

THE SABER-TOOTH CURRICULUM

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Adapated from: Benjamin, H.R.W., *Saber-tooth Curriculum, Including Other Lectures in the History of Paleolithic Education*, McGraw-Hill, 1939.

The first great educational theorist and practitioner of whom my imagination has any record (began Dr. Peddiwell in his best professorial tone) was a man of Chellean times whose full name was New-Fist-Hammer-Maker but whom, for convenience I shall hereafter call New-Fist.

New-Fist was a doer, in spite of the fact that there was little in his environment with which to do anything very complex. You have undoubtedly heard of the pear-shaped, chipped-stone tool which archeologists call the coup-de-point or fist hammer. New-Fist gained his name and a considerable local prestige by producing one of these artifacts in a less rough and more useful form than any previously known to his tribe. His hunting clubs were generally superior weapons, moreover, and his fire-using techniques were patterns of simplicity and precision. He knew how to do things his community needed to have done, and he had the energy and will to go ahead and do them. By virtue of these characteristics he was an educated man.

New-Fist was also a thinker. Then, as now, there were few lengths to which men would not go to avoid the labor and pain of thought. More readily than his fellows, New-Fist pushed himself beyond those lengths to the point where cerebration was inevitable. The same quality of intelligence which led him into the socially approved activity of producing a superior artifact also led him to engage in the socially disapproved practice of thinking. When other men gorged themselves on the proceeds of a successful hunt and vegetated in dull stupor for many hours thereafter, New-Fist ate a little less heartily, slept a little less stupidly, and arose a little earlier than his comrades to sit by the fire and think. He would stare moodily at the flickering flames and wonder about various parts of his environment until he finally got to the point where he became strongly dissatisfied with the accustomed ways of his tribe. He began to catch glimpses of ways in which life might be made better for himself, his family, and his group. By virtue of this development, he became a dangerous man.

This was the background that made this doer and thinker hit upon the concept of a conscious, systematic education. The immediate stimulus which put him directly into the practice of education came from watching his children at play. He saw these children at the cave entrance before the fire engaged in activity with bones and sticks and brightly colored pebbles. He noted that they seemed to have no purpose in their play beyond immediate pleasure in the activity itself. He compared their activity with that of the grown-up members of the tribe. The children played for fun; the adults worked for security and enrichment of their lives. The children dealt with bones, sticks, and pebbles; the adults dealt with food, shelter, and clothing. The children protected themselves from boredom; the adults protected themselves from danger.

"If I could only get these children to do things that will give more and better food, shelter, clothing, and security," thought New-Fist, "I would be helping this tribe to have a better life. When the children became grown, they would have more meat to eat, more skins to keep them warm, better caves in which to sleep, and less danger from the striped death with the curving teeth that walks these trails by night."

Having set up an educational goal, New-Fist proceeded to construct a curriculum for reaching that goal. "What things must we tribesmen know how to do in order to live with full bellies, warm backs, and minds free from fear?" he asked himself.

To answer this question, he ran various activities over in his mind. "We have to catch fish with our bare hands in the pool far up the creek beyond that big bend," he said to himself. "We have to catch fish with our bare hands in the pool right at the bend. We have to catch them in the same way in the pool just this side of the bend. And so we catch them in the next pool and the next and the next. Always we catch them with our bare hands."

"Thus New-Fist discovered the first subject of the first curriculum-- fish-grabbing-with-the-bare-hands.

"Also we club the little woolly horses," he continued with his analysis. "We club them along the bank of the creek where they come down to drink. We club them in the thickets where they lie down to sleep. We club them in the upland meadow where they graze. Wherever we find them we club them."

So woolly-horse-clubbing was seen to be the second main subject in the curriculum.

"And finally, we drive away the saber-tooth tigers with fire," New-Fist went on in his thinking. "We drive them from the mouth of our caves with fire. We drive them from our trail with burning branches. We wave firebrands to drive them from our drinking hole. Always we have to drive them away, and always we drive them with fire."

Thus was discovered the third subject--saber-tooth-tiger-scaring-with-fire.

Having developed a curriculum, New-Fist took his children with him as he went about his activities. He gave them an opportunity to practice these three subjects. The children liked to learn. It was more fun for them to engage in these purposeful activities than to play with colored stones just for the fun of it. They learned the new activities well, and so the educational system was a success.

As New-Fist's children grew older, it was plain to see that they had an advantage in good and safe living over other children who had never been educated systematically. Some of the more intelligent members of the tribe began to do as New-Fist had done, and the teaching of fish-grabbing, horse-clubbing, and tiger scaring came more and more to be accepted as the heart of real education.

For a long time, however, there were certain more conservative members of the tribe who resisted the new, formal education system on religious grounds. "The Great Mystery who speaks in thunder and moves in lightning," they announced impressively, "the Great Mystery who gives men life and takes it from them as he will--if that Great Mystery had wanted children to practice fish-grabbing, horse-clubbing, and tiger-scaring before they were grown up, he would have taught them these activities himself by implanting in their natures instincts for fish-grabbing, horse-clubbing, and tiger-scaring. New-Fist is not only impious to attempt something the Great Mystery never intended to have done; he is also a damned fool for trying to change human nature."

Whereupon approximately half of these critics took up the solemn chant, "If you oppose the will of the Great Mystery, you must die," and the remainder sang derisively in unison, "You can't change human nature."

Being an educational statesman as well as an educational administrator and theorist, New-Fist replied politely to both arguments. To the more theologically minded, he said that, as a matter of fact, the Great Mystery had ordered this new work done, that he even did the work himself by causing children to want to learn, that children could not learn by themselves without divine aid, that they could not learn at all except through the power of the Great Mystery, and that nobody could really understand the will of the Great Mystery concerning fish, horse, and saber-tooth tigers unless he had been well grounded in the three fundamental subjects of the New-Fist school. To the human-nature-cannot-be-changed shouters, New-Fist pointed out the fact that paleolithic culture had attained its high level by changes in human nature and that it seemed almost unpatriotic to deny the very process which had made the community great.

"I know you, my fellow tribesmen," the pioneer educator ended his argument gravely, "I know you as humble and devoted servants of the Great Mystery. I know that you would not for one moment consciously oppose yourselves to his will. I know you as intelligent and loyal citizens of this great cave-realm, and I know that your pure and noble patriotism will not permit you to do anything which will block the development of that most cave-realmish of all our institutions--the paleolithic educational system. Now that you understand the true nature and purpose of this institution, I am serenely confident that there are no reasonable lengths to which you will not go in its defense and its support."

By this appeal the forces of conservatism were won over to the side of the new school, and in due time everybody who was anybody in the community knew that the heart of good education lay in the three subjects of fish-grabbing, horse-clubbing, and tiger-scaring. New-Fist and his contemporaries grew old and were gathered by the Great Mystery to the Land of the Sunset far down the creek. Other men followed their educational ways more and more, until at last all the children of the tribe were practiced systematically in the three fundamentals. Thus the tribe prospered and was happy in the possession of adequate meat, skins, and security.

It is to be supposed that all would have gone well forever with this good educational system if conditions of life in that community had remained forever the same. But conditions changed, and life which had once been so safe and happy in the cave-realm valley became insecure and disturbing.

A new ice age was approaching in that part of the world. A great glacier came down from the neighboring mountain range to the north. Year after year it crept closer and closer to the head waters of the creek which ran through the tribe's valley, until at length it reached the stream and began to melt into the water. Dirt and gravel which the glacier had collected on its long journey were dropped into the creek. The water grew muddy. What had once been a crystal-clear stream in which one could see easily to the bottom was now a milky stream into which one could not see at all.

At once the life of the community was changed in one very important aspect. It was no longer possible to catch fish with the bare hands. The fish could not be seen in the muddy water. For some years, moreover, the fish in this creek had been getting more timid, agile, and intelligent. The stupid, clumsy, brave fish, of which originally there had been a great many, had been caught with the bare hands for fish generation after fish generation, until only fish of superior intelligence and agility were left. These smart fish, hiding in the muddy water under the newly deposited glacial boulders, eluded the hands of the most expertly trained fish-grabbers. Those tribesmen who had studied advanced fish-grabbing in the secondary school could do no better than their less well-educated fellows who had taken only an elementary course in the subject, and even the university graduates with majors in ichthyology were baffled by the problem. No matter how good a man's fish-grabbing education had been, he could not grab fish when he could not find fish to grab.

The melting waters of the approaching ice sheet also made the country wetter. The ground became marshy far back from the banks of the creek. The stupid woolly horses, standing only five or six hands high and running on four-toed front feet and three-toed hind feet, although admirable objects for clubbing, had one dangerous characteristic. They were ambitious. They all wanted to learn to run on their middle toes. They all had visions of becoming powerful and aggressive animals instead of little and timid ones. They dreamed of a far-distant day when some of their descendants would be sixteen hands high, weigh more than half a ton, and be able to pitch their would-be riders into the dirt. They knew they could never attain these goals in a wet, marshy country, so they all went east to the dry, open plains, far from the paleolithic hunting grounds. Their places were taken by little antelopes who came down with the ice sheet and were so shy and speedy and had so keen a scent for danger that no one could approach them closely to club them.

The best trained horse-clubbers of the tribe went out day after day and employed the most efficient techniques taught in the schools, but day after day they returned empty-handed. A horse clubbing education of the highest type could get no results when there were no horses to club.

Finally, to complete the disruption of paleolithic life and education, the new dampness in the air gave the saber-tooth tigers pneumonia, a disease to which these animals were peculiarly susceptible and to which most of them succumbed. A few moth-eaten specimens crept south to the desert, it is true, but they were pitifully few and weak representatives of a once numerous and powerful race.

So there were no more tigers to scare in the paleolithic community, and the best tiger-scaring techniques became only academic exercises, good in themselves, perhaps, but not necessary for

tribal security. Yet this danger to the people was lost only to be replaced by another and even greater danger, for with the advancing ice sheet came ferocious glacial bears which were not afraid of fire, which walked the trails by day as well as by night, and which could not be driven away by the most advanced methods developed in the tiger-scaring courses of the schools.

The community was now in a very difficult situation. There was no fish or meat for food, no hides for clothing, and no security from the hairy death that walked the trails day and night. Adjustment to this difficulty had to be made at once if the tribe was not to become extinct.

Fortunately for the tribe, however, there were men in it of the old New-Fist breed, men who had the ability to do and the daring to think. One of them stood by the muddy stream, his stomach contracting with hunger pains, longing for some way to get a fish to eat. Again and again he had tried the old fish-grabbing technique that day, hoping desperately that at last it might work, but now in black despair he finally rejected all that he had learned in the schools and looked about him for some new way to get fish from the stream. There were stout but slender vines hanging from trees along the bank. He pulled them down and began to fasten them together more or less aimlessly. As he worked, the vision of what he might do to satisfy his hunger and that of his crying children back in the cave grew clearer. His black despair lightened a little. He worked more rapidly and intelligently. At last he had it - a net, a crude seine. He called a companion and explained the device. The two men took the net into the water, into pool after pool, and in one hour they caught more fish - intelligent fish in muddy water - than the whole tribe could have caught in a day under the best fish-grabbing conditions.

Another intelligent member of the tribe wandered hungrily through the woods where once the stupid little horses had abounded but where now only the elusive antelope could be seen. He had tried the horse-clubbing technique on the antelope until he was fully convinced of its futility. He knew that one would starve who relied on school learning to get him meat in those woods. Thus it was that he too, like the fish-net inventor, was finally impelled by hunger to new ways. He bent a strong, springy young tree over an antelope trail, hung a noosed vine therefrom, and fastened the whole device in so ingenious a fashion that the passing animal would release a trigger and be snared neatly when the tree jerked upright. By setting a line of these snares, he was able in one night to secure more meat and skins than a dozen horse-clubbers in the old days had secured in a week.

A third tribesman, determined to meet the problem of the ferocious bears, also forgot what he had been taught in school and began to think in direct and radical fashion. Finally, as a result of this thinking, he dug a deep pit in a bear trail, covered it with branches in such a way that a bear would walk out on it unsuspectingly, fall through to the bottom, and remain trapped until the tribesmen could come up and dispatch him with sticks and stones at their leisure. The inventor showed his friends how to dig and camouflage other pits until all the trails around the community were furnished with them. Thus the tribe had even more security than before and in addition had the great additional store of meat and skins which they secured from the captured bears.

As the knowledge of these new inventions spread, all the members of the tribe were engaged in familiarizing themselves with the new ways of living. Men worked hard at making fish nets, setting antelope snares, and digging bear pits. The tribe was busy and prosperous.

There were a few thoughtful men who asked questions as they worked. Some of them even criticized the schools.

These new activities of net-making and operating, snare-setting, and pit-digging are indispensable to modern existence," they said. "Why can't they be taught in school?"

The safe and sober majority had a quick reply to this naive question. "School!" they snorted derisively. "You aren't in school now. You are out here in the dirt working to preserve the life and happiness of the tribe. What have these practical activities got to do with schools? You're not saying lessons now. You'd better forget your lessons and your academic ideals of fish-grabbing, horse-clubbing, and tiger-scaring if you want to eat, keep warm, and have some measure of security from sudden death."

The radicals persisted a little in their questioning. "Fishnet-making and using, antelope-snare construction and operation, and bear-catching and killing," they pointed out, "require intelligence and skills--things we claim to develop in schools. They are also activities we need to know. Why can't the schools teach them?"

But most of the tribe, and particularly the wise old men who controlled the school, smiled indulgently at this suggestion. "That wouldn't be education," they said gently.

"But why wouldn't it be?" asked the radicals.

"Because it would be mere training," explained the old men patiently. "With all the intricate details of fish-grabbing, horse-clubbing, and tiger-scaring--the standard cultural subjects--the school curriculum is too crowded now. We can't add these fads and frills of net-making, antelope-snaring, and--of all things--bear-killing. Why, at the very thought, the body of the great New-Fist, founder of our paleolithic educational system, would turn over in its burial cairn. What we need to do is to give our young people a more thorough grounding in the fundamentals. Even the graduates of the secondary schools don't know the art of fish-grabbing in any complete sense nowadays, they swing their horse clubs awkwardly too, and as for the old science of tiger-scaring--well, even the teachers seem to lack the real flair for the subject which we oldsters got in our teens and never forgot."

"But, damn it," exploded one of the radicals, "how can any person with good sense be interested in such useless activities? What is the point of trying to catch fish with the bare hands when it just can't be done any more. How can a boy learn to club horses when there are no horses left to club? And why in hell should children try to scare tigers with fire when the tigers are dead and gone?"

"Don't be foolish," said the wise old men, smiling most kindly smiles. "We don't teach fish-grabbing to grab fish; we teach it to develop a generalized agility which can never be developed by mere training. We don't teach horse-clubbing to club horses; we teach it to develop a generalized strength in the learner which he can never get from so prosaic and specialized a thing as antelope-snaring. We don't teach tiger-scaring to scare tigers; we teach it for the purpose of

giving that noble courage which carries over into all the affairs of life and which can never come from so base an activity as bear-killing."

All the radicals were silenced by this statement, all except the one who was most radical of all. He felt abashed, it is true, but he was so radical that he made one last protest.

"But--but anyway," he suggested, "you will have to admit that times have changed. Couldn't you please try these other more up-to-date activities? Maybe they have some educational value after all?"

Even the man's fellow radicals felt that this was going a little too far.

The wise old men were indignant. Their kindly smiles faded. "If you had any education yourself," they said severely, "you would know that the essence of true education is timelessness. It is something that endures through changing conditions like a solid rock standing squarely and firmly in the middle of a raging torrent. You must know that there are some eternal verities, and the saber-tooth curriculum is one of them!"