

teach a considerable number of practical lessons; must cover an extensive course in school management; must master the elements of pedagogy; must familiarize himself with the methods of teaching arithmetic, grammar, composition, spelling, literature, reading, geography, history and the other subjects of the public school curriculum; and is to cover suitable courses in hygiene, in music, in form study and drawing, in physical culture, and in school law. Who will contend that such a course—elementary, as it is—can be covered in a four months' term? The absurdity of the thing is beyond words.

Finally, notice the fact that although the mass of third class teachers find employment in ungraded schools, (where, in the writer's opinion, no certificate lower than second class should be valid, on account of the overwhelming difficulties), the Model Schools are not provided with any ungraded department. This topic would be an interesting one for a complete article.

The writer is conscious that he has but touched the borderland of his subject. He has felt compelled to leave each sub-topic long before his treatment of it was complete; and for each fault in our normal system which he has mentioned, there are many others which he has passed over in silence. Where is the Ryerson to lead the army of reform?

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Science in Education.

(Continued from last issue.)

Another disadvantage of science education as it is pursued at the present day, is the degeneration of literary style which it tends to bring about. Any system of education has, as its aim, the drawing out and developing of all the latent powers of the mind; but while this is so, no system has

yet been found capable of developing all these powers proportionately. *Our* system has done its best for us, and now wherein we are deficient we must make up by self-culture. By far the most deplorable deficiency in the education of the scientist of to-day is his poor command of ordinary English. Scientific articles are clumsy, and indeed often ambiguous as compared with articles of literary men: lectures on science, by scientific men, seldom possess the artistic finish of first-class literature. And in so far as any scientist has distinguished himself by the literary quality of his productions, so far has he supplemented his college education by careful post-graduate study of English.

On the other hand the older literary mediæval education was not without its defects, even for its own patrons. Perhaps in no other feature is the superiority of modern education more apparent than in the training it gives to the power of observation. Under the old regime abundant provision was made for the development of the other faculties, but this, the most important was neglected. If a student were naturally observant, he was left to cultivate the use of his eyes as best he might; if naturally unobservant, no attempt was made to improve him. Now since it is through our eyes that we derive the most of our knowledge, the cultivation of the power of observation must be the correct starting point for education along any line whatever; and while science study cannot create such a power it can go a long way to develop that which nature has bestowed on all. This feature in education is of much more practical importance than might be supposed, looked at from the standpoint of the individual or the nation. A good example of its effect in national affairs is afforded us in the decrease in late years of England's foreign trade in manufactured articles, which decrease is due to the fact that in the foreign market she has been outrivalled