography of Malaysia	6
GPA. 21	The Malaysian Constitution	3
GPA. 22	Government and Politics of Southeast Asia	3
Any course in Year II and Year III not already taken		3/6

Honours Courses

Mal. Hon. 1.	Academic exercise on an aspect of Malay language, literature or society
Mal. Hon. 2.	Sejarah Melayu and related texts
Mal. Hon. 3.	Selected modern Malay/Indonesian authors for intensive study
Mal. Hon. 4.	Advanced Sociology, with special reference to the Malay Peoples
Mal. Hon. 5.	Islamic law and society

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75. Department of History. The following course structure is recommended.

(For details of the courses, see Appendix B):

Year I

Required Courses (27 credits) Credits

Hist. 11	Modern Southeast Asian History	3
Hist. 12	General East Asian History	6
Hist. 13	World History before 1500	6
Lang.	Malay I/Advanced Malay I	6

One of the following:

Geo. 12	Elements of Human Geography	6
GPA. 11	Introduction to Government	6
Econ. 11	Economic Analysis I	6

Elective Courses (9 credits)

GPA. 12	Sociology I	6
GPA. 13	Introduction to Political Theory	6
Any course for Year I not already taken		3/6

Year II

Required Courses (27 credits)

* Hist. 21	Early Southeast Asian History	3
OR		
* Hist. 22	Southeast Asian History, 16 th to 18 th centuries	3
* Hist. 23	Modern Chinese History	6
OR		
* Hist. 24	Europe in Early Modern Times	6
* Hist. 25	History of Modern Europe I	6
Hist. 26	History of Japan before 1868	6
Lang.	Malay II/Advanced Malay II	6

Elective Courses (9 credits)

Hist. 27	Modern South Asian History	3
Hist. 28	Chinese History (selected period)	3
Geo. 26	Geography of Southeast Asia	3
GPA. 21	The Malaysian Constitution	3
GPA. 22	Government and Politics of Southeast Asia	3
GPA. 23	Public Administration I	6
GPA. 25	Sociology II	6
Any course for Year II not already taken		3/6

Year III

Required Courses (24 credits)

* Hist. 31	History of Malaysia	6
* Hist. 32	History of Modern Japan	3
Hist. 33	Chinese History (selected period)	3
* Hist. 34	Theory & Method of History I	6
Hist. 35	History of the United States	6
OR		
Hist. 36	History of Russia	6
OR		
Hist. 37	History of Modern Africa	6

Elective Courses (12 credits)

Hist. 38	History of Indonesia and the Philippines	3
Hist. 39	History of Mainland Southeast Asia	3
Chin. 33	History of Chinese Philosophy	6
Geo. 34	Geography of Malaysia	6
GPA. 32	Public Administration II	6
GPA. 33	History of Political Thought	6
GPA. 34	Comparative Government	6
Econ. 33	History of Economic Thought	6

Honours Courses

Hist. Hons. 1.	Theory & Method of History II	6
—a long essay or academic exercise		

Hist. Hons. 2. History of East Asia (selected period)	6
Hist. Hons. 3. History of Modern Europe II	6
Hist. Hons. 4. Malaysian Historical Documents, 19 th and 20 th centuries	6
Hist. Hons. 5. Modern Political Thought since Hegel (may be given by Department of Government & Public Administration)	
Or One of the following if not already taken for the Pass degree:	
Hist. 35 History of the United States	
Hist. 36 History of Russia	
Hist. 37 History of Modern Africa	6

76. Department of Geography. The following course structure is recommended.

(For details of the courses, see Appendix B.):

Year I

Required Courses (27 credits)

		Credits
Geo. 11	Elements of Physical Geography	6
Geo. 12	Elements of Human Geography	6
Geo. 13	Practical Geography	6
Geo. 14	Cartography	3

One of the following:

GPA. 12	Sociology I	6
Econ. 11	Economic Analysis I	6
Bio. 1.1	Biology I	6

Elective Courses (9 credits)

Hist. 11	Modern Southeast Asian History	3
Hist. 12	General East Asian History	6
Econ. 12	Statistics I	6
Lang.	Malay I/Advanced Malay I (for two years)	6
	Any course above not already taken	6

Year II

Required Courses (27 credits)

Geo. 21	Geomorphology I	6
Geo. 22	Climatology and Elementary Meteorology I	6
* Geo. 23	Economic Geography	6
* Geo. 24	Geography of Settlement	6
Geo. 25	Surveying and Map Projections	3

Elective Courses (9 credits)

Geo. 26	Geography of Southeast Asia	3
Geo. 27	Geography of East Asia	3
Hist. 25	History of Modern Europe I	6
GPA. 22	Government of Politics of Southeast Asia	3
Lang.	Malay II/Advanced Malay II	6

Any course offered in Year I and Year II not already taken 3/6

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Year III

Required Courses (24 credits)

* Geo. 31	Geomorphology II	6
* Geo. 32	Climatology and Elementary Meteorology II	6
* Geo. 33	Modern Geographical Thought & Ideas	6
* Geo. 34	Geography of Malaysia	6

Elective Courses (12 credits)

At least one of the following:

Geo. 35	Political Geography	3
Geo. 36	Historical Geography	3
Geo. 37	Geography of South Asia	3
Hist. 31	History of Malaysia	6
GPA. 25	Sociology II	6
Econ. 21	Economic Analysis II	6
Econ. 22	Statistics II	6
GPA. 22	Government and Politics of Southeast Asia	3

Any course in Year II and Year III not already taken 3/6

Honours Course

Geo. Hons. 1.	History of Geographical Thought and Ideas	6
Geo. Hons. 2.	Geographical Description of a local area or academic exercise on a selected Geographical topic	6
Geo. Hons. 3.	Geography of the Tropical World	6
Geo. Hons. 4.	Geography of the Western World	6
Geo. Hons. 5.	Political Geography of Asia	6

77. Department of Government and Public Administration. The following course structure is recommended:

Year I

Required Courses (27 credits)

GPA. 11	Introduction to Government	6
GPA. 12	Sociology I	6
GPA. 13	Introduction to Political Theory	6
Hist. 11	Modern Southeast Asian History	3
Econ. 11	Economic Analysis I	6
OR		
Econ. 12	Statistics I	6

Elective Courses (9 credits)

GPA. 14	Introduction to the study of English law	3
Hist. 12	General East Asian History	6
Geo. 12	Elements of Human Geography	6
Lang.	Malay I/Advanced Malay I (for 2 years)	6

Any course above not already taken 6

Year II

Required Courses (27 credits)

* GPA. 21	The Malaysian Constitution	3
* GPA. 22	Government and Politics of Southeast Asia	6
GPA. 23	Public Administration I	6
GPA. 24	Elements of International Law	3
* GPA. 25	Sociology II	6
Econ. 21	Economic Analysis II	6
OR		
Econ. 22	Statistics II	6

Elective Courses (9 credits)

GPA. 26	Political Parties	3
Hist. 23	Modern Chinese History	6
Hist. 25	History of Modern Europe I	6
Hist. 26	Modern South Asian History	3
Geo. 23	Economic Geography	6
Geo. 26	Geography of Southeast Asia	3
Lang.	Malay II/Advanced Malay II	6

Any course of Year I and Year II not already taken 3/6

Year III

Required Courses (24 credits)

* GPA. 31	Comparative Constitution	6
* GPA. 32	Public Administration II	6
* GPA. 33	History of Political Thought	6
* GPA. 34	Comparative Government	6
OR		
IBM. 33	Labour Economics and Industrial Relations	6
OR		
Econ. 33	History of Economic Thought	6

Elective Courses (12 credits)

* GPA. 35	International Organisations	3
Hist. 31	History of Malaysia	6
Geo. 34	Geography of Malaysia	6
Econ. 24	International Economics I	6
Econ. 31	Economic Development	3
IBM. 22	Financial Institutions	6

Any course for Year II and Year III not already taken 3/6

Honours Courses

GPA. Hons. 1.	Academic exercise on Theory & Practice of Government	6
GPA. Hons. 2.	Field work on Public Administration in Malaysia — A report to be examined	6
GPA. Hons. 3.	Government and Politics in Malaysia	6
GPA. Hons. 4.	Modern Political Thought since Hegel	6
GPA. Hons. 5.	Constitutional History of Britain and the Commonwealth	6

CHAPTER SEVEN:

Recommendations on the College of Science

78. We recommend that the College of Science be reorganised with the following departments:

- (a) Department of Mathematics
- (b) Department of Chemistry
- (c) Department of Physics
- (d) Department of Biology

79. It is not necessary to establish divisions within departments as at present. Each department, however, may develop more than one stream of study. In the Department of Biology, we have recommended a course structure which provides for a Botany stream and a Zoology stream. Other departments may also institute additional streams of study when necessary and when adequate staff is available.

80. The present courses of study in the Department of Chemical Engineering are not satisfactory at all. There are no proper mechanical workshop facilities in support of chemical engineering. Moreover, at present moment the demand for chemical engineers is very limited in this country. We strongly feel that the field be best left to the Faculty of Engineering at the University of Malaya where courses in other engineering practices have already been established. We therefore recommend that the Department of Chemical Engineering be abolished and that the present resources of equipment and staff be made available to strengthen the Department of Chemistry.

81. We recommend the following degree structure for the College of Science:

New Degree Structure — College of Science

Year	Pass Degree ¹ (Three years) Credits	Pass Degree ² (Four years) Credits	Pass Degree ³ (Two years) Credits	Minimum Total Credits
I	24(12)	21(6)	Exemption	24
II	27(9)	21(6)	27(9)	45
III	27(9)	18(9)	27(9)	66
IV	Honours courses	18(9)	Honours courses	87
V	—	—	—	108

- 1. Or any other suitable variations over 3 years.
- 2. Or any other suitable variations over 4 years.
- 3. Or any other suitable variations over 2 years.

82. We recommend that the courses be divided into two parts. In the first part, the courses provide a comprehensive survey of various subjects. In the second part, a

wider range of courses are provided to be covered in at least two years. Examinations for all the courses in Part II should be moderated by External Examiners.

83. The courses in the first part are arranged so that a student may, at the end of the courses, transfer from one Department to another, always provided he has taken the required courses of the Department concerned. In this way, a student is given the opportunity to make up his mind about his future career in the University.

84. A student of exceptional merit may be exempted from all the courses in Part I. He should then be permitted to complete all his courses for the pass degree in two years. As for students who are unable to obtain all the required credits within three years, they may do so in four years. No student may take more than five years to complete all the required courses for the pass degree.

85. We recommend the use of lectures as the normal means of teaching. Each lecture should be carefully prepared to bring out clearly and simply the most important aspects of a subject. Lectures should be used to introduce a topic sufficiently so that the students could do their own reading profitably. Tutorial/seminar classes may be used in support of lectures for further discussion on the topics covered as well as for discussion on the students' written assignments and exercises. Practical classes are essential; the organisation and supervision of laboratory classes must be the responsibility of senior staff.

86. Courses are assigned credits on the basis of one credit representing one hour of lecture or tutorial/seminar or two hours of practical classes per week for one semester. All courses are divided into three-credit and six-credit courses. We recommend that no student be allowed to register for courses exceeding a total of twenty-four credits in any one semester. For the courses in the Honours year, each course is approximately the same as a three-credit course.

87. Science students who in our local conditions must of necessity rely on works in the English Language for the pursuit of their study should be encouraged to use English in essay writing, laboratory reports and in the examinations. They should also be given every opportunity to improve their standard of English so that they have no difficulty in reading the latest publications by the time they are admitted to the honours classes. Students should take the appropriate courses offered by the Language Centre and make full use of the facilities provided by the Centre.

88. The credit system is particularly suitable for introducing special elective courses to cover the full range of each subject. We have merely suggested some of the possibilities for the degree structure. We suggest that the various Departments take full advantage of the system when they are adequately staffed.

89. We are particularly concerned not to lay down rigid limits for the honours courses. Details of such courses have been deliberately left out so that the staff responsible for introducing the courses may be free to design them appropriately.

90. **Department of Mathematics.** The following course structure is recommended.
(For details of the courses, see Appendix C):

Year I

Required Courses (24 credits)

		Credits
Maths. 1.1	Algebra, Trigonometry, Calculus and Numerical Analysis	6
Maths. 1.2	Geometry, Statistics and Mechanics	6
Phy. 1.1	New Physics, Electricity & Magnetism	6
Phy. 1.2	General Physics, Optics, Heat and Sound	6

Elective Courses (12 credits)

Chem. 1.1	General Chemistry	6
Chem. 1.2	Inorganic & Organic Chemistry	6
Bio. 1.1	General Biology I	6
Bio. 1.2	General Biology II	6

Year II

Required Courses (27 credits)

Maths. 2.1	Algebra	3
Maths. 2.2	Probability & Statistics	3
Maths. 2.3	Calculus	3
Maths. 2.4	Differential Equations & Vector Analysis	3
Maths. 2.5	Fundamentals of Mathematics	6
Maths. 2.6	Analytical & Vectorial Mechanics	3
Phy. 2.1	A.C. Theory	3
Or		
Phy. 2.2	Spectra, Physical and Geometrical Optics	3
Phy. 2.5	Practical classes, two 3-hour classes per week for one Semester	3

Elective Courses (9 credits)

Any other degree courses in Physics, Chemistry and Biology

Year III

Required Courses (27 credits)

Maths. 3.1	Linear Algebra	3
Maths. 3.2	Analysis	3
Maths. 3.3	Differential Equations & Geometry	3
Maths. 3.4	Dynamics	3
Maths. 3.5	Statistics	3
Maths. 3.6	Potential Theory	3
Maths. 3.7	Theory of Numbers I	3
Phy. 2.3	Thermodynamics & Statistical Mechanics	3
Or		
Phy. 2.4	Properties of Matter, Classical and Theoretical	3
Phy. 2.5	Practical classes, two 3-hour classes per week for one Semester	3

Elective Courses (9 credits)

Any other degree courses in Physics, Chemistry and Biology including the following:

Maths. 3.8	Mathematical logic	3
Maths. 3.9	Mathematic Programming	3
Maths. 3.10	Theory of Numbers II	3
Maths. 3.11	Tensor and Riemannian Geometry	3

Honours Courses

Required Courses

Maths. 4.1	Modern Algebra (1 course)	
Maths. 4.2	Analysis & Differential Equation (1 course)	
Maths. 4.3	General Topology (2 courses)	
Maths. 4.4	Advance Calculus (1 course)	
Maths. 4.5	Electromagnetism & Special Relativity (1 course)	

Elective Courses

6 courses to be selected from either groups, A, B or C below:

Group A

Maths. 4.6	Algebraic Topology (2 courses)	
Maths. 4.7	Functional Analysis (2 courses)	
Maths. 4.8	Modern Algebra (2 courses)	
Maths. 4.9	Lattice Theory (2 courses)	
Maths. 4.10	Theory of Numbers (2 courses)	

Group B

Maths. 4.11	Analytical Dynamics (1 course)	
Maths. 4.12	Quantum Mechanics I (1 course)	
Maths. 4.13	Quantum Mechanics II (1 course)	
Maths. 4.14	Statistical Mechanics (1 course)	
Maths. 4.15	General Relativity (2 courses)	
Maths. 4.16	Mechanics of Continuous Media (2 courses)	

Group C

Maths. 4.17	Statistics & Probability (3 courses)	
Maths. 4.18	Computers (3 courses)	
Maths. 4.19	Practical work in Statistics (3 courses)	

91. Department of Chemistry. The following course structure is recommended.

(For details of courses, see Appendix C.):

Year I

Required Courses (12 credits)

		Credits
Chem. 1.1	General Chemistry	6
Chem. 1.2	Inorganic & Organic Chemistry	6

Elective Courses (24 credits)

Phy. 1.1	New Physics, Electricity & Magnetism	6
Phy. 1.2	General Physics, Heat, Optics & Sound	6
Bio. 1.1	General Biology I	6
Bio. 1.2	General Biology II	6
Maths. 1.1	Algebra, Trigonometry, Calculus & Numerical Analysis	6
Maths. 1.2	Geometry, Statistics & Mechanics	6

Year II

Required Courses (30 credits)

Chem. 2.1	Inorganic Chemistry	6
Chem. 2.2	Physical Chemistry A	3
Chem. 2.3	Physical Chemistry B	3
Chem. 2.4	Organic Chemistry	6
Maths. 2.2	Probability and Statistics	3
Maths. 2.3	Calculus	3
Phy. 2.2	Spectra, Physical & Geometrical Optics	3
Phy. 2.3	Heat, Thermodynamics and Statistical Mechanics	3

Elective Courses (6 credits)

Any other degree courses in Physics, Mathematics and Biology

Year III

Required Courses (27 credits)

Chem. 3.1	Inorganic Chemistry	6
Chem. 3.2	Physical Chemistry A	3
Chem. 3.3	Physical Chemistry B	6
Chem. 3.4	Organic Chemistry A	3
Chem. 3.5	Organic Chemistry B	6
Chem. 3.6	Biochemistry	3

Elective Courses (9 credits)

Any other degree courses in Physics, Mathematics or Biology including the following:

Chem. 3.7 Industrial Chemistry

Honours Courses

The following courses will be covered over the year; practical classes will also be held:

1. Inorganic

Crystallography

Organometallic Chemistry

π -complexes, carbonyls and nitrosyls

Electron deficient compounds (boron hydrides)

Non-aqueous solvents

Inorganic Polymers

Nuclear chemistry

Ion exchange

Non-stoichiometric compounds

2. Physical

1. Spectroscopy

The course would include the consideration of the various types of spectroscopy such as ultraviolet, visible, infra-red, Raman, microwave, radiowave and mass. Study will be made as to show the interaction of matter with electromagnetic radiation could yield valuable information to the chemist.

2. Dielectrics
Theory of dipole moments; experimental determination and application to problems of chemical interest.
3. Statistical Thermodynamics
Internal rotation; Chemical equilibria; Theory of absolute reaction rates.
4. Radiation Chemistry
5. Colloids
6. Free radicals
7. Reaction rates
3. Physical Organic
 1. Correlation of Structure and reactivity of organic compounds.
 2. More detailed treatment of mechanism of:
 - (a) Heterolytic or polar reactions.
 - (b) Hemolytic or free radical reactions.
 3. Application of U.V., I.R. and N.M.R. in organic chemistry.
4. Organic
 1. Further discussion of Heterocyclic Compounds.
 2. Natural Products: alkaloids, diterpenes, sesquiterpenes, steroids, flavonoids, nucleic acids, tropolones.
 3. Chemistry of:
 - (a) non-benzenoid aromatics
 - (b) fulvenes
 - (c) carbenes

92. **Department of Physics.** The following course structure is recommended
(For details of courses, see Appendix C.):

Year I

Required Courses (24 credits)		Credits
Phy. 1.1	New Physics, Electricity & Magnetism	6
Phy. 1.2	General Physics, Optics, Heat & Sound	6
Maths. 1.1	Algebra, Trigonometry, Calculus & Numerical Analysis	6
Maths. 1.2	Geometry, Statistics & Mechanics	6
Elective Course (12 credits)		
Chem. 1.1	General Chemistry	6
Chem. 1.2	Inorganic and Organic Chemistry	6
Bio. 1.1	General Biology I	6
Bio. 1.2	General Biology II	6

Year II

Required Courses (27 credits)		
Phy. 2.1	A.C. Theory	3
Phy. 2.2	Spectra, Physical & Geometrical, Optics	3

Phy. 2.3	Heat, Thermodynamics & Statistical Mechanics	3
Phy. 2.4	Properties of Matter, Classical and Theoretical Mechanics	3
Phy. 2.5	Practical classes, two 3-hour classes per week of two semesters	6
Maths. 2.2	Probability & Statistics	3
Maths. 2.3	Calculus	3
Maths. 2.4	Vector Analysis and Differential Equations	3

Elective Courses (9 credits)

Any other degree courses in Chemistry, Mathematics and Biology

Year III

Required Courses (27 credits)

Phy. 3.1	Electromagnetic Theory	3
Phy. 3.2	Nuclear Physics & Special Relativity	3
Phy. 3.3	Quantum Mechanics	3
Phy. 3.4	Electronics	3
Phy. 3.5	Practical, two 3-hour classes per week for two semesters	6
Maths. 3.5	Statistics	3
Chem. 2.1	Inorganic Chemistry	6

Elective Courses (9 credits)

Any other degree courses in Chemistry, Mathematics and Biology

HONOURS COURSES

Required Courses

Phy. 4.1	Quantum Mechanics
Phy. 4.2	Electromagnetism
Phy. 4.3	Nuclear Theory
Phy. 4.4	Spectroscopy
Phy. 4.5	Advance Experiment (I), 2 days per week for 5 weeks
Phy. 4.6	Advance Experiment (II), 2 days per week for 5 weeks

Elective Courses

Four courses to be taken at least 2 must be specialist courses.

Phy. 4.7	Specialist Course I
Phy. 4.8	Specialist Course II
Phy. 4.9	Specialist Course III
Phy. 4.10	Specialist Course IV
Phy. 4.11	Specialist Course V
Phy. 4.12	Specialist Course VI
Phy. 4.13	Advance Experiment III — 2 days per week for 5 weeks
Phy. 4.14	Advance Experiment IV — 2 days per week for 5 weeks

Advance experiments can be selected from about 12 different sets of experiments designed for the Honours Laboratory. Specialist courses will be given by members of staff on subjects closely related to their research interest. Classes in workshop practice, glass blowing and electronic circuitry work will be held during the first Semester and the vacation.

93. **Department of Biology.** The following course structure is recommended. In years II and III, two specialised streams of Botany and Zoology are offered. (For details of courses, see Appendix C.):

Year I

Required Courses (24 credits)		Credits
Bio. 1.1	General Biology I	6
Bio. 1.2	General Biology II	6
Chem. 1.1	General Chemistry	6
Chem. 1.2	Inorganic and Organic Chemistry	6
Elective Courses (12 credits)		
Phy. 1.1	New Physics, Electricity & Magnetism	6
Phy. 1.2	General Physics, Heat, Optics and Sound	6
Maths. 1.1	Algebra, Trigonometry, Calculus & Numerical Analysis	6
Maths. 1.2	Geometry, Statistics and Mechanics	6

Year II BOTANY

Required Courses (27 credits)		
Bio. 2.1	Cytogenetics	3
Bio. 2.2	Ecology and Biogeography (Plant)	3
Bio. 2.3	Taxonomy of seed-bearing plants	6
Bio. 2.4	Cryptogamic Botany	6
Bio. 2.5	Economic Zoology	6
Chem. 3.6	Biochemistry	3

Elective Courses (9 credits)

Any other degree courses in Mathematics, Physics, Chemistry or Zoology

including the following:

Bio. 2.6	Horticulture	3
Bio. 2.7	History of Biology	3

Year II ZOOLOGY

Required Courses (27 credits)		
Bio. 2.1	Cytogenetic	3
Bio. 2.2	Ecology & Biogeography (Plant)	3
Bio. 2.8	Invertebrate Zoology	6
Bio. 2.9	Vertebrate Zoology	6
Chem. 3.6	Biochemistry	3
Bio. 2.10	Economic Botany	6

Elective Courses (9 credits)

Any other degree courses in Mathematics, Physics, Chemistry or Botany including

the following:

Bio. 2.6	Horticulture	3
Bio. 2.7	History of Biology	3

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Year III BOTANY

Required Courses (27 credits)

Bio. 3.1	Plant Anatomy and Histology (with microtechniques)	6
Bio. 3.2	Palaeontology and Evolution	3
Bio. 3.3	Ecology and Biogeography (Animal)	3
Bio. 3.4	Mycology and Plant Pathology	6
Bio. 3.5	Plant Physiology	6
Maths. 2.2	Probability and Statistics	3

Elective Courses (9 credits)

Any other degree courses in Mathematics, Physics, Chemistry or Zoology including the following:

Bio. 3.6	Bacteriology	3
Bio. 3.7	15 Biological Essays (required for admission to Honours) to be taken over two Semesters	3

Year III ZOOLOGY

Required Courses (27 credits)

Bio. 3.2	Palaeontology & Evolution	3
Bio. 3.3	Ecology and Biogeography (Animal)	3
Bio. 3.8	Entomology	6
Bio. 3.9	Vertebrate History & Microtechniques	3
Bio. 3.10	Embryology	3
Bio. 3.11	Animal Physiology & Behaviour	6
Maths. 2.2	Probability and Statistics	3

Elective Courses (9 credits)

Any other degree courses in Mathematics, Physics, Chemistry or Botany including the following:

Bio. 3.12	Parasitology	3
Bio. 3.7	15 Biological Essays (required for admission to Honours) to be taken over two Semesters	3

Honours Courses

1. Students are expected to carry out an Investigation and write a report or academic exercise. The investigation need not be original work, but it must be carried out as if it were original work, and if it is founded on other work a copy of the relevant book or paper should be provided for the examiner.

2. Four courses in advanced practical ecology (Plant or Animal) in which four of the following habitats will be studied in detail:

Primary forest, secondary forest, mangrove forest, soil, fresh water sea beaches, coral reefs, open sea.

3. Two advanced courses in one of the following:

Cytology and Genetics	Horticulture & Market Gardening
Comparative Animal Physiology	Fisheries & Fishpond Culture
Plant Physiology	Entomology
Plant Pathology	

4. Two of the following courses (which must differ from 3 above):
 - (a) Any degree course not already taken, especially:

Bio. 3.12	Parasitology	Bio. 2.6	Horticulture
Bio. 3.6	Bacteriology	Bio. 2.7	History of Biology
 - (b) Advanced Microtechniques, Embryology, Applied Entomology, Mycology, Plant Taxonomy, Palaeontology, or other subjects as may be available.

CHAPTER EIGHT:

Recommendations on the College of Commerce

94. A brief survey of business education in the major countries of the English-speaking world has led us to the conclusion that:

- (a) Business education has an established place at the universities at both the undergraduate and post-graduate levels;
- (b) Important differences exist in the courses offered by the Commonwealth and the American universities;
- (c) The guiding principles in the development of professional courses are based on the culture, the educational patterns and the business needs of each country.

95. The College of Commerce at present consists of four departments offering specialization in Industrial Management, Accountancy, Banking and Finance, and Economics. We recommend that the existing Department of Industrial Management and Department of Banking and Finance be merged into one department to be called the Department of Industrial and Business Management. The College of Commerce will then comprise the following departments:

- (a) Department of Economics
- (b) Department of Accountancy
- (c) Department of Industrial and Business Management

96. We recommend the following degree structure for the College of Commerce:

New Degree Structure — College of Commerce

Year	Pass Degree ¹ (Three years) Credits	Pass Degree ² (Four years) Credits	Minimum Total Credits
I	30	27	18
II	39	27	36
III	39	27	60
IV	Honours Courses	27	84
V	—	—	108

1. Or any suitable variations over 3 years.

2. Or any suitable variations over 4 years.

97. A three-credit course consists of 30 one-hour lectures and 10-20 tutorials. A six-credit course consists of 40-60 one-hour lectures and 20-40 tutorials. Each honours course in Commerce is approximately the same as a six-credit course.

98. We recommend that the three Departments shall have common courses in the first year. Special emphasis should be placed on core subjects like, Economic Analysis I, Statistics I and Accounting I. By this arrangement, students completing the three courses will be in a better position to decide for themselves their future career in the University. After their first year, they should be allowed to transfer from one Department to another with the agreement of the Department concerned.

99. We recommend that each of the courses be examined by one three-hour paper. As for the honours examination, four to five three-hour papers are adequate. The graduation exercise shall constitute one paper for the purpose of marking, and the required length shall be between five thousand and ten thousand words. Topics for the exercise should be assigned to students not later than one month after the enrolment.

100. We are aware that management education is still very much in an experimental stage in many universities. There is always the need to take into account changing business requirements, new methods of teaching and other advances in the field. For this reason, we recommend that the courses of study be reviewed from time to time in the light of local developments and developments elsewhere.

101. In the context of Malaysia, where English is still the commercial and legal language, the importance of the language should not be overlooked. In addition, many reference books on business subjects which the students must consult frequently are written in English. Also it will be increasingly important for the students to know the National Language. We therefore recommend that the Language Centre establish a language laboratory for the College of Commerce to assist the students to acquire a good working knowledge of the necessary languages in the shortest possible time.

102. We feel that a commerce degree of a sufficiently high standard deserves the support of the professional bodies in Malaysia. This support may take the form of exemption from their intermediate examination and the usual reduction in the number of years of experience given to university graduates. This is particularly relevant to the degrees in accountancy. We suggest that the University authorities take up the question of recognition with the Singapore Society of Accountants and the Malaysian Association of Certified Public Accountants.

103. We further suggest that the College establish contacts with the commercial and industrial world to enable its commerce students to gain practical experience. The College should also provide courses or seminars during the long vacation. These courses or seminars may be offered in conjunction with outside bodies and institutions.

104. Department of Economics. The following course structure is recommended.
(For details of the courses, see Appendix D.):

Year I

Required Courses (24 credits)		Credits
Econ. 11	Economic Analysis I	6
Econ. 12	Statistics I	6
Acc. 11	Accounting I	6
Maths. 11	Mathematics I	6
Elective Courses (6 credits)		
Hist. 11	Modern Southeast Asian History	3
Geo. 12	Elements of Human Geography	6
GPA. 11	Introduction to Government	6
GPA. 12	Sociology I	6
GPA. 14	Introduction to the Study of English Law	3

Year II (39 credits)

Econ. 21	Economic Analysis II	6
Econ. 22	Statistics II	6
Econ. 23	Money & Banking	6
Econ. 24	International Economics I	6
Acc. 22	Accounting Theory & Analysis of Financial Data	3
IBM. 21	Principles of Management & Organisation	6
Acc. 35	Business Finance	6

Year III (39 credits)

* Econ. 31	Economic Development I	3
* Econ. 32	International Economics II	6
* Econ. 33	History of Economic Thought	6
* Econ. 34	Public Finance & Fiscal Policy	6
* Econ. 35	Agricultural Economics	6
* Econ. 36	National Income Accounting	6
* Econ. 37	Mathematical Economics	6

Honours Courses

1. Economic Development II
2. Economic Analysis III
3. Statistics III
4. Graduation Exercise
5. Mathematics II (Maths. 1.2)

105. Department of Accountancy. The following course structure is recommended.
(For details of the courses, see Appendix D.):

Year I

Required Courses (24 credits)		Credits
Acc. 11	Accounting I	6
Econ. 11	Economic Analysis I	6
Econ. 12	Statistics I	6
Maths. 11	Mathematics I	6
Elective Courses (6 credits)		
Hist. 11	Modern Southeast Asia History	3
Geo. 12	Elements of Human Geography	6
GPA. 11	Introduction to Government	6
GPA. 12	Sociology I	6
GPA. 14	Introduction to the study of English Law	3

Year II (39 credits)

Acc. 21	Accounting II	6
Acc. 22	Accounting Theory & Analysis of Financial Data	3
Acc. 23	Commercial Law I	6
Econ. 21	Economic Analysis II	6
Econ. 22	Statistics II	6
Econ. 23	Money & Banking	6
IBM. 21	Principles of Management & Organisation	6

Year III (39 credits)

* Acc. 31	Accounting III	6
* Acc. 32	Commercial Law II	6
* Acc. 33	Auditing	6
* Acc. 34	Managerial Accounting	6
* Acc. 35	Business Finance	6
* Acc. 36	Taxation	6
* Econ. 31	Economic Development I	3

Honours Courses

1. Advanced Business Finance
2. Managerial Economics
3. Advanced Accounting Theory & Problems
4. Graduation Exercise
5. Mathematics II (Maths. 1.2)

106. Department of Industrial & Business Management. The following course structure is recommended. In Years II and III, two specialised streams of Industrial Management and of Banking and Finance are recommended. (For details of the courses, see Appendix D.):

Year I**Required Courses (24 credits)**

		Credits
Acc. 11	Accounting I	6
Econ. 11	Economic Analysis I	6
Econ. 12	Statistics I	6
Acc. 11	Accounting I	6
Maths. 11	Mathematics I	6

Elective Courses (6 credits)

Hist. 11	Modern Southeast Asian History	3
Geo. 12	Elements of Human Geography	6
GPA. 11	Introduction to Government	6
GPA. 12	Sociology I	6
GPA. 14	Introduction to the study of English Law	3

Year II — Industrial Management (39 credits)

IBM. 21	Principles of Management & Organisation	6
IBM. 22	Factory Management	6
IBM. 23	Marketing I	6
Econ. 21	Economic Analysis II	6
Econ. 22	Statistics II	6
Econ. 23	Money and Banking	6
Acc. 22	Accounting Theory & Analysis of Financial Data	3

Year II — Banking & Finance (39 credits)

IBM. 21	Principles of Management & Organisation	6
IBM. 24	Financial Institutions	6
Econ. 21	Economic Analysis II	6
Econ. 22	Statistics II	6
Econ. 23	Money & Banking	6
Acc. 22	Accounting Theory & Analysis of Financial Data	3
Acc. 23	Commercial Law I	6

Year III — Industrial Management (39 credits)

* IBM. 31	Industrial Law	6
* IBM. 32	Marketing II	6
* IBM. 33	Labour Economics & Industrial Relations	6
* Econ. 31	Economic Development I	3
* Acc. 31	Accounting III	6
* Acc. 34	Managerial Accounting	6
* Acc. 35	Business Finance	6

Year III — Banking & Finance (39 credits)

* IBM. 34	Law & Practice of Banking	6
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* IBM. 35	Law & Administration of Trust	6
* Econ. 24	International Economics I	6
* Econ. 31	Economic Development I	6
* Econ. 34	Public Finance & Fiscal Policy	6
* Acc. 32	Commercial Law II	6
* Acc. 35	Business Finance	6

* Examination moderated by External Examiner.

Honours Courses (Industrial Management)

1. Personal Management
2. Production Management
3. Advanced Business Finance
4. Graduation Exercise
5. Mathematics II. (Maths. 1.2)

Honours Courses (Banking & Finance)

1. International Trade & its Finance
2. Trust Account & Taxation
3. Advanced Business Finance
4. Graduation Exercise
5. Mathematics II. (Maths. 1.2)

Note: All commerce honours students must take Mathematics II (Maths. 1.2) as a non-examination subject and attendance at lectures is compulsory.

CHAPTER NINE:

Implementation of the New Degree Structure

107. We believe that, with the implementation of the new degree structure, future graduates of the University should achieve standards comparable to graduates of other established universities. The task of implementation, however, must be undertaken with great care in order to ensure that the students receive the full benefits of the new curriculum.

108. We are convinced that the most important single factor for the successful implementation of the new degree structure is the selection of a strong Professorial Head for each of the Departments. We believe that the firm and dedicated leadership provided by such persons is the key to the new system. We recommend that every effort be made to find the best men available.

109. We recognise that there are many ways by which the new degree structure can be implemented. In considering all the alternatives, we concluded that with the present staffing difficulties, immediate implementation of all aspects of our recommendations will not be feasible. Partial stage-by-stage implementation also pose extremely complicated problems both in administration and in teaching. We feel that implementation cannot be tied to any rigid timetable. There must be the greatest flexibility.

We recommend that as many of the Pass degree courses in the new curriculum as possible be implemented with the staff available. This could begin with the new academic year in 1966/67, and, if possible, all remaining courses for the Pass degree be introduced in 1967/68.

110. We further recommend that a Standing Committee be established to guide the implementation of the new degree structure as long as it is needed to ensure the maintenance of the required standards. Because of the unevenness in the quality of the existing students, the immediate task of this Committee will be to supervise the transitional arrangements for these students to take suitable courses under the new degree structure. Particular care should be taken to see that the credits obtained by these students in the present four year structure be given the correct weight when allowing these students to fit themselves into the new three years degree structure.

111. We are aware that, during the first few years of the transition, there may be difficulty in ensuring that the desired standards are achieved. This difficulty can be overcome if the system of external examinations along the lines recommended is implemented immediately. It is imperative that the selected courses for moderation by External Examiners are organised satisfactorily. We are concerned that future graduates should be able to attain a standard suitable for further studies at the honours level. It is, therefore, important for External Examiners to be selected from among scholars familiar with the nature of honours degrees. Such External Examiners can then be expected to advise the University about the best means of introducing honours classes in a few years' time. Only when everyone concerned is satisfied that staff and students, equipment and facilities of the required quality are available should the University establish the first honours programmes. It is not suggested that every Department should start offering honours courses at the same time. The decision to have honours classes must depend on the conditions in the individual Department.

112. We feel that the significance of the new degree structure rests primarily on the quality of the honours degrees that the University will award. It is imperative therefore that the greatest care be made in the selection of graduates for admission to the honours classes.

113. We recognise that previous graduates of academic promise may wish to take the honours courses and recommend that provision be made to admit such graduates. We also recommend that such provision be made available to them for a period of five years only from the year the honours programmes are introduced.

114. For admission to the honours classes, first priority should be given to current graduates under the new degree structure. Other graduates are eligible to compete for places in the honours classes, but some priority should be given to those who were among the top 20% of their graduating classes.

CHAPTER TEN: Summary of Conclusions

115. We revised the curriculum and recommended a new degree structure consisting of a pass degree and an honours degree.

116. We believe that the University should open its doors to students from all streams of education in the country.

117. A Language Centre serving the whole University should be immediately established.

118. A Department of Malay Studies should be established in the College of Arts.

119. The Department of Modern Languages and Literature, the Department of Education, and the Department of Chemical Engineering should be abolished.

120. The Department of Political Science should be reorganised and renamed the Department of Government and Public Administration.

121. The Department of Industrial Management and the Department of Banking and Finance should be merged into one department called the Department of Industrial and Business Management.

122. The requirements of the relevant professional bodies must be kept in mind if courses in the College of Commerce are to be of an acceptable standard.

123. Staff of high academic quality must be obtained as soon as possible; it is particularly important that each Department should have a strong Professorial Head.

124. New salary scales should be immediately introduced in order to attract and retain good staff.

125. Opportunities and facilities for research must be adequately provided.

126. For future staff, facilities must be provided for the training of the University's own graduates. Plans should now be drawn up to offer higher degrees.

127. None of our recommendations concerning the new degree structure will be meaningful unless salary scales for teaching staff are revised and made comparable to those of other universities in Malaysia.

Report On University Education In Singapore

December 1979

by Sir Frederick Dainton, Frs

PREFACE

When the Prime Minister addressed staff and students of Nanyang University in February 1978, he said Singapore would be better off with two universities, one at Kent Ridge, the other at Jurong, competing with and complementing each other. He believed that healthy competition for both staff and students would improve overall performance in each university. This situation, however, required two universities of comparable standards, each with its share of both able teachers and good students.

2. The Prime Minister met four British academics* in London in June 1979 to discuss how university education in Singapore could best be organised. These four have had considerable experience in establishing and managing universities in Britain and the Commonwealth.

3. The prime Minister was told that for an ultimate university undergraduate population of about 12,000, university education could be in one or two universities, or in one university on two campuses. Two good universities would be more difficult to achieve because more staff would be required to man duplicated faculties on two campuses, and they would not be easy to recruit quickly.

4. Subsequently one of the academics, Sir Frederick Dainton, visited Singapore in October 1979. Before he arrived, he was given background information on a whole range of items, including our education system, school population projections, future graduate manpower requirements, university enrolments, university admission criteria, history of the Universities and the Joint Campus, student capacities of the various campuses, staff numbers by faculty and appointment, capital and recurrent expenditures, and research allocations. After the visit, Sir Frederick was sent additional information to clarify various matters he raised.

5. The report by Sir Frederick Dainton is presented. His conclusion:

“The arguments for maintaining two universities whether on two campuses or one (an absurd proposition) are extremely weak whilst those in favour of a *single, strong university at Kent Ridge* are compelling and I recommend accordingly.”

* Sir Frederick Dainton, Chancellor of Sheffield university, Sir John Llewellyn, Director-General of The British Council; Sir Douglas Logan, retired Principal of the University of London; and Dr Frank Thistlethwaite, Vice-Chancellor of the University of East Anglia.

The British Library Board
Store Street
London WC1E 7 DG
Telephone 01-6361544
11th December 1979.

The Prime Minister,
Prime Minister's Office,
Singapore.

Dear Prime Minister,

I have the honour to submit to you my preliminary report on University Education in Singapore. My conclusions, which are summarised in the Annex A to this letter, are based on information gained in discussions with the principal officers and the senior academics of both universities held at the Kent Ridge, Jurong and Bukit Timah campuses on 18th and 19th October and on information supplied to me at request by the two universities and by your Principal Private Secretary Mr Lim Siong Guan. I am grateful to the Registrar of each university for providing me with records of those discussions.

I want to stress that the discussions went very well in the sense that I felt my respondents answered my questions fully and frankly and without reserve or rancour and that every opportunity was given to each university to proffer any views and opinions which it cared to express either during the discussions themselves or later when they had had time for further consideration of the points raised. I would also emphasise to you that all the University representatives expressed themselves as completely satisfied that all the points raised on either side had been adequately probed and that they had been given complete freedom to make any comments or voice any opinions which they cared to utter or to send to me in writing. I believe that your knowledge of this fact may be of some help in assisting your consideration of my proposals and will also facilitate the acceptance by the universities of any of the recommendations which you feel prepared to implement. However I should also stress that two days is scarcely long enough to do more than touch on the major issues and perhaps my visit can best be regarded as a reconnaissance and many details changes consequent upon my recommendations would require more careful study.

May I say how much I have enjoyed the privilege of conducting this enquiry and I wish to thank you for inviting me to undertake what for me has been a most interesting assignment. It will do what I am able to help even if this involves further visits.

Yours sincerely,

Fred Dainton.

PRIME MINISTER
SINGAPORE

19 December 1979

Dear Sir Frederick

Thank you for your letter of 11 December sending me your preliminary report on University Education in Singapore. You have answered the main question: whether it is better to have one or two universities. Your assessment helped to convince me that it is better to have all disciplines in one university, and that the number of students there will be in Singapore does not justify the costs of duplicating faculty staff and facilities.

By spelling out the arguments in favour of two universities in paragraph 13 and dealing with them in paragraph 14, and again by treating the proposal of the Director-General of Nanyang University separately in paragraph 20 to 22, you have shown remarkable perceptivity to political nuances, picked in the two days you were here.

I found your presentation clean and simple. I take the next few steps with greater assurance. I thank you sincerely. When I need further help I shall get in touch.

Yours sincerely

Lee Kuan Yew

Sir Frederick Dainton FRS

Chairman

The British Library Board

Preliminary Report On University Education In Singapore

The Scale and Range of foreseeable university provision in Singapore

1. Having regard to known sizes of the 18 year old age group (boys and girls) up to 1996, the likely school leaving examination attainments ('A' and 'O' levels), population growth from all causes, the likely needs of Singapore for university educated and trained people in the context of the foreseen economic and social policies for the country up to the end of the century and the consequent necessary quality of that education at the under-graduate and post-graduate levels, I consider that *a total student population in the range of 12–14,000 students by the year 2000 to be adequate.*

2. The distribution of the student numbers between subjects and between undergraduate and post-graduate work should reflect the needs of Singapore a) for highly qualified people to man and lead the wealth-creating industries in a highly competitive world in which the “name of the game” is science based technological competence allied to commercial enterprise and, b) for people to man the service industries and public administration who are not only competent but sensitive to the special cultural background of Singapore's ethnic composition. *The mix of undergraduate study should continue to be roughly half science based (medicine, dentistry, paramedical, natural science, and relevant engineering and technologies) and half arts and social sciences but no dispositions should be made which ossify this distribution for all time* because the future of Singapore depends as much as, if not more than, that of other countries on its capacity to adapt quickly to changing circumstances and opportunities. For this reason the aim of the undergraduate education should be not only to equip each graduate with the necessary skills and cultivate a lively curiosity and draw out his or her talents of intellect and personality but also to encourage adaptability and a willingness to tackle new problems which cannot be foreseen but which are bound to present themselves during the graduate's lifetime.

3. In this context I should record that I have the impression, confirmed by some of those whom I met, that there is an excessive reliance on examination results which is disadvantageous to education in Singapore. Thus with limited exceptions, the 'A' and 'O' level performance of applicants, numerically conflated, seem to be the sole and rather inflexibly applied criterion for university entrance. Other less commensurable but none-the-less significant qualities of applicants should be taken into account such as personal motivation and depth of interest and potential for development in the selected field. Information on these matters could be provided by Head Teacher's reports and further probed by interviews. Moreover a too pervasive attitude of excessive dependence on examination success can adversely affect the approaches to their work of the students and the university staff tending to make the former the passive receptors

of the predigested pabulum offered to them in lectures of the latter or in text-books. The most useful benefit of a university education is a comprehension of general principles with a thorough grounding in the way they apply to a variety of concrete problems and issues so that the graduate is equipped to tackle successfully the problems which he will encounter when he leaves the university and which cannot be foreseen. This power, the capacity for clear logical thought and a problem-solving rather than rote-learning attitude are developed in students only if his teachers have these qualities and their own work exemplifies this. Students cannot be taught by precept if they are not also inspired by example.

4. To achieve these ends requires an enquiring, constantly learning and probing attitude to their work on the part of the academic staff, an attribute which can only be developed by teaching in an atmosphere of research and preferably with some participation in it at a level which will bear international comparison. This is at present lacking. However the remedy is not to have a lavish research programme in all fields. This is neither possible nor desirable. It would be better to select a limited number of fields of enquiry in each of which academics in the same or closely allied disciplines would participate co-operatively and be supported by resources which would ensure a significant outcome to the research and that the students involved in these researches be well trained. The selection of these fields requires thought and *consideration should be given to the establishment of a Singapore Research Policy Committee* where these questions and other factors such as the relevance of the research to Singapore's needs in the widest sense, and the resources necessary to maintain the academic competence in research at the necessary level could be discussed and given due weight. Such a body should have real "clout" i.e. sufficient funds to enable it to steer research into productive areas and its membership should contain local academics (who would serve in a personal capacity on the basis of their knowledge and experience), representatives of Government departments and industry and have the power to call in any necessary external advice. Given these arrangements it is reasonable to envisage that Singapore with an undergraduate student population of 12—13,000 could have a useful and vigorous research enterprise which would liven and enrich the undergraduate programmes and also sustain a *post-graduate student population working for post-graduate diplomas, Masters and Doctors degrees of about 1,000 students* giving a total student enrollment in the range 13—14,000. The distribution of post-graduate work requires further consideration as does the relative emphasis to be given to Master degrees by research or taught courses but possibilities of employment are likely to predispose the distribution heavily towards engineering, technology, natural science and medicine.

5. The execution of research in various fields might well be improved by involving senior foreign scientists on short or long term contracts, a process likely to be facilitated

by enlarging the post-graduate population from its present value as I have suggested and by *developing links with overseas institutions noted for the high quality of their work* in the same fields. In this context I would remark that the division of the staff in certain subjects into two departments one in each of the existing universities is an obstacle to full exploitation of their potential which should be removed (see below).

6. There is a related point which should be mentioned here, namely, the serious understaffing of certain Faculties, notably Law, Engineering, Business Administration and Accountancy and Dentistry. My stay was too brief to make a trustworthy diagnosis of the causes of this deficiency but I have little doubt a) that a more lively research atmosphere would make these Faculties more attractive to able men and women who might otherwise seek their careers elsewhere and b) that, if properly organised, arrangements to encourage practitioners to contribute as part-time teachers could be beneficial.

7. I was asked questions about academic organisation and the grouping of subjects and departments into Faculties which could lead to the most educationally fruitful relationships between them. These are not questions which can be answered definitely without more detailed enquiry and discussion than was possible but my first reaction is that I would see merit in having separate faculties of Arts and Humanities (languages, literature, history, philosophy etc.) and Social Studies (including law, social administration, government etc.). Accountancy could be brigaded with Economics and Business Studies either to form a separate faculty or as part of Social Studies and, because elements of these studies ought to be incorporated in the education of engineers, links between this faculty and that of engineering should be cultivated. There ought to be a Computing Service with a well qualified manager or director performing a university-wide function in the same way that a library does and, in addition, a Computer Science Department which undertakes teaching and research in this subject and should be closely linked to the Service.

The Capacity of the 3 sites

8. University work in Singapore is now carried out on 3 separate sites listed in the table below; all of which I visited.

Name of Site	Occupants	Area (acres)	Student Capacity of Buildings	Undergraduate ¹ Students in 1979
Kent Ridge	Singapore University	366 ²	9010 ³	3517
Jurong	Nanyang University	512	3500 ⁴	722 ⁵
Bukit Timah	Joint Campus of SU and NU	88	5000 ⁶	4063

Notes 1. These figures apply to the situation before the transfer of Business Administration and Accountancy students from Bukit Timah to Kent Ridge on 3 Dec 79.

2. This excludes an adjacent 100 acres reserved for the hospital and the Civil Service

Institute. Since much of the clinical medical training of students is conducted in the hospital the total area available for the university work at Kent Ridge exceeds 366 acres.

3. This is the designed capacity of the building already completed or now under construction at Kent Ridge. I was told that most of the buildings have been designed to take additional floors and or lateral extensions which would allow a 25-30% increase in usable area.
4. Largest enrolment ever at Jurong is 2500. According to NU, the maximum theoretical capacity is 3500.
5. By 1980 only about 150 non-Joint Campus students will be pursuing their studies at Jurong.
6. This is the maximum that can be crammed into Bukit Timah, which would then be overcrowded.

The experience of universities throughout the Commonwealth would indicate that the Kent Ridge and Jurong campuses would each be able to accommodate the academic departments for teaching and research of an institution or institutions with a total student body of 14,000 and could also take halls of residence for the small percentage of students expected to reside in such halls rather than live at home, provided it was not proposed to incorporate on the site any large land-consuming activity such as, say, a 150 acre sports complex or a Department of Agriculture with its associated farm of large acreage. However I would emphasise that my visit to and tour of each site was brief and hurried and I would recommend that *a careful capacity survey of each site should be undertaken* to establish its maximum capacity expressed in terms of student load for the following categories of use; residence; sports, amenity space, student welfare; academic buildings, including necessary central facilities such as library, computer centre, administration etc.

9. If this survey confirms my preliminary estimate, I would recommend that *only one of these sites be developed to meet the needs of university education in Singapore*. Though not the largest, the best site for this purpose is Kent Ridge because

- a. it has the most modern buildings which have been designed to be extendable and
- b. it is the designated site of the medical school and the teaching hospital and it will be of great mutual benefit to have close physical proximity of these activities with those of the basic science and engineering.

10. If this proposal were accepted the Jurong and Bukit Timah campuses would be available for use for other proposes. It is not a part of my remit to make such suggestions for the use but I cannot refrain from commenting that my first impressions are that laboratory accommodation at Jurong is not of a high standard, that the student accommodation and sports facilities there are clearly under-utilised and could readily

be used by other people and that the library and the non-library academic accommodation could serve a new institution e.g. a specialised centre for Chinese students, an institute of education or an adult education centre. The buildings at Bukit Timah seem to be of higher quality and give the superficial appearance of easy adaptation and one could envisage an institute of education or some sub-degree level vocational education being carried out on this site.

One or two universities?

11. This question was raised in my discussions with the representatives of both universities. Those from Nanyang University expressed themselves strongly in favour of two universities whilst those from Singapore University seemed to favour the other alternative. These reactions were to be expected since they reflect vested interests and the relative strengths of the two universities. Leaving aside political considerations which it is not my place to weigh, I would comment on this question as follows.

12. First and foremost *it is desirable that the issue be settled as soon as possible*. The uncertainty is damaging to the morale and the sense of commitment of the academic staff, especially those at Nanyang University whose Jurong campus will be almost bereft of students in 1980. Also the more the uncertainty is prolonged the more entrenched in their attitudes and the more reluctant to accept change will the proponents of each solution become.

13. Those in favour of retaining two separate universities seem to me to rest their case on five major arguments viz:

- (i) that some competition at university level is desirable because it would promote efficiency and a higher quality of work in both and that, even if this involved some duplication of effort it would still be desirable to have graduates with the same discipline but “differently moulded” (see also (iii) below).
- (ii) that if fusion were to occur now then a later decision to divide the new university would be costly and absurd.
- (iii) that Eastern countries are growing in strength and influence and therefore that Nanyang University should look more to the East than the West and thereby provide a “cultural ballast” or counterweight to that of Singapore University. In a related manner it was stated that Nanyang had established a special and valuable place in the hearts and minds of certain groups of people in Singapore and Malaysia.
- (iv) that Nanyang University has well deserved reputation for excellence in certain fields e.g. Chinese Studies, Mathematics and Computer Science and that this asset and its work in Business Studies should not be wasted but built upon in any future expansion of university provision in Singapore.

(v) that the Joint Campus was a strictly temporary device designed to re-establish the attractiveness of Nanyang University in the eyes of potential applicants and overcome a language problem and that when this stage is reached this University would be restored to the Jurong site. It was also stated that there had been a recent proposal to concentrate Business Administration and Accountancy at Jurong* and that this would be a desirable permanent use to which this campus should be put.

14. These arguments either individually or collectively do not seem to me to justify a policy of retaining two separate universities on either one or two campuses. Dealing with these arguments *seriatim*, my comments would be:

(i) Competition between Nanyang and Singapore for students in the recent past has shown an overwhelming preference of the applicants, especially those of higher school-leaving attainment, to enter Singapore University. The recognition of this fact and its likely permanence was a prime reason for the adoption of the device of a joint campus. Whilst this preference persists there seems little hope for Nanyang University competing with Singapore University on anything approaching equal terms and therefore the competition is likely to be unproductive because Singapore University, being secure in its better position would have no incentive to improve and Nanyang University would have no hope of competing. If the general level of all university education in Singapore is to be raised then, whether there are one or two universities, the aim should be to compete at the international level. I return to this point later. The point about education in "different moulds" is conceptually entirely distinct. It has no force in Science, Engineering and other subjects which are dependent solely on the Laws of Nature but it is, of course, significant in the Arts and Social Studies which are concerned with the transmission and development of humane and cultural values and is therefore related to (iii). With care, as argued in (iii) below, this benefit need not be lost.

(ii) I cannot take this argument seriously for it is tantamount to saying that marriage should not be entered into if divorce is possible.

(iii) I am entirely in sympathy with the concept of reflecting in the work of the institutions of higher education the cultural and other influences which the society which supports these institutions wishes to nurture and preserve but to attempt to do this in the weaker and markedly less popular of the two existing institutions and to ignore it in the other would frustrate the intention. If it is

* Six weeks after my visit I was informed that a decision had been taken to conduct all courses in Business Administration and Accountancy at Jurong from the beginning of the 1980/81 academic year.

wished to realise this intention then this area of study should be represented in the stronger as well as the weaker institution. Moreover, by imaginative and sympathetic response to the aspirations of those who at present have a special feeling for Nanyang it should be possible to fulfil their hopes perhaps even to a greater degree in a unified university. I therefore consider that this argument has little bearing on the question at issue.

(iv) The fact that each university has its particular strengths and these strengths are important to Singapore is an argument for the retention of separate universities only if it is clear that those strengths would be eroded by any unification and any valuable distinctive character lost. I have not examined the examples cited in that detail which would justify a judgment before the event. However it does not seem obvious to me that such strengths will inevitably be lost and there are arguments which I have mentioned elsewhere in this Report that combined resources in many fields offers advantages and that Business Administration should not be geographically and organisationally divorced from the Applied Science and Economics.

(v) This argument is simply that not to re-establish Nanyang University on the Jurong Campus will be a breach of faith with those agreed to move from it to Bukit Timah. This may be so but I was asked to examine the university needs of Singapore in the future and to be as unconstrained as possible by past decisions.

15. The advantages of having one university in Singapore are those of economy of scale; of larger, stronger departments in every field of study and greater opportunities for multidisciplinary teaching and research. From the data I have acquired it seems to me that neither university has at present a library adequate to its range of work and, although I have not personally verified this, there must be wasteful duplication of books and serials. Similarly central administrative costs would be likely to be a smaller fraction of total costs in the unified institution and the same would be true for many other services such as computer services, student welfare etc.

16. Although this argument also applies at the departmental level it is of minor significance compared with the fact that the present staffs in certain subjects are too small to give adequate coverage of this subject. Amalgamation of these departments over a period together with the expansion afforded by growth could be used to remedy this defect and would create the possibility of developing real strength and quality as well as affording greater chances of study leave and attracting expatriate staff. Moreover the range of specialist options could be increased, the larger staff would justify the acquisition of better apparatus and equipment and the research capability of Singapore in single- or multi-disciplinary fields would be enhanced. The applicability of these

arguments to scientific, engineering and medical fields of study is obvious but it is worth comment that although the financial diseconomies of divided Arts departments are less severe the arguments about subject coverage, options, library facilities etc. apply with equal force.

17. Modern societies are complexes of many interacting parts and it is important that an understanding of this should be given to university students. One example will suffice to make the point. Matters of finance, technological economics, business decisions, industrial relations, marketing etc. affect the performance of manufacturing industry at least as much as technical feasibility and therefore some knowledge of these non-technical subjects should permeate the education of engineers and technologists. Conversely an awareness of some technical considerations should be part of the education of future graduates in Accountancy and Business Administration. If these aims are to be achieved then geographical obstacles to the easy mingling, interaction and co-operation of the respective staffs should be minimal i.e. the staff of all departments should be on the same campus.*

18. The question is often raised and was briefly touched upon in my discussions as to whether a university can grow too large and therefore whether there is some optimum size. It is unnecessary to rehearse the arguments here because the only question which is really relevant to the Singaporean situation now is whether a unitary university of 12-14,000 students is inevitably deficient in its teaching and research compared with two smaller institutions of comparable combined material and human resources. There is ample evidence to show that this is not so.

19. In my judgement therefore the arguments for maintaining two universities whether on two campuses or one (an absurd proposition) are extremely weak whilst those in favour of *a single, strong university at Kent Ridge* are compelling and I recommend accordingly.

An alternative proposed by the Director-General of Nanyang University

20. The Director-General of Nanyang University sent me separately a proposal of which the essential elements are:-

- (i) To create a new university on the Jurong Campus when the purposes of Bukit Timah Joint Campus have been fulfilled.
- (ii) This new university would have a complementary role to that of Singapore University and would concentrate on Arts, Social Sciences, Accountancy and Business Administration, which fields of study would no longer be available at Singapore University.

* For this reason I hope that the move of Accountancy and Business Administration to Jurong, due to take place in 1980, will not be permanent.

(iii) To ensure the most economical use of resources, both universities should co-operate in the sharing of facilities, courses and specialised programmes and seek to establish joint “inter university research centres and institutes”. Cross accreditation is seen as a necessary feature of this. It is envisaged that existing methods of joint admission of students, joint examinations and joint appointment of staff would be maintained for a period until it was judged that existing prejudices have been overcome and the New University is strong enough to attract its own students and staff of the desired calibre and therefore become independent. At this stage the policy of non-duplication of courses by each university could be relaxed.

21. The Director-General clearly considers that “in the long term” Singapore will need two universities. I am not clear what space of years this phrase implies but such evidence as I have been given indicates merely that one cannot make credible estimates of university student populations more than two decades ahead and the figure of 12—14,000 students in the Report implies that 10% of the 18 year age group will enter university at the end of this period and is in line with Government policy. The central question at issue between the Director-General's proposal and that in my Report is therefore “Will Singapore be better served by one or two universities over the next twenty years?”

22. I will not repeat here the arguments already given but merely comment that the Director-General's proposal necessarily implies:-

- (i) that, for an unspecified but considerable period, neither university would have the full range of university studies and that, in reality, there would be one Institute of Science, Technology and Health Studies and one Institute of Arts, Social Sciences and Business Studies 15 miles distant from each other.
- (ii) that, therefore, an educationally undesirable organisational and geographical separation of cognate and interdependent disciplines would be prolonged more than it need be.
- (iii) that the economies mentioned in 20(iii) above would be difficult to achieve.

It follows that I regard this proposal as being less satisfactory as a solution to the problem of university education than that which I have offered.

A study mission?

23. The suggestion was made, both before and during my visits, that a group of experts in Higher Education should investigate in depth all matters connected with the provision of university education in Singapore and then publish a comprehensive report. Such a study mission would take time to assemble, meet and complete its work. I doubt whether its effects would be wholly beneficial at this stage when the dominant

issue is plain for all to see. Indeed the establishment of such a mission might well provide an excuse for procrastination and might even ensure that the nettle is not grasped in 1980, as I believe it should.

24. This said I think there is a strong case to be made for providing some means of external guidance and support for the Vice-Chancellor of the unified university in his task of formulating and implementing policy. This would probably require the involvement of acknowledged experts in particular fields e.g. Engineering, Business Studies, Accountancy etc etc who would be prepared to study carefully and with due regard to the special needs of Singapore, the organisation and development of a particular subject and its interdigitation with cognate fields of study. Such experts could easily be identified and some might well have acted as external examiners. Whilst there would be an advantage if they could be constituted into an Academic Expert Committee advisory to the Vice Chancellor it might not be easy to bring together the members, many if not all of whom might have to travel long distances and therefore it might be more realistic to appoint them as Consultants, as and when required. This matter requires further discussion and thought.

Signed

Sir Fred Dainton FRS

11th December, 1979

Summary of Conclusions and Recommendations

Paragraph

- 1 1. A total student population in range 12—14,000 by the year 2000 is likely to be adequate.
- 2 2. About half the student population should be studying science-based subjects and about half arts and social science subjects but no dispositions should be made now which ossify this distribution for all time.
- 4 3. Consideration should be given to the establishment of a Singapore Research Policy Committee.
- 4 4. The post-graduate student population within 1. above should be about 1,000.
- 5 5. Links with overseas institutions of high quality could be valuable in the next decade in improving the quality of research and teaching and should be developed.
- 8 6. A careful capacity survey of the Kent Ridge and Jurong campuses should be undertaken.
- 9 7. If this survey confirms that either site would be adequate for the student population in 1 above then Kent Ridge should be the one selected for development.
- 19 8. The arguments in favour of a single, strong university covering a wide range of academic disciplines are compelling.
- 12 9. It is highly desirable that the issue of one or two universities for Singapore should be settled promptly and any consequential decisions made as soon as possible thereafter so that a clear sense of purpose and commitment to whatever long-term policy is decided can develop in those who will be involved in university work in Singapore.