

Phoebe and Isabel

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There is much more involved in defective vision than mere inability to see the blackboard or to use the eyes without pain or discomfort.

Defective vision is the result of an abnormal condition of the mind, and when the mind is in an abnormal condition it is obvious that none of the processes of education can be conducted with advantage.

Memory is among the faculties of the mind which are impaired when the vision is impaired.

As much of the educational process consists of storing the mind with facts, and all other mental processes depend upon one's knowledge of facts, little is accomplished by merely putting glasses on a child that has "trouble with his eyes."

The extraordinary memory of primitive people has been attributed to the fact that owing to the absence of any convenient means of making written records, they had to depend upon their memories, which were strengthened accordingly.

In view of the known facts about the relation of memory to eyesight, it is more reasonable to suppose that the retentive memory of primitive man was due to the same cause as his keen vision: a mind at rest.

The primitive memory as well as primitive keenness of vision have been found among civilized people.

If the necessary tests had been made, it would doubtless have been found that they always occur together — as they did in a case of two sisters, Phoebe and Isabel, which recently came under my observation.

Phoebe, a child of ten, had such marvelous eyesight that she could see the moons of Jupiter with the naked eye. This fact was demonstrated by her drawing a diagram of these satellites which exactly corresponded to the diagrams made by persons who had used a telescope.

Her memory was equally remarkable. She could recite the whole content of a book after reading it, and learned more Latin in a few days — without a teacher — than her sister (with six diopters of myopia) had been able to do in several years.

Phoebe remembered five years afterward what she ate at a restaurant; she recalled the name of the waiter, the number of the building and the street in which it stood.

She also remembered what she wore on this occasion and what everyone else in the party wore. The same was true of every other event which had awakened her interest in any way.

The sort of things we remember are the things that interest us. The reason children have difficulty in learning their lessons is because they are bored by them.

For the same reason, among others, their eyesight becomes impaired, boredom being a condition of mental strain in which it is impossible for the eye to function properly.

Some of the various kinds of compulsion now employed in the educational process may awaken interest.

Betty Smith's interest in winning a prize, or in merely getting ahead of Johnny Jones, may have the effect of rousing her interest in lessons that have hitherto bored her.

And this interest may develop into a genuine interest in the acquisition of knowledge.

But this cannot be said of the various fear incentives still so largely employed by teachers.

These, on the contrary, have the effect usually of completely paralyzing minds already benumbed by lack of interest, and the effect upon the vision is equally disastrous.

The fundamental reason for both poor memory and poor eyesight in school children is our irrational and unnatural educational system.

It is only when children are interested they can learn. It is equally true that it is only when they are interested they can see.

Phoebe's Keen Vision

Phoebe, of the keen eyes, who could recite whole books if she happened to be interested in them, disliked mathematics and anatomy extremely.

Not only could she not learn them, but

she became myopic when they were presented to her mind.

She could read letters a quarter of an inch high at 20 feet in a poor light, but when asked to read figures one to two inches high in a good light at ten feet, she miscalled half of them.

When asked to tell how much 2 and 3 made, she said "4," before finally deciding on "5" — and all the time she was occupied with this disagreeable subject, the retinoscope showed she was myopic.

When I asked her to look into my eyes with the ophthalmoscope, she could see nothing — although a much lower degree of visual acuity is required to note the details of the interior of the eye than to see the moons of Jupiter.

Phoebe could read a photographic reduction of the Bible and recite what she had read verbatim. She could see the moons of Jupiter and draw a diagram of them afterward because she was interested in these things.

But she could not see the interior of the eye, nor see figures even half as well as she saw letters, because these things bored her.

When, however, it was suggested to her that it would be a good joke to surprise her teachers (who were always reproaching her for her backwardness in mathematics) by taking a high mark in a coming examination, her interest in the subject awakened, and she contrived to learn enough to get 78 percent.

Shortsighted Isabel

Shortsighted Isabel, on the c]se cases, the ability to learn and the ability to see went hand in hand with interest.

In Isabel's case, letters were antagonistic. She was not interested in most of the subjects with which they dealt, and therefore was backward in those subjects, and had become habitually myopic. But when asked to look at objects which aroused an intense interest, her vision became normal.

When one is not interested, one's mind is not under control — and without mental control, one can neither learn nor see.

Better Mental Faculties

Not only the memory, but all other mental faculties are improved when the eyesight becomes normal.

It is a common experience with patients cured of defective sight to find their ability to do their work has improved.

A teacher reports that one of her pupils used to sit doing nothing all day long, and apparently was not interested in anything.

After the test card was introduced into the classroom and his sight improved, he wanted to learn, and speedily developed into one of the best students in the class.

In other words, his eyes and mind became normal together.

A bookkeeper nearly 70 years of age, who had worn glasses for 40 years, found after he had gained perfect sight without glasses that he could work more rapidly and accurately — and with less fatigue — than ever in his life.

During busy seasons, or when short of help, he has worked for some weeks at a time from 7 am until 11 pm, and he reports that he felt less tired at night after he was through than he did in the morning when he started.

Previously, although he had done more work than any other man in the office, it always tired him very much.

He also noticed an improvement in his temper. Having been so long in the office and knowing so much more about the business than his fellow employees, he was frequently appealed to for advice.

These interruptions, before his sight became normal, were very annoying to him, and often caused him to lose his temper. Afterward, however, they caused him no irritation whatever.

From all these facts it will be seen that the problems of vision are far more intimately associated with the problems of education than we had supposed.

These can by no means be solved by putting concave, or convex, or astigmatic lenses before the eyes of children.