Teaching and learning have a certain relation to each other which which it is highly important to ascertain. Sometimes the pupils ought to prepare their lessons for subsequent instruction on the same, and sometimes it is the duty of the teacher to prepare his pupils for the intelligent study of their lessons. As a general rule it may be laid down that a lesson mainly on facts should be privately got up by the pupils in preparation for an oral lesson from the teacher, whilst a lesson involving principles, rules, or definitions, should first be explained and illustrated at school, that is, the teacher should whenever necessary, help his pupils to understand before requiring them to commit to memory.

The ability to repeat formal rules and definitions is quite compatible with an utter ignorance of the subject to which they relate. The power of acquiring words, which is so remarkable in a child, may easily cast a veil over the ignorance which lies hidden behind them. The pupil may repeat by rote the answers to set questions, without attaching any ideas to the terms he so glibly employs. I am aware that teachers advisedly act on the principle of storing the memory of the young for future use; they think that the ultimate advantages more than counterbrlance the evils attending the blind exercise of the memory.

There is much that might be said in favour of this course if the chief end of education were the ability to translate a set words from one language into another; but if we are right in considering the cultivation of the whole mind a higher end of education than the attainment of knowledge, then we are probably right in thinking that the exercise of the verbal memory at the expense of the higher faculties of the mind is a grave mistake. Further, if we are right in regarding the love of learning and interest in gaining knowledge of more consequence than the actual stores of learning laid up in the memory, then also we are probably right in thinking that the drudgery attending the unintelligent exercise of the verbal memory too great a price to pay for the ultimate advantages expected therefrom.

In elementary schools there is also this further objection to this mode of proceeding, the pupils are sure to leave school before the expected harvest can be reaped; indeed, a few weeks of absence from school in the case of a pupil taught on the mechanical principle is generally attended with a considerable loss of his attainments; whereas, knowledge that had been really acquired, that is, understood and digested so as to enter into one's system of thinking, is seldom lost—the mind continues to be enriched with the ideas thus obtained, though the facts that contributed to form those ideas may have passed from the memory.

It is not always possible, we admit, to explain so as to give the young scholar a thorough understanding of what he is required to learn, or of the reasons which underlie the rule he has to apply; but whenever this is impracticable; it should be regarded is an unavoidable evil to be reluctantly tolerated for a time. Whilst thus admitting that children must acquire by an effort of the memory the knowledge of certain things they cannot rightly understand, it should be the teacher's endeavour to reduce that number to the smallest possible. This he may do partly by postponing the introduction of subjects which do not admit of intelligent study by young pupils, and partly by a lucid explanation of any subject involving difficulties previous to the pupil's attempt to make it a matter of memory. The right order in learning whenever possible, is this :—understand first and then remember; get knowledge (not verbal, but real), and then keep it.—*The Scholastic World.*

## Man and the different transformations he undergoes, according to the zone he inhabits and his mo .e of living.

(Read before the French Teachers' Association of Montreal, by THOMAS WHITTY.)

MR. PRESIDENT AND GENTLEMEN,

Man, in whatever stage of civilisation he may appear, is always more or less influenced by the geographical conditions of the region he occupies. He may struggle against and so far modifiy them, but still, to a great extent, his thoughts and actions. his industrial pursuits, his social probity, his religious beliefs, are all affected by the physical circumstances of his position.

To argue otherwise is to ignore theprinciples of science and lose sight of those zoological relations that subsist not only between man and the other animals, but between him and his physical surroundings upon which the continuation of his existence is so absolutely dependent.

In savage life this influence is direct and perceptible; hence the difference between the Semi-Aquatic Esquimaux and the hunting Red Indian, though inhabiting the same continent; between the stationary vegetable-feeding islanders of the Sunny Pacific; and the wandering omnivorous tribes of the scrubby plains of Australia; between the lithe and nervous red man of the New World, and the robust and vigorous negro of the Old. And this influence is still more direct and perceptible where populations have been long established and civilisation has assumed its most advanced aspects:—and climate, scenery, natural products, facilities for intercommunication and exchange are ever exercising their influence, rendering one nation wealthy and independent, another bold and interprising, and, a third, it may be, isolated and stationary.

His mere material condition is not only affected; his religious sentiments, his poetic feelings, his love of liberty, and his social government, are all more or less tinctured by the nature of the physical characteristics of the country he inhabits. The different nationalities of the world prove this.

Now, though the inherent qualities of Race, for many reasons, may greatly differ, still external conditions exert a direct, perceptible and modifying influence over and above these qualities.

The white men differ physically and intellectually from the black tribes of Africa and the red races of North America in every respect; the former owe their present activity and progress to their greater application to the study of the creation and thereby leading them to use everything in its proper place and season.

Spring, Summer, Autumn, and Winter are all equal to them. Their habits tend to continuous exertion and industry, not attended to by the other races. Nevertheless, the character of a people depends upon the physical or geographical conditions of the country they inhabit.

The different nations of the same great race, are similarly affected by external conditions: hence the obvious distinction between the livelier and more versatile people of the southern part of a country and the graver inhabitants of the northern part; between the bold and independent mountainers of Switzerland, Scotland and Scandinavia, and the tamer occupies of the central and eastern European plain.

Climate, food, landscape, all in fact that constitutes geographical diversity must exercise an influence on mental as well as on bodily character; and were it, not so, there is no reason why the inhabitants of one country should not be identical in all their aspects with