

The Ideal Education System Series

< Individualized, self-paced, subject-mastery instruction for all learners >

Learning Oriented Education: An Introduction

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We Need to Change the Educational Process in the Public School System

We have all listened to local and national politicians, parents, business executives and even some school administrators exclaim that we are not getting our money's worth from the public school system. Many young adults are not completing their educations, or are graduating from high school, without the necessary skills to succeed in whatever they choose to do after their public school educations. In a society that requires a highly skilled workforce to run the economic engine, those adults without an appropriate education will become a burden to themselves and to society in the form of increased welfare payments or criminal activity. Or at least that's how the argument is usually presented. I argue that, more importantly, it is a waste of human potential – a loss that could be avoided if we were willing to change the methods we use to educate our children. Children who fail in the current system are victims of a process that is designed to make them fail.

Imagine if you will a 1500 meter Olympic race with eight contestants. Suppose that every 200 meters, the runner who was last in the pack was forced to leave the race. The race would conclude with just one runner and that person would be recognized as the winner. "Those are ridiculous rules given the nature of the race," you might say. Ridiculous, yes, but we operate under very similar rules while educating our children. We penalize them for not keeping up with the pack, for not running the race at the same rate as everyone else. Some try, exhaust themselves in the process, and give up. Those who are accustomed to conserving their energy until a race is nearing its conclusion find themselves out of the race early. Those who run as fast as they can in order to keep ahead of the pack may not have the

energy to finish. No doubt that a student participating in such a process views most of their classmates as competitors rather than as friends.

This approach distorts the educational process, which should be a time for learning at a relaxed pace. It is when we have time to think about and explore a new subject in depth that we learn at our best. With the current process, curiosity – our best motivation for learning – must of necessity fall by the wayside. The phrase most often voiced by students in such classes is, “Will this be on the test?” If it won’t, why bother? It leads the instructor to patiently go over the material that will be on the test. Sample problems and reading interpretations are covered time and time again, eliminating any chance that the students will be faced with an unfamiliar problem – one that just might require some original thinking.

You might argue that competition is what it’s all about: bringing the best and the brightest to the front. Those who hold up under pressure will be those most qualified for the job (whatever that might be). But that should not be our goal in educating children. Our goal should be to have children learn how to live happy and healthy lives, and learn to behave in ways that are supportive of themselves and others. Save the competitions for the Navy Seals. Let’s make it our goal to give every child in school the opportunity to realize their potential.

No doubt you have heard the phrase “No child left behind.” You might even associate that phrase with the goal of having all children graduate from the public school system with the skills needed to enter the workforce or to continue their educations. I interpret “No child left behind” to mean implicitly that all children will be forced to keep up with the pack, regardless of their differing cognitive skills, emotional and social intelligence, and current interests. In a more insidious way, I interpret it to mean that “You will do as you are told.” This is not the way to educate human beings.

Teacher Oriented Education

Walk into any public school classroom above the 4th grade level and I will wager that 90 percent of the time you will find the students sitting quietly in desks that are neatly arranged in rows, facing the teacher, who is lecturing in the front of the room. This is the way that schooling has been conducted since the Middle Ages! The irony is that today, when students leave the classroom, they are free to learn anything they please using a wide variety of venues and presentation methods.

Even if you find an exception to the teacher-as-lecturer scenario, chances are that the students in the class are all studying the same unit, on the same subject, and preparing to take a one-time test over the same material in the not too distant future. The focus is entirely teacher oriented; there is little or no input from the students directing the course of study. And the teacher is usually compelled to teach

that material by contract: the curriculum being predetermined by the local school board or the State Board of Education.

As the teacher lectures from the front of the room – armed with a formidable array of audio-visual-computer equipment – you will most likely observe that the majority of the class is tuned out. As a teacher myself, I often saw that look of disconnection in the eyes of my students. Not that I was a poor lecturer; good teachers are often great dramatists and I often played to the crowd in order to hold their attention. But it was exhausting both for them and for me. How many back-to-back 50 minute performances can a person endure either on the giving or the receiving end?

But most egregiously, the teacher oriented process ignores the fact that people just don't like hearing answers to questions that they haven't asked. Making education a learning rather than a teaching process means that the educational system will have to be redesigned to motivate students to ask the questions. That is the way to acquire and hold students' attention; that is the way students will appreciate what is being presented, and that is the key to having students remember what is being said. From my experience as a teacher, I can say that having students ask the questions, literally directing the improvised performance¹ of the teacher, greatly increases the interest level of the class.

Learning Oriented Education

Having students ask the questions and direct the communication solves a major objection to the current educational process, but simultaneously raises others. In a classroom environment it is often the case that a question asked by one student is of no interest to the others; they are nevertheless forced to listen to the response. It often makes students uncomfortable and wastes their time. Again we are back to the problem of students having to listen to answers to questions that they haven't asked. To solve this problem we need to implement one of the three principles of learning oriented education: *individualized instruction*.

Individualized instruction requires developing a program of care and study for each student. Probably the biggest superficial change that individualized instruction would bring to the current system would be the absence of grade levels; there would be no K-12 designation associated with a student's progress. With individualized instruction no child will be left behind because each child moves through the system at their own pace based on their unique cognitive abilities and emotional intelligence.

1. Incidentally, a good class warm-up that brings students back to life is to do an improvisation routine involving several members of the class and the teacher.

Which brings us to the second principle of learning oriented education: *self-paced instruction*. Undeniably all people, especially children and young adults, differ in their cognitive abilities and their emotional and social intelligence. Learning oriented education explicitly recognizes these differences by not pushing students beyond their capabilities at a very formative time in their educational development. We recognize that learning by its very nature requires moving out of our own comfort zones; self-paced instruction allows students to take the necessary risks without being overwhelmed. No one wants to learn to swim by being tossed into the deep end of the pool.

A common scenario in a self-paced instructional environment would be a period of study followed by a unit test. If a student indicates mastery of the objectives for that unit, he or she will be allowed to move on to another unit in that series, or be given detailed information by the teacher as to why they did not achieve the expected performance. With this information the student can review the necessary subject matter and practice the required skills. When the student feels prepared, they can retake a test² over that unit. Most importantly, the student has been allowed to fail *while learning a new skill*. All of us need to have that permission, especially our own, in order to make progress in our lives. Penalizing a person for not learning a new skill at the rate of some arbitrary standard will more than likely slow the learning process or halt it altogether for that individual. This consequence can be seen as one of the biggest drawbacks of teacher oriented education.

It follows that the third principle of learning oriented education is *subject mastery*. It does a person no good to simply “pass” a test if they can only demonstrate less than adequate performance in the execution of the skills involved. Think of any professional service or finished product that you would purchase for yourself: Would you be willing to accept a sixty or seventy percent level of workmanship? No, we expect nothing less than perfection in the goods and services that we purchase. There is no reason to expect less from students who will soon be providing us with those same goods and services. Learning oriented education allows the student to consistently achieve high levels of performance. As a result, the student’s confidence in his or her own abilities will be greatly enhanced.

What *Should* Children Learn?

It makes no sense to create an ideal learning environment without a sense of what it is that we want our children to learn. This is a task that is normally relegated to local curriculum committees or Departments of Education. Often meetings are held to gather public input before decisions are made. Usually the individual deci-

2. An alternative to a written test might be an oral exam. The student may have been solving a significant problem with many steps. The teacher can ask the student to explain one or more of the steps involved. The student may, in fact, explain how the problem was solved demonstrating a variety of learned skills in the process.

sions affect only a small fraction of any school's curricula. But we need a broader perspective: one that asks the question of why we have compulsory public school education in the first place, and what that implies for school curricula.

A lot of people would agree that we educate our children in order that they learn how to support themselves after they leave the protective environments of home and school. Perhaps people would also agree that we educate our young in public schools to allow them to further their educations at the college level or in a school designed to teach a skilled trade. The general understanding being that twelve or more years of compulsory education will prepare our children to find a job and support themselves and their future families.

Still, that answer begs the question of what children in public school systems should learn, and in my opinion, it is not preparation for a job, per se. Simply preparing a child for the world of work warps the entire educational process, and forgoes the many opportunities we have of helping children find their own educational and lifetime goals. Besides, it is foolish to think that we can foresee what we need to "teach" children at an early age, for employment that is years away, and have it be meaningful to them.

What we do need to accomplish in our educational institutions is to prepare our children to lead happy and healthy lives over their expected lifetimes. In addition, we should want them to learn how to create employment opportunities for themselves, and perhaps others, as a result of their educations. We should not be producing simple cogs of production who at some point in their lifetimes will be asking (as many do now during the presidential election of 2012) why their national government (of all institutions) is not creating enough jobs for everyone!

What Children *Should* Learn

Today we motivate children to learn primarily by threat of failure. No child wants to be left behind given the circumstances they would find themselves in if they failed. We force some children to learn just enough to squeak by from year to year – with barely a passing grade – until they can legally quit school. A lot of these same kids are often truant and end up going to school year round, increasing the total cost of providing public school education.

Granted, a large number of kids do make it through the current educational process in spite of its drawbacks – human beings are extremely adaptable creatures; the current system is the only game in town. But some kids are just stubborn enough, or smart enough, or neglected enough to want to be treated in a more humane fashion. And given the right conditions, we could see a dramatic reversal in those same kids' attitudes toward schooling, and a vast improvement in the attitude of a lot of other kids.

So, I propose an alternative means of motivation – let the kids determine what they want to learn, when they want to learn it, and at a pace they choose for themselves. And while we are at it, let’s repeal the laws requiring compulsory education – its time is long past. Under these conditions we would have a school setting that provided real opportunities to motivate ALL kids.

Many people – accustomed to the structure imposed by the public school system – may fear that my proposals would result in chaos: kids running rampant in the streets. On the other hand, we do let them out of school for two months of the year, and the cities and towns in which they live seem to manage without undo stress. What do kids do during this “time off” for good behavior? Plenty. When allowed, kids get together and find interesting things to do: often without a teacher or parent directing their activities! They make choices and act on them.

If you need to look for examples of the consequences of freedom of choice in our own lives, you need look no further than our economic system. Supply and demand largely determine the nature of that system. The result is the wealth of goods and services made available to us. There is no politburo directing the course of the economy. That economic path has been tried and it led nowhere. And when Chinese bureaucrats stopped dictating economic policy, their economy took off. Another example of freedom of choice, but a bit more subtle, is “money.” No one sets the inherent value of money. In fact, the script itself is worthless. The value of money is determined by the goods and services that secure the debt that is money. The net result is that we freely choose what money is worth. It is only when we try to meddle with its free market value by setting some arbitrary standard that problems arise. So let’s look at the possibilities and consequences of freedom of choice in our public school system.

What do you suppose would happen if school were the most interesting game in town – all year round? A place that offered opportunities for kids that didn’t exist elsewhere. Someplace where kids could find people who really cared about helping them achieve the goals that they have determined for themselves. In this setting school becomes a smorgasbord of activities, some requiring self study and some offering group activities. Again, the keyword is *choice*. The individual gets to choose programs that may include ordinary subjects like math and science, or music and art, or something quite extraordinary of their own design.

Under free choice for students in choosing the subjects they want to study, curricula offerings become items in a free market, that is, a market driven by supply and demand. Teachers would have the responsibility of providing the courses (the supply side) to meet student requests (the demand side). Teachers could also attempt to influence demand by providing interesting introductions to new subjects. Good teachers will stand out because demand for their goods and services (course offerings and teaching style) will be high.

This does not imply that a course of study need be easy. You can't make an AP-level physics or biology course easy: or classical piano or portrait painting, or computer programming, or finish carpentry, or electrical wiring. But you can make it interesting, and you can allow the student to explore avenues that wouldn't be possible in a regimented curriculum. Again, I would expect nothing less than mastery of a subject by each student. But now the students would be fully engaged and want to do well, and consequently give it their level best.

The other side of this coin is that we can hardly expect children and adolescents to know in advance what they need to learn in order to live happy and fulfilling lives. As adults, we have a pretty good idea of what we need to know to make a living and have some fun in life. As a result, we have a responsibility to help our children learn these things, if only to avoid the mistakes and missed opportunities that we ourselves experienced.

At the same time we need to offer choices that kids can understand. For example, there is no inherent meaning in the term "Algebra." We need to place algebra in the context of problem solving to make the term meaningful. We need to characterize school program offerings as problems to be solved rather than as subjects to be learned. If we want kids to learn algebra, it should be something to be mastered while they are attempting to solve the larger problem of interest. Now comes the hard part for curriculum designers – finding interesting and relevant problems, and innovative ways of converting them into program offerings.

If I were designing school curricula today there are several learnings that I would address over the entire course of a child's education. I see them as fundamental to the learning process and to the physical and emotional health of the child. I list them here:

- Making choices with a high probability of a favorable outcome.
- Getting along with others and one's self.
- Communicating one's needs to others.
- Maintaining a healthy body.
- Solving problems.

If we assure that kids have these skills, we are well on our way to giving them the best chance to live happy and healthy lives, and to provide for themselves in the future.

Questions That Still Need Answers

In the interest of brevity, I have offered the foregoing as pure commentary on a situation that I feel needs to be addressed in an urgent manner. I've spared you the references to research and practice that support the proposals I've expressed here. I hope you will read the additional essays in this series which will discuss those ref-

erences in detail. One of the questions that I will address in future essays is just how these proposals would operate in a school setting on a day-to-day basis. Here's a brief preview.

Imagine if you will a child's first day at school. The child is brought to the school by the child's parents or caretakers. The child is met by a teacher and another child who is already familiar with the school. Together they tour the school and introduce the new student to the school surroundings. The final destination is a room where other students of approximately the same age are busily engaged in activities under the supervision of one or more teachers and teacher-aides. The new student is introduced to the teachers and some of the students. Then the new student is allowed to explore the classroom environment on his or her own. After the parents/caretakers have had an opportunity to observe their child in this new environment, they say their good-byes and take their leave. The accompanying teacher and student remain in the room until they feel that the new student is comfortable in his or her new surroundings.

Some of the things you may have noticed in this scenario is that the new student is made to feel as comfortable as possible in this new setting before the parents /caretakers take their leave. The entry of the new student into the classroom does not interrupt the activities in that room, but becomes a part of them. The new student is introduced to the teachers and some of the students in the room as they would be in a similar unfamiliar environment – say a birthday party. There is no opening day of school, where all new students arrive en masse. In fact, ideally, the school is open every day of the year from seven in the morning until late in the evening providing a maximum amount of flexibility to the parents' or caretakers' schedules. Students arrive at and leave the school according to these schedules, providing the opportunity for parents/caretakers to spend time with their children during the day according to their own work schedules.

Parents or caretakers will have the opportunity to meet with school personnel before bringing their child to school. At least two meetings will take place: one in the home of the child and the other in the school facility. In this way school personnel will have the opportunity to evaluate the home environment of the new student, and the parents/caretakers will have the opportunity to detail any special needs of their child and to familiarize themselves with the school and its operation.

Conclusion

We need to change the process of education in the public school system so that ALL children – regardless of their cognitive abilities, emotional and social intelligence, and family backgrounds – have the opportunity to acquire the education of their choice. And, as a consequence, be better prepared to live happy, healthy, and fulfilling lives in support of themselves and others.