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BOOK REVIEWS

Ruth M. Beard (1972). *Teaching and Learning in Higher Education*, (2nd ed.) Harmondsworth, Middlesex: Penguin. 253 pp.

Donald A. Bligh (1972). What's the Use of Lectures? Harmondsworth, Middlesex: Penguin. 254 pp.

The book by Ruth Beard, *Teaching and Learning*, is intended as an aid for improving college teaching. It should be particularly useful for beginning college teachers, but I suspect it will also be of much interest to more experienced college teachers who have surmounted the anxieties and frustrations of planning and teaching one's first classes and are able to think a little more meditatively about what they are doing and why.

Perhaps the most significant theme of the book is the need to define one's objectives carefully and precisely and to relate one's teaching methods to these objectives. Chapters on course planning and setting objectives are followed by a chapter on the psychology of learning and by successive chapters on lecturing, teaching small groups, laboratory teaching, new techniques, independent study, and, finally, evaluation of learning and teaching.

Dr. Beard has done an admirable job of gathering relevant research from a variety of sources, and indicating the implications of the research for college teaching. Her judgements are wise and perceptive although she may on occasion be a mite too overconfident of the validity of some of the propositions drawn from research on learning or research on social psychology. She nicely notes the similarity of the problems in assessing teaching to the problems of assessing students, but seems to be much more willing to accept the inadequacies of assessment of student learning than she is to accept the inadequacies of assessment of faculty – a point of view which will be shared by most professors.

Bligh's book *What's the Use of Lectures*? is an expansion of the topic introduced by Beard in her Chapter 4, "Advantages and disadvantages of the lecturing method." Bligh not only reviews a good deal of evidence with respect to the use of lectures but gives step-by-step methods of organizing and executing effective lectures. After discussing the objectives that cannot be effectively achieved by lectures and research on factors affecting the acquisition of information, Bligh discusses lecture techniques in enough detail so that a beginning lecturer should have no doubt about how to proceed.

The book goes much beyond lectures. One chapter, "Alternatives when lecturing is inadequate" gives an excellent discussion of use of buzz groups, problemcentered groups, controlled-discussion, lecture-discussion, the case study method, short talks by students, and audio tapes and reading. In short this book is a very practical guide to classroom procedures, marred only by some slight errors in citations. No books can in themselves make a teacher effective, but these books provide both the perspective on teaching and the careful description of relevant skills that should be of great help to both the beginning and the experienced teacher.

> Wilbert J. McKeachie University of Michigan

Kenneth E. Eble (1972). Professors as Teachers. San Francisco: Jossey-Bass. xvi + 202 pp.

This book is a survey of practices and problems in college teaching. It is based on the author's experiences as director of the two-year (1969-1971) Project to Improve College Teaching, sponsored by the American Association of University Professors and the Association of American Colleges, and supported with funds from the Carnegie Corporation. A professor of English and department chairman at the University of Utah, Eble was given a special leave of absence to carry out his work. During his visits to 70 colleges and universities he not only discussed undergraduate teaching with many faculty members, students, and administrators, but also made direct observations of classroom behavior.

In the first chapter Eble presents a critical overview of the kinds of activities he encountered in various classrooms (lectures predominated); the physical facilities used for instruction (frequently inappropriate); and methods employed in assigning grades (under revision in many places). In the remaining nine chapters Eble analyzes these matters in more detail, and also deals with additional problems and issues in undergraduate teaching.

Chapters 2-5 are concerned with Eble's conclusions about professors' attitudes toward teaching (respect prevails, but not enthusiasm); characteristics of effective teaching (e.g. generosity of outlook, high energy level, and a mood of earnest effort); methods of evaluating teaching (student ratings, classroom visits, and student achievement are emphasized); and the demands student make: they want "relevance," and Eble agrees they should have it, while at the same time he rescues the term from its unfortunate cliché status.

In Chapters 6-10 Eble discusses various characteristics of college teachers and methods used to train them; in-service development of teachers; rewards of teaching versus rewards of research; conditions under which college teachers must work; and problems of demonstrating clear-cut relationships between what teachers do and what their students learn. And finally, a brief "Epilogue" contains some general recommendations for enhancing the economic and professional status of faculty members who wish to concentrate on becoming and remaining excellent teachers.

Eble does all that in an interesting and lively fashion, but since his approach is largely anecdotal, those who prefer that conclusions about the practice of teaching be buttressed with precise data will probably be disappointed. Eble does refer occasionally to quantitative studies that support his own findings, but his conclusions rest mainly upon those particular observations of his that he chose to stress, and thus are bound to be biased in ways the reader can only conjecture. But at the very outset Eble evidently anticipates such criticism, for he says: "I describe here teaching in undergraduate classes as I have observed it. I do not purport to have sampled college teaching adequately, either in number of observations or in careful selection of a representative sample. But I do promise to be honest in reporting what I saw and to be temperate in drawing conclusions." (p. 1)

Although there is no reason to doubt that Eble kept his promise, one must recognize the limitations of its fulfillment. The book does not contain many specific solutions to problems of college teaching, or many examples of effective teaching methods that one can readily put into practice. It does, however, provide an excellent point of departure for developing new ways of approaching some perennial problems of undergraduate instruction, and for developing and testing innovative techniques. The book's chief value, then, is in the positive stimulus it can furnish for further inquiry and application.

> Frank Costin University of Illinois at Urbana – Champaign

Louis-Philippe Bonneau and J. A. Corry (1972). Quest for the Optimum: Research Policy in the Universities of Canada (The Report of a Commission to Study the Rationalisation of University Research), vol. I. Association of Universities and Colleges of Canada, 151 Slater Street, Ottawa, Canada, KIP 5N1. viii + 207 pp. \$3.00 (paper).

Even before the current era of austerity in university financing, the Association of Universities and Colleges of Canada was concerned about the need for coordination of the programmes of graduate studies and research of the universities of Canada's ten provinces. As the chief source of university research funds, the federal government too has been concerned, and in recent years has sponsored several studies intended to help in the formulation of a national science policy. There was general recognition of the problem, therefore, when Bonneau (engineer; former vice-rector of l'Université Laval) and Corry (political scientist; former principal and vice-chancellor of Queen's University, Kingston) were invited to study it and propose ways in which university research might be rationalised.

The Commissioners adopted a broad and unthreatening definition of rationalisation. "Rationalising," they say, "means thinking rationally about how to use the available means, whether large or small, to come as close as possible to one's objectives." Inevitably, they were forced first to consider the question of objectives: the missions of the university and priorities among these. They come out strongly in support of teaching as having priority over research in the university, and with respect to the latter they argue that the university's emphasis should be on basic rather than applied research.

They suggest that research which serves teaching in a direct way should have first claim on available funds. "But insofar as particular kinds of research cannot be shown

to serve teaching in a direct way, they should stand in the second line at the trough."

One of the distinctions made by the Commissioners in their discussion of the nature of research is between what they call "frontier research" – exploration on the frontier of knowledge – and "reflective inquiry" – thinking, synthesising, evaluating, hypothesising. Indeed, this terminology has already become part of the vocabulary of Canadian academics. Bonneau and Corry believe that because universities fail to make this distinction, they tend to press in the direction of frontier research many faculty members who would be more suitable and more usefully engaged in reflective inquiry.

When the Commissioners turn from consideration of principles to proposals for implementation, they make suggestions at three levels — institutional, provincial and national: (1) particular universities should articulate policies and objectives for themselves which keep in mind local, provincial and national problems that research can help solve, (2) provincial governments should identify areas of research of special interest to them, offering inducements to university research workers to take them up, and (3) federal government funding agencies, and associations in the several disciplines, should identify areas needing research, define and list projects, and stimulate competent persons to undertake them on terms that favour development of centres of excellence and centres of specialisation.

Examples of how the necessary studies, discussions and decisions could be effected are given in three models – one for rationalisation within one university, one for rationalisation between several universities, and one for rationalisation at the national level. Each is spelled out in detail and illustrated by a flow chart.

In my view, the strength of the report lies in its discussion of principles and priorities rather than in its proposed models for rationalisation. Without straining too obviously, one might say that its chief fruits are those of reflective inquiry rather than of frontier research.

Vol. I of the report is supplemented by Vol. II, published in 1973 (67 pp., \$1.00 paper), which consists of three parts: (1) Library Coordination in Canada: A Report by the AUCC Task Force on Library Rationalisation, (2) The Work of the Commission: Report of the Secretary, and (3) Selected Bibliography. Both volumes have been published also in French, with the title *Poursuivre l'Optimum: Politique de la recherche dans les universités au Canada.*

Edward F. Sheffield University of Toronto

Lindsey R. Harmon (1971). Mobility of Ph.D.'s before and after the Doctorate. (Career Patterns Report Number 3) Washington, D.C.: National Academy of Sciences. xv + 200 pp.

The movement of labour from one place to another is a healthy economic process. The idea is that migration allocates labour where it yields the highest marginal product and therefore national income is maximised. The degree of mobility varies directly with the educational level of the migrant. Persons with lower skills do not

have as many uses elsewhere as persons with higher skills. Therefore, one would expect to observe the highest migration rates among the more educated.

This book is devoted to the study of migration patterns of what may be today's most mobile group: Ph.D.'s in the United States. Although there already exists some information on the mobility of Ph.D.'s, this volume contains the most documented and detailed evidence produced thus far. The reader is helped through the data labyrinth by computer produced "pseudo-maps."

The book's six chapters could be divided into three parts. Firstly, mobility before the doctorate, secondly, mobility after the Ph.D., and thirdly, a statistical analysis of factors associated with mobility. Regarding the origins of Ph.D.'s, one of the book's major findings is that about 20% of the U.S. Ph.D. stock is foreign born. In the late sixties, over 40% of foreign students planned to remain in the United States after graduation. The doctorate production has shifted from the northeastern states to the West coast and the Great Lakes. The statistical analysis section considers 155 variables that may correlate with migration. These variables range from the State's per capita expenditure on education to the North–South grid location of the centre of the State's population. A rather surprising finding regarding the mobility after the doctorate is that Ph.D.'s move from the more affluent states to the poorer ones.

The book's comparative advantage lies in the data presented rather than the statistical analysis, but it will certainly be a corner-stone of any further analysis of the mobility of educated labour.

George Psacharopoulos London School of Economics

George Psacharopoulos, assisted by Keith Hinchcliffe. (1972). Returns to Education – An International Comparison. Amsterdam: Elsevier. 216 pp. \$8.50.

In the wake of a number of national studies, Psacharopoulos and Hinchcliffe present, for the first time, a compendium of evidence drawn from over fifty countries on the rate of return to investment in education. The data are used to analyse a number of questions which are of interest to economists and educationalists. Among the most important are (i) the relative profitability of education as compared to other forms of investment activity and (ii) the relationship between investment in education and economic growth and development.

A number of their results confirm what, on a priori grounds, one might expect; for example, declining social rates of return by level of education and higher rates of return to human (relative to physical) capital in underdeveloped compared to developed nations. Other conclusions are somewhat puzzling; in particular, the relationship between private and social rates of return. A large difference suggests a high degree of state subsidy for education, yet these data reveal that the difference between private and social rates is greater, the less developed the nation concerned. This implies that less developed nations subsidise education to a greater extent than more developed countries. Unfortunately, disaggregative evidence as to rates of return for secondary technical, postgraduate education, and by subject area are inconclusive. This is due to a restricted number of case studies.

Throughout the study, the distinction between developed and less developed countries is crucial. The overall social rate of return to education for countries with per capita incomes of less than \$1000 p.a. (excluding two extreme observations) is estimated to be 15.2%. In the case of countries with per capita incomes above \$1000 p.a. the corresponding rate is 9.6%. Similarly, the contribution of education to economic growth would appear to be inversely related to the level of per capita income. A striking difference between developed and less developed countries lies in their costs of higher education relative to other levels of education. Total costs per student year for higher education in high income countries are around eighteen times as great as those per student year in primary education. A similar ratio for low income countries is in the order of 88, suggesting that low income nations should look very closely at the benefits associated with higher education before investing.

There is, of course, the perennial problem of data comparability in attempting to relate such diverse studies. The dangers and limitations are carefully explained, as in the technique of rate of return calculation. Details of the studies reviewed and subsidiary information are included in a number of appendices.

Objections can easily be raised regarding the use of a Cobb-Douglas production function for growth accounting. Nevertheless, the authors correctly point out that most economists are familiar with the problems of aggregate production functions and that more sophisticated forms may yield no better results. One wonders also, in the estimation of aggregate production functions, what effect the inclusion of on-the-job training expenditures would have on the already high explanatory power of their cost-based estimate of human capital stock. General training expenditure would, of course, involve the use of earnings data and result in a less strict cost of capital-based estimate.

Psacharopoulos and Hinchcliffe have not produced a semi-religious tract justifying the rate of return approach but a cautious examination of a vast quantity of evidence. Their results concerning the ease with which one type of educated labour may be substituted for another suggest that fixed coefficient manpower requirement models may be appropriate under certain conditions in less developed nations. Sadly, one is still forced to conclude that we know too little about investment in education. Despite this conclusion, *Returns to Education* is an important study and contains, in addition, a very good bibliography.

> Philip Regan University of Lancaster

D. Birley. (1972). Planning and Education. London: Routledge and Kegan Paul. 152 pp.

This short book, by an experienced administrator who is now Director of Ulster College, Northern Ireland's Polytechnic, is written "for educationists interested in planning and planners interested in education." The heart of the book is a description of the Planning-Programming-Budgeting System (PPBS) which is familiar to readers of this journal. Reference is made to other countries but in the main the book is a drawing out of the ideas contained in the British official publication *Output Budgeting* for the Department of Education and Science (Education Planning Paper No. 1) HMSO, London 1970. The numerous examples refer to the planning of a whole educational system though the author recognises that PPBS can be applied to single institutions such as colleges and universities. The author is careful not to overstate the power of PPBS. Nevertheless he sees it as something with great potential which even if used in the limited form of merely helping administrators to analyse alternatives will transform educational planning.

A. G. Watts. (1972). Diversity and Choice in Higher Education. London: Routledge and Kegan Paul. £4.

The author of this book has a long-standing professional interest in his subject matter, being a co-founder of the Careers Research and Advisory Centre (CRAC), Cambridge, England. CRAC was established in order to help the more able secondary school pupils in their choice of university study, through the publication of guides to the available courses and their various entry requirements. Choice of university becomes an issue only when the opportunity exists for the individual to exercise some freedom of choice among alternatives. England and Wales differ from most European countries, apart from West Germany and, to some extent, Sweden, in respect of the encouragement accorded this freedom of choice. Since the publication of this work, there would seem to be a move on the part of universities in England and Wales towards the admission of an increased proportion of home-based students, with the corresponding reduction in costs to the institution of providing accommodation for increasing numbers of students. Other factors, however, such as the student grant system, and the number and diversity of universities from which to choose, should ensure the continuation of considerable student mobility and choice.

The greater part of the book is devoted to extremely competent reviews of the literature concerning differences between institutions, distribution of students, and the process of choice, and constitutes an excellent summary of British findings in these fields which has not hitherto been available. American research on the differential effects of varying types of institution is also covered but, both because of the dubious applicability of these somewhat equivocal findings to England and Wales and the fact that this has been exhaustively reviewed by a number of American workers, this section is to some extent redundant. One chapter is devoted to a small piece of empirical research carried out by the author into the process of university choice among three hundred and eleven sixth-formers attending nine schools in one English city. The theoretical framework of this investigation utilises only sociological concepts, no attempt being made to control for individual differences on psychological variables. The inconclusive findings which emerge emphasise yet again the complexities of the real life decision-making process.

Two main conclusions emerge from Watts' wide-ranging examination. Firstly, pupils make their university choices on the basis of less than adequate information.

Secondly, the vast expenditure required by the system of choice as it operates at present in England and Wales is at least open to question. After reviewing the different methods by which students might be distributed among institutions the author suggests professional counselling in schools as one means of making this choice more meaningful. Acceptance of this course of action would necessitate both the training of appropriately qualified counsellors for this task together with a corresponding increase in acceptance of the concept of professional counselling in schools.

Those who look to this book to provide insights into how the system of selection of students for their own departments or universities might be improved to the benefit of applicants and selectors alike will be somewhat disappointed. The emphasis is principally upon pupil preferences. The other side of the coin, institutional selection procedures, is largely ignored. Although this book often reads like the postgraduate thesis from which it is derived, its excellent summaries of British research in particular, and its well annotated bibliography, make it a worthwhile addition to both personal and institutional libraries.

David H. Thompson University of Lancaster

G. S. Harman and C. Selby Smith (eds.) (1972). Australian Higher Education: Problems of a Developing System. Sydney: Angus & Robertson.

This book is a collection of papers by some of Australia's most highly respected and best informed academics and deals with problems in Australian tertiary education associated with the trebling of student enrolments in fifteen years and a high future growth rate.

The goals and purposes of different forms of tertiary education are treated since Australia has, besides its university sector, a public sector of Colleges of Advanced Education, roughly corresponding to the British Polytechnics, designated with similar purposes in mind and arising out of the initiative of the Commonwealth Federal Government.

Problems dealt with besides the role and purpose of universities and colleges of advanced education, are teacher education and relations between the States and the Federal Government with respect to education. Demographic and financial aspects are also dealt with and other chapters refer to the special problems of older universities, access to higher education, research, professional education and the future of Australian higher education.

The contributors raise many important questions. How far should the colleges of advanced education differ from universities? And how should they differ from each other? For example, is it reasonable to expect that small rural institutions should be the same as larger urban ones? Then, is diversity being encouraged? How closely should they respond to local needs? Can course structures be more flexible to enable greater mobility of students? The fear of loss of autonomy and strengthening of government control as public financial investment in higher education increases also arises in the papers. Unanimous agreement does not exist on the need for co-ordination of higher education at State and Federal levels to ensure that scarce resources will be well distributed. This is where the respective roles of the universities, colleges of advanced education and teachers' colleges require clarification.

The arguments go to and fro as to whether the colleges will or will not become second-class universities, yet when money and facilities are provided on a somewhat lavish scale in the colleges it is questioned whether it is correct for them to have such facilities sometimes surpassing those in universities when their role is not yet clearly defined and research is not such a heavy commitment. The notion that students with practical minds would opt for colleges while those with analytical minds would go to universities is questioned, yet there is serious questioning also of what the roles of each kind of institution should be. One thing that appears to stand out is that the Colleges of Advanced Education should not neglect their vocational and technical commitment. Another is that they must establish academic standards acceptable to employers as certificates of competence and acceptable to universities as evidence of capacity for advanced studies. Perhaps the main role to emerge will be to ensure that no gaps exist in tertiary education to inhibit the development of a balanced professional work force. This will give the colleges great scope for innovation.

It might be hoped that they and the universities will be able to respond appropriately to the "needs of society." The needs of society rapidly change. We used to want more scientists and technologists. A few years ago, for a while, the wellrounded scholar appeared to be an old-fashioned fancy. Now it seems that to be relevant to the needs of society we really need to look at the needs of the individual. These are education in how "to be," as well as how "to do." The rejection by so many young people of science and technology in favour of arts and social sciences and the "surplus" of graduates in some scientific and technological disciplines suggest that old notions expressed under the rubric of the idea of a university are once more in fashion and expressive of the needs of society. The traditional roles of the university are valid and not to be scorned as belonging to the museum, as one provocative critic of universities stated.

Teachers' colleges in Australia face a difficult future and may have to redefine their role as the British ones are having to do. Teacher education is a large sector of higher education and much attention is always devoted to it by governments and the public. Recognising the need for new programmes. Phillip Hughes states as a fact of life that research into teacher education is too rare to provide a basis for anything more than a pragmatic approach to the development of curricula for the training of teachers. Research into teacher education has always been very poorly funded and so has yielded no more than "a few glimmers of enlightenment," yet we cannot wait until all the answers are found. He rightly asserts, "Merely institutional and organisational solutions will not suffice. It is necessary to look more deeply at the nature and purpose of schools, at their social setting and the effects of these factors upon students." It is deplorable that teacher education suffers from such poor research funding when the formative years of each successive generation are spent in school and there is so much research to be done.

Demographic factors indicate that the booming demand for higher education will

continue. Although in percentage terms future growth looks less, in numerical terms the increase will make a continuing demand for staff, especially in the Colleges of Advanced Education.

There is some parallel between Britain and Australia on the question of comprehending the higher education system as a whole. Although specific action was needed to launch the Colleges of Advanced Education, the view is sometimes held in Australia as in England, that if the resources of higher education are to be efficiently allocated and used there will need to be increasing co-ordination. Perhaps a commission for higher education is needed for this purpose. Contributors to this volume do not all agree about this, however.

There is no question, as the originators of Advanced Colleges hoped, and as did the originators of Polytechnics in Britain, that costs per student place would be less for colleges than for universities. Data show that in Australia, costs per place in the colleges are if anything a little higher than in the universities. It will be intriguing to see if the same will apply in Britain in the fullness of time despite the lesser research commitment in polytechnics. On the question of abolishing fees (the new Australian government's policy), it is suggested that an extension of such a policy be made to accommodate more candidates from economically poorer homes, namely a form of grants system since for the student, it is loss of earnings foregone that is the strongest factor hindering entry from the lower paid groups in society.

Looking to the future, Partridge considers that country colleges should see themselves less as part of a national system and more as fulfilling regional requirements seeking to attract local financial support with some characteristics similar to those of American Community Colleges. Australia is a highly urbanised society and regional colleges could play as effective role in decentralisation of cultural and economic activity in a way that universities have never done and the advanced colleges in urban areas cannot be expected to do.

The book is a useful source for policy makers who wish to make their own decisions in the light of others' experience and is a valuable contribution to the comparative education literature.

Gordon W. Miller University of London Institute of Education

Arthur M. Cohen, Florence B. Brawer and John Lombardi. (1971). A Constant Variable. San Francisco: Jossey-Bass. 238 pp. \$7.75.

The community college, seen by some educators as the panacea of higher education for the masses, is a twentieth century phenomenon developed to provide post-secondary education within commuting distance of every American. Providing comprehensive education, the college, in its modern form, has merged the traditional arts and sciences found in the university with trade and technical training very similar to that offered by technical institutes in Europe and other parts of the world.

While professional educators in colleges and universities throughout America provide a glut of texts, reports, position papers, and scholarly articles dissecting the

raison d'être of this relatively new educational institution, Arthur M. Cohen and his collaborators have assembled a concise, intelligent compendium of thought and analysis on the development and potential of the community college.

Referred to by Cohen as an "analytical review," *A Constant Variable* provides a critical analysis of the community college through a review of the literature which has chronicled its evolution. Cohen and his colleagues, members of the Educational Resources Information Center "think-tank" at UCLA, have edited the thoughts and writings of more than 300 individuals, groups, and associations into a thoroughly readable and understandable document.

Unlike much of the esoteric literature which is produced within the field, *A* Constant Variable will serve well as an introduction for those readers new to the community college, as well as a capsule analysis and an invaluable review of the literature for the accomplished community college professional.

Discussing the character and personality of the institution, the faculty and students, and the processes by which the colleges operate, the authors question the accepted and play devil's advocate to varying opinions. "By offering divergent perspectives," says Cohen in the Preface to the text, "we hope to show the reader that it is possible to examine the community college as though it were something other than the social panacea the prevailing view holds it to be." The book is a refreshing, if sometimes acid, commentary upon a developing institutional form.

What are the special characteristics of community college instructors? What has the advent of a black studies curriculum taught us? What is good teaching? Who are the students who attend the community college and what are their needs? Some answers and some further questions develop within this work.

The authors see as the community college's greatest strength its ability to become what its students and faculty make it, rather than to form these individuals into the mould of a typical higher educational institution. A typical community college, says Cohen, does not exist. "Always the same, always different ... Never changing, always in motion. A constancy of action. A constant variable." This text is far and away the most comprehensive and valuable introduction to the American community college in existence today.

Clyde E. Blocker Harrisburg Area Community College

Udo Kollatz. (1973). Qualität trotz Gleichheit. Aktuelle Probleme der deutschen Hochschulreform im Lichte amerikanischer Erfahrungen. Frankfurt-am-Main: Diesterweg.

Higher education in the Federal Republic of Germany has yet to come to terms with a host of problems engendered by the fast growth of the last decade. Indeed, the very nature of the university system has inhibited this process, and German eyes are now turned outwards, intently seeking in other countries models for the inevitable reforms at home. This comparative perspective has been principally focussed on higher education in the USA, which is confronted with similar problems but whose totally different structure makes useful comparisons and inferences difficult. The rapid expansion of student numbers in Germany has led the author of this book to question how far quality and equality of opportunity can be reconciled in the future. Kollatz sees two decisive criteria for the quality and openness of a democratic system: on the one hand, whether the educational system can offer a university education to all who are willing and capable of benefitting from study, and on the other hand whether it can — it it is to thrive — keep clear of the university those students who are neither able nor motivated.

To satisfy these two criteria, the author considers it necessary to regulate and advise the torrent of students and to exercise continuous control over the quality of university teaching. It is here that Kollatz sees the greatest weakness of the German universities, in that they only apply qualitative comparisons in the domain of research and in making additions to the teaching staff. He points to the quite different situation in the USA, where the credit system enforces, and the existence of good private universities encourages, quality comparisons.

The largest part of the book is therefore taken up with a description of American efforts to use objective yardsticks to throw light upon changes in quality. Kollatz gives an account of the big testing organisations, the investigations of the American Council on Education, the standards of selection and admission in US universities, the counselling and vocational guidance given to students, the public relations work, the problem of freedom to study where one likes, and he explores the influence of private and public interest on the control of the student avalanche. In a supplement, example of the techniques and weight of evidence of external ratings of quality are given, and a list of works consulted is arranged under subject headings.

What makes the book superior to others on similar themes is the author's attempt to consider whether certain characteristics of the American higher education system could be introduced in German universities, and the ways in which assistance and control of curricular innovations can be exploited without falling prey to the recognisable disadvantages of the US system. If Kollatz puts forward no blueprints of his own, at least he indicates the guidelines which might be followed.

Erich Leitner Hochschule für Bildungswissenschaften Klagenfurt

John Lawlon (ed.) (1972). Higher Education: Patterns of Change in the 1970s London: Routledge. 155pp. £2.25.

This book is a sequel to the author's *The New University* (1968); the contrast of titles of the two books is significant, reflecting the growing acceptance of the view that, for the purposes of planning, higher education must be regarded as a single system of which the universities are only a part. Lawlor has chosen authors able to write with first-hand knowledge of different parts of the British educational system: colleges of education, polytechnics, universities and adult education centres.

The organisational structure of a system, whether it be at departmental or national level, predicates the education it can provide. This complex and delicate relationship between form and content is familiar to the authors who move discussion easily between lofty educational purpose and administrative detail. Campbell Stewart gives an overview of the higher education system, making distinctions of purpose between its parts and examining the administrative superstructure which supports and contains them. The essay, impressive and informative, is bettered only by Brian Pippard's well-argued plea for commonsense and moral commitment from the universities. As befits a professor of physics he gives us a physical analogy: university development does not follow an unerring path based on a single resolve, rather it swings like a pendulum. If we try to stabilise a pendulum by giving it a corrective tap each time it passes beyond its central point we are likely to increase rather than decrease the oscillations and make them more erratic. Public opinion is too powerful and too capricious an instrument; its use to correct oscillations of university policy leads only to catastrophe.

At first that may seem to be an argument for protecting the cosy conservatism of the universities. Clearly not so, for Pippard demands that intellectual leaders should ruthlessly reappraise the function of the universities. "The concept of academic freedom has too often been taken as the right to think thoughts without worrying about putting them into action, or possibly preventing them being put into action... It is not enough to recognise that there are two sides to every question, when experience and the general good demand that one shall be chosen and the other rejected... in subjecting students to the atmosphere of a university we are unconsciously instilling in them those academic ideals of detached enquiry which are admirable in the few, but in the many amount to collective irresponsibility."

There follow proposals for major structural changes in the nature of university courses, including the introduction of a two-year course of general education. Arnold Kettle takes up the theme, arguing against a departmental structure in higher education: "The most fundamental and convincing case for a different sort of structure is not that the present departments give the students too much of a good thing but too much of a bad one. In other words it is the disciplines themselves that are misconceived, that the present tendency to abstract say, economics or philosophy or English as though it could ever be an autonomous 'discipline' is bad above all, for economics, philosophy and English."

It is also bad for most students whose education, William Walsh argues, should be a practical apprenticeship to the life of reason. He agrees with Keats that "every mental pursuit takes its reality and worth from the ardour of the pursuer." Noble sentiments, but are universities to confine themselves only to the "noble" form of education? Stanley Hewett and H. A. Jones point to the need for universities to become more deeply involved in (respectively) teacher education and adult education. Patrick Nuttgens denies that liberal education is the only peak and claims that the polytechnics offer an equally noble alternative with an equally long pedigree. One suspects, despite the distinctions he makes, that when it comes down to analysing just what students need (or would like) to learn, the difference between the "applied" courses of the polytechnics and the academic courses of the universities is more apparent than real.

David Warren Piper University of London Institute of Education Wolfgang Nitsch and Walter Weller, under the direction of Dietrich Goldschmidt. (1970). Social Science Research on Higher Education and Universities. Part II: Annotated Bibliography. (Confluence, vol. X.) The Hague: Mouton. XXX + 802 pp. Dfl. 80.

An annotated bibliography of over 8,000 entries, this monumental work took over four years to compile and includes nearly all the material published from the early 1950s up to Spring 1968. The bibliography is the first volume to be published in a three-part series investigating the relationship between social structures and their systems of higher education through research findings. (Part I, a Trend Report, will develop a theory on the interdependence of university and society as this varies according to given social conditions, and point out trends in the development of various branches of research and their respective methods; Part III, a Supplement to the present work, will contain an additional 4,000 titles published between Spring 1968 and the end of 1969.)

The main sections of the bibliography are: reference works and literature on research; historical and interpretative studies, sociological and interdisciplinary empirical research; economics; law and government; sociographic survey research and statistics; social psychiatry. Entries in each section are arranged under broad national or multi-national headings, but there is no index of either authors or subject-matter, and the comprehensive coverage which has been attempted proves an impediment to rapid location of information.

Given its unwieldy size, there is cause to wonder why the compilers of this bibliography included so much material which is peripheral or unpublished, particularly when references to the latter appear side by side with published material by the same author. Nevertheless, as a record of research in, for example, China, Africa and South-East Asia, which receive poor coverage in English-language abstracting and indexing journals, it should serve to stimulate discussion and perhaps open up new avenues for investigation.

Brigitte Eckstein and Peter Hrabowski. (1973) Gruppendynamische Arbeit an der Hochschule. Ein Report. (Schriftenreihe der International Society for Group Activity in Education) Heidelberg: Quelle & Meyer. 146pp.

A report on group activity with six groups composed primarily of students during the winter term 1971-2 at a university in northwestern Germany. The authors' intentions are to warn untrained people against taking charge of group activities without careful thought, and to demolish expectations of catharsis in group activity. Protocols report in detail the anxieties and temptations to which intending trainers may be exposed in group work. One important conclusion can be drawn from the main part of the report and the protocols: unstructured group activity must be supplemented with structured activity. Only then can necessary social innovations at the adult level be resolved. OECD. (1972). Classification of Educational Systems in OECD Member Countries: Finland, Germany, Japan. Paris. 78 pp. France, Norway, Spain, Paris. 136pp.

These two volumes are in a series intended to provide a comparative view of the educational systems of all OECD member countries. The series follows up a suggestion made in *Methods and Statistical Needs for Educational Planning* (Paris, 1967) which called for data to be published in a standard form. A classification has been prepared and the data in the present and subsequent volumes is intended to allow for direct comparisons between countries. That part of the classification dealing with the areas of interest to readers of this journal has three headings which read as follows:

Teacher Training: Preparatory training for the teaching profession.

Non-university type higher education: Higher education leading to a specific qualification, often occupational and, unlike the first university degree, generally not offering the possibility of pursuing doctorate or other post-graduate studies.

University type higher education: The length of the different types of education varies from country to country. It was therefore considered advisable to specify the corresponding years of study in the educational scale so as to permit any regrouping necessary for inter-country comparisons.

Yip Yat Hoong (ed.) (1972). Role of Universities in Management Education for National Development in Southeast Asia. Singapore: Regional Institute of Higher Education and Development. 346pp.

RIHED is a regional and autonomous institution established for the purposes of stimulating and facilitating co-operation among the universities and the governments of the countries in Southeast Asia, and to enhance the contributions of higher education to the social and economic development of the countries of the region and of the region as a whole. It is supported and financed jointly by the Governments of Indonesia, the Khmer Republic, Laos, Malaysia, Singapore, Thailand and the Republic of Vietnam and by the Ford Foundation. This report is of the proceedings of a workshop held in Singapore in August 1972. The papers deal with the application of business management skills and techniques to government particularly in relation to economic development and social responsibility. The papers emphasise that this approach has implications for management education. It is clear that the development of such programmes requires closer co-operation between the traditionally separated public and private sectors. Government officials and private enterprise managers in Southeast Asia as in many other areas have not hitherto co-operated; management education clearly has a part to play in bringing the two sides together. Co-operation of this kind will be to the good of both management and national development.

Tony Birks and Michael Holford. (1972). Building the New Universities. Newton Abbot: David & Charles. 128pp. £3.50.

Since 1959, seven new English universities have been founded under the auspices

of the University Grants Committee: East Anglia, Essex, Kent, Lancaster, Sussex, Warwick and York. In this book, sumptuously illustrated with photographs by Michael Holford, Tony Birks makes a careful and penetrating analysis of the architecture of the new universities and the environments which have been created.

PUBLICATIONS ALSO RECEIVED

- N. J. Entwistle and J. D. Nisbet (1972). *Educational Research in Action*. London: University of London Press. x + 342pp. £3.60 (cloth). £1.95 (paper).
- Nigel Grant (1972). Soviet Education. 3rd edn. Harmondsworth: Penguin. 190pp. £0.40 (paper).
- Thomas Green (ed.) (1971). Educational Planning in Perspective. Guildford: FU-TURES/IPC Science and Technology Press. 132pp. £ 2.25 (\$5.00).
- John Hajnal (1972). The Student Trap: A Critique of University and Sixth-Form Curricula. Harmondsworth: Penguin. 288p. £0.45 (paper).
- Tor Kobberstad (1972). Studenter, kandidater og ressursforbruk ved universiteter og hogskoler fram til 1990. (Enrolment, graduates and resource requirements in university-type higher education up to 1990) Institute for Studies in Research and Higher Education, The Norwegian Research Council for Science and the Humanities, Akersgaten 49, Oslo 1, Norway. 92pp.
- Janko Lavrin (1973). A Panorama of Russian Literature. London: University of London Press. 325pp. £5.00.
- OECD (1973). Reviews of National Policies for Education: Germany. Paris: OECD 151pp. £1.48 (\$4.25).
- W. Kenneth Richmond (1972). The Literature of Education: A Critical Bibliography 1945–1970. London: Methuen; New York: Barnes & Noble. x + 206pp. £1.30.
- Kenneth W. Thompson (1972). Higher Education for National Development: One Model for Technical Assistance. (Occasional Paper No. 5) New York: International Council for Educational Development. 24pp.
- Mohsen M. Zahran (1972). College Housing: An Arena of Involvement and Conflict. Beirut: Beirut Arab University. 130pp.