"ADVANTAGE TO UNDER-GRADUATES OF PROFESSORIAL TEACHING.

"Teaching will, of course, predominate in the earlier work, and research will predominate in the advanced work; but it is in the best interests of the University that the most distinguished of its professors should take part in the teaching of the undergraduates from the beginning of their university career. It is only by coming into contact with the junior students that a teacher can direct their minds to his own conception of his subject, and train them in his own methods, and hence obtain the double advantage of selecting the best men for research, and getting the best work out of them. Again, it is the personal influence of the man doing original work in his subject which inspires belief in it, awakens enthusiasm, gains disciples. His personality is the selective power by which those who are fittest for his special work are voluntarily enlisted in its service, and his individual influence is reproduced and extended by the spirit which actuates his staff. Neither is it the few alone who gain; all honest students gain inestimably from association with teachers who show them something of the working of the thought of independent and original minds. 'Any one,' says Helmholtz, 'who has once come in contact with one or more men of the first rank must have had his whole mental standard altered for the rest of his life.' Lectures have not lost their use, and books can never fully take the place of the living spoken word. Still less can they take the place of the more intimate teaching in laboratory and seminar, which ought to be beyond the range of the ordinary course of a university education, and in which the student learns not only conclusions and the reasons supporting them, all of which he might get from books, but the actual process of developing thought, the working of a highly trained and original mind."*

The conditions under which New Zealand was colonized and developed ensured the selection of a population animated by a love of adventure and of investigation. Throughout its history its people have been constantly face to face with new situations requiring original thought and initiative for their solution. New Zealand has established a reputation throughout the world for experimental legislation. One would, therefore, expect that the spirit of inquiry and research would flourish in

and be encouraged among such a community.

We venture to suggest, however, that, largely owing to the causes we have mentioned, university-trained men in New Zealand are not contributing sufficiently towards the solution of the many local problems which are demanding attention in every branch of knowledge. Teacher and student in a university should be engaged jointly in a voyage of discovery in search of truth, and so long as their actions are controlled by an external authority this is impossible. The teacher should have ample leisure for his own researches, both because it is the duty of every University to take its share in the work of extending the boundaries of human knowledge, and because only thus will his teaching be informed with vitality, inspiration, and the spirit of inquiry. We agree with the evidence of Professor H. G. Denham where he states: "In my opinion, there is no more vitalizing force in the hands of the teacher than research. A teacher of science who is himself untouched by the research spirit is, in my opinion, incapable of fulfilling the higher ideals of his position; the advanced and honours men pass through his hands comparatively uninfluenced—unstimulated."

It must be borne in mind, however, that research cannot be gauged by volume of output in printed pages: it is the quality and spirit of the work that counts, and the researcher's success in breathing the same spirit into students. We are not in favour of the provision of special research staffs apart altogether from the teaching staffs. Much research of high quality cannot, however, be expected from university teachers if an exacting round of lectures, examinations, and correction of essays leaves them no reasonable amount of leisure in which to prosecute their investigations.

While we believe that the work of the professorial staff under present conditions is unduly heavy, owing to large classes and an inadequate staff of assistants, we are of opinion that, except in the natural sciences, too little research is attempted even in the long vacations. It appears that too much of the time of professors is occupied in marking examination-papers for the various University Entrance and other examinations, time which might conceivably be spent to greater advantage.

In one direction the Senate has realized the necessity for research in that it has provided post-graduate scholarships to enable selected students to travel to places abroad for study. This is an excellent provision, but it is still more important to create a spirit of inquiry and research in the Colleges themselves. We note that efforts have been made in this direction also; the National Research Scholarships, the recently inaugurated Research Scholarships in Otago, the thesis require-

Effect of research on nature of teaching.

encouragement of research.