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# A Subtractive Education

The goal of today's schools seems to be to outfit children in the educational armor that will enable them to soldier on to their appropriate places in the white-collar hierarchy. Mr. Childress wants schools instead to chip away at that armor, to discover the true core of each student.

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## By Herb Childress

AM A meandering kind of thinker. Something comes up for me, and that reminds me of something else, and then I remember a third thing, and pretty soon I'm talking about something brand new. Let me take you on a little tour of how that works for me.

I'm walking to Albertson's because Ben & Jerry's Frozen Yogurt is on sale — two pints for five dollars. I get to the store, it's about seven o'clock at night, and the parking lot is jammed; people are weaving around with their shopping carts through the stream of incoming cars trying to get their groceries to their own cars and go home.

And I'm looking at all of these hundreds of people and all of these cars, and I suddenly think, "I wonder how many of these people could resolve a trigonometric identity." Honest to God, that's what came into my head. Well, from there, this meandering thinker was off to the races. "I wonder how many of these people could tell you about the origins of the French Revolution. I wonder how many can still diagram a sentence."

And then I thought, "Well, why would I care if they could or not? They all have enough money to afford their cars and their groceries; they're getting by. Would they get by any better if they remembered how to construct the perpendicular bisector of a line segment using only a straightedge and a compass?"

Well, that of course took me right back to the high school that I wrote my book about and to all the kids who ever asked why they should bother learning something. "Why are we doing this?" That was the plaintive cry from the back corners of the room. "Why are we doing this?" It never came from the front: up front were the kids to whom it never occurred to ask that question or who had given up asking it. And the arguments that came back from the teachers were never very compelling to me. They said things like, "There's *lots* of careers that use algebra," though they never offered a specific example. Or, when the question came up with regard to conjugating French verbs, it would be met with, "Well, you might travel to France someday." For these kids from rural Northern California, even

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the City of Lights was neither a likely nor an especially desirable destination. Their picture of France amounted to the Eiffel Tower, the Arc de Triomphe, and a language that made them say things like, "Hello, I name myself Stacy. How do you name yourself?"

"Why are we doing this?" the kids ask. So let's ask ourselves why we have them doing all of these crazy things. When I think about what high school is for, I remember that John Ogbu, the educational anthropologist, wrote that, "whatever else education may be, from the standpoint of society it is a preparation of children for adult life as adults in their society conceive it."

Well, I don't know, John. Here I am in the Albertson's parking lot, willing to bet my Ben & Jerry's and most of my paycheck that not one of the next three people I see could name the first European to sail around the Cape of Good Hope. "Adult life as adults in our society conceive it" doesn't typically include answering trivia questions like that, unless we're standing on a stage across from Alex Trebek. (By the way, it was Vasco da Gama in 1497, and yes, I had to look it up.)

But let's give John Ogbu another reading and another chance: "Whatever else education may be, from the standpoint of society it is a preparation of children for adult life as adults in their society conceive it." I think that's true, but the problem we have, in our very diverse society, is that Ogbu's phrase "preparation for adulthood" has many different meanings, based on a lot of potential adulthoods. I think we need to make those adulthoods explicit so that we're not working at cross-purposes. So I'm going to do two things here. I'm going to start out by telling you what I think a successful adulthood is, and then I'm going to tell you — based on the evidence of my own and other people's research — what our education system says that a successful adulthood is.

Here's a definition I hold of strong adulthood. I've cast it in the form of a list of my ideal outcome measures for a high school, the characteristics I hope that graduates have as they prepare to move toward adulthood.

• **Graduates of my ideal high school should love to read.** This is not at all the same as saying that they *can* read. There's an enormous middle ground between illiterate and literate, which has sometimes been called aliterate — a term

for people who can read but choose not to, who see little value or reward in it. People who *love* to read are people who are open to new ideas, who are engaged in constant reinvention.

## Graduates of my ideal high school should ...

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enjoy physical exertion and activity ...

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know how to teach a skill to someone else ...

• **Graduates of my ideal high school should enjoy numbers.** I'm no mathematician, but I can do arithmetic in my head very well. It's a skill I developed before I was 8 by playing cribbage and rummy and pinochle and by keeping score at bowling. It's a skill that has served me well all the way through calculus and physics, it's a skill that helps me navigate the everyday world of taxes and budgeting, of saving and knowing when I can indulge in an extravagance, and it's a skill that helps me evaluate the accuracy and pertinence of information that's offered to me.

• **Graduates of my ideal high school should enjoy physical exertion and activity.** And that activity should take several forms, from team sports to hiking across town to playing hacky sack. Anything that gets you sweaty is a damn sight better than television, and we should encourage young people to regard physical activity as a lifelong pursuit, rather than as something to look back on fondly once high school football has ended.

• **Graduates of my ideal high school should have some well-developed outlet for their creative desires.** This will also take all kinds of forms, from writing to visual arts to music to physics, but the quest for putting ideas together in a unique way is part of what makes us really human.

• **Graduates of my ideal high school should know how to work in groups, and they should know how to teach a skill to someone else.** Kids are going to be working with groups for the rest of their lives, from work to marriage and parenthood to community service. We are social animals, and we need to quit pretending that individual performance is the only thing that really matters.

• **Graduates of my ideal high school should be brave and take risks.** This means that they must be exposed to failure and supported through the other side. They need to know that it's possible to fall down and still get up again.

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They must know that, if a magazine rejects their article, there are hundreds more to try. They need to know that anything really worth doing will be scary and intimidating — and that they have to do it anyway.

- **Graduates of my ideal high school should understand and take an interest in their community.** They should know something about real estate, local government and services, major local industries, and the natural landscape and climate. Even if they move away, knowing *how* to find out about these things is a skill that will serve them wherever they go.

- **Graduates of my ideal high school should be compassionate and care about people they don't know.** They should understand that a lot of what happens in people's lives isn't their fault — and that even things that *are* someone's fault usually are mistakes that can be recovered from rather than a sign of a core moral failing that leaves people irredeemable and so dismissible.

For me, this list presents a compelling model of an attractive adulthood. It is a set of characteristics that I don't encounter all that often in the adults I know. In fact, it is a set of characteristics that I strive for but sometimes fail to live up to myself. The list outlines adulthood as a rigorous, ongoing practice rather than a state to be obtained and then mounted on the wall with the high school diploma. And such an adulthood is one that will serve as the foundation for an infinite number of careers, in an ever-shifting economic world.

Now, this may not be the same definition that *you* would create for an attractive, complete adulthood. And that's fine, so long as you actually go through the exercise and create a definition that you can really stand behind and don't just accept the default version.

And believe me, there is a default version. Our institutions — maintained and shepherded as they are by white-collar people who understand complex organizations — promote as the norm their own white-collar, managerial, hierarchical, certified view of adulthood. That's what schools attempt to perpetuate, and it's the model of adulthood for which they prepare young people. Half a century ago, the sociologist C. Wright Mills had the same impression and described the high school as "the seed-bed of white-collar skills." Like the early Spanish in California and Mexico, the white-collar, information-laden school takes on the missionary role of civilizing the uncivilized and converting the heathens. Even the most benevolent of the conquerors are preparing the natives for what they see as a materially and morally superior way of life. We are "helping," "developing," or "training," or whatever term we might use to mean making someone else be more like us.

This has led to a model of secondary education that I call an "additive education," in which each certified specialist takes an assembly under construction and screws on a particular component and then passes the material along to the next specialist. One person takes 150 kids and screws on some algebra, and another person takes those same kids and screws on some world history, and a third person takes those same kids and screws on some Hemingway. Over the course of four years, each successful kid gets more than 20 components screwed on. And in the end, they're screwed, indeed. They're encased in this educational armor and have no experience in encountering and challenging their own communities, futures, or desires, because all of that has been sublimated to the repetitive and mechanical structures that they endured.

In the high school I've studied most thoroughly, which is a tragically normal high school, I found six underlying principles of the school, principles that were never stated overtly but that were repeated over and over in the rules that were laid, in the spaces that were created, in the furniture that was used, in the lessons that were taught, and in the lessons that were avoided. And these were the six principles:

1. Kids and adults should be physically separated.
2. Teaching should be active, and learning should be passive.
3. Abstraction is beneficial, and uniqueness should be avoided.
4. Economies of scale are necessary and beneficial.
5. Objective evaluation and peer competition are necessary and beneficial.
6. Students should be prepared for a life of geographic and organizational mobility.

And, after all, the world educators endure is governed by these same rules. So let's look at them as educators suffer them.

1. *Kids and adults should be physically separated.* Certainly, teachers, administrators, and education policy makers are all physically (and conceptually) separated from one another.

2. *Teaching should be active, and learning should be passive.* The school that most completely follows the guidelines is considered the best school by those who write the guidelines, which become more prescriptive all the time.

3. *Abstraction is beneficial, and uniqueness should be avoided.* Unique local outcomes and desires are less important than test scores and standings on other indices of achievement — and certainly less important than the number of AP courses offered.

4. *Economies of scale are necessary and beneficial.*

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Every single school must be immersed in district, state, and federal systems that ensure completeness and correctness and that avoid duplication of services.

5. *Objective evaluation and peer competition are necessary and beneficial.* Schools themselves are forced to compete with one another on grossly abstract terms that have little to do with the life of learning and citizenship.

6. *Students should be prepared for a life of geographic and organizational mobility.* Teachers and administrators, if they are successful, also move upward or outward from their classrooms and into larger communities or educational structures.

So schools, to their credit, don't ask kids to deal with anything that adults don't have to face as well. Our white-collar organizational biases, in our modern economic circumstances, lead toward an education in which kids are trained primarily to endure what educators themselves endure. Remember again Ogbu's quote: "Whatever else education may be, from the standpoint of society it is a preparation of children for adult life as adults in their society conceive it." The main lessons of the "hidden curriculum" are to compete with your peers, to be compliant with your superiors, and to refrain from asking awkward questions. And those lessons are there on purpose! That's what makes the safest economic life in a culture in which capital is mobile and a company can leave Michigan for Georgia and then leave Georgia for Indonesia. In such a world, you have to demonstrate superiority over other workers and unquestioning loyalty to your supervisors and their world view.

This additive education is an education of fear. It's an effort to avoid disaster rather than to reach for a dream, to avoid a career at McDonald's rather than to pursue a deep personal mission. It's an effort to ensure that kids will have the tools necessary to survive in the similarly white-collar colleges and workplaces they will move on to. It's an effort to keep them from being sorted out of the pool for advancement before they ever really get under way. It's a recognition that our modern economic terrain allows employers to use the desperation of labor as a resource anywhere in the world, that every American who might formerly have done physical work is competing with someone in another country who is willing to work for less, in worse conditions, and for longer hours than our nation allows. It's a recognition that we have educated ourselves into a society in which information is the only material we have left to manipulate.

I understand this education of fear, and I think I know why it exists. But I have no patience for it, because I see how cold and empty it leaves its products — both the kids and the adults. They learn to avoid pain instead of to seek

love. They learn to avoid commitment, because they might have to leave. They're never asked to engage who they really are, but rather to be more and more like their masters.

When I encounter students in a high school like that — which is to say, almost all the time — my immediate urge is to help them escape, to get them into the lifeboats before they drown. I'm not entirely sure what we'd be moving toward, but that's not a question that you ask in a time of crisis. You just get people out of the wreckage and away from the danger. This is my own fearful response to the education of fear.

When I was talking to the folks at Duke about the possibility of my coming there to teach their first-year students, I told them that I was fascinated by people who were between about 15 and 25 years old, standing on the brink of adulthood, peering over the edge in simultaneous fear and anticipation. I told them that I thought high school was something that had to be recovered from and that I thought I could aid in that recovery.

And I talked about my friend Pete. Pete is a young man; he'll be 29 soon. He's a wonderful writer, a great friend to those of us blessed to know him well, a great son and brother to his family, and, possibly, the best illustrator that I've ever had the chance to watch at work. He draws like an angel.

Pete has no idea what he wants from an adult life. Both of his parents are teachers, and he enjoyed school all the way up through sixth grade. But when he moved from elementary school to junior high school, began to move from one teacher and 25 classmates to six teachers and 150 classmates who shifted all day long, he didn't survive the change. He told me that he could recognize instantly that those adults weren't really there for him, that they didn't even know him. And about halfway through seventh grade, he tested his hypothesis, as any good scientist would. In the middle of an assigned five-page essay, he wrote the third page in an imaginary alphabet that he'd drawn, to see if anyone would read it. No one did, and his hypothesis was confirmed.

Pete had a naturally occurring social life in elementary school; in a class of 25 kids who are together all year long, people make allowances for eccentricity and learn to appreciate one another's gifts. When you're shoved into an anonymous crowd of 600 kids you don't know, you tend to seek out people who are the most like you in order to have some safety and stability. But Pete wasn't in any of those natural safety groups. His eccentricity and artistic mind, assets through sixth grade, became social and academic liabilities three months later.

By the time I met him in high school, Pete had two lives: exuberant and creative with his small circle of friends and

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in the theater and completely alienated in the classroom and in the larger social life of the school. He maintained his mathematically precise 2.0 grade-point average so that he could graduate, but there was never even one entire course that reliably captured his attention. There were *days*, there were *topics*, there were *moments* when you could see him come alive and watch the gears turn, but mostly Pete was that kid in the back right corner who you'd never guess was six feet tall because he sat so low in his chair. He saw nothing in the adult world that he trusted, that he wanted, or that he was adequately guided toward. And that distrust of and distaste for adult life persist for him to this day.

So I was talking to the folks at Duke about Pete in the context of helping kids recover from high school, and the director of the writing program said, "Our kids don't come here with 2.0s. We help kids recover from getting 4.3s." And then I began to think in a different way about the scars left by our education system. The rebellious get their 40 lashes on a regular basis, but the silent and compliant have wounds of their own, harder to see but no less real and no less deep. We rightfully strive to eliminate a system of schooling in which there are winners and losers, but we don't think to eliminate a system of schooling in which even the winners have lost their curiosity, have lost their passion, have lost the willingness to ask, "Why are we doing this?"

We are deeply familiar with this screwed-on model of high school, this additive education in which each professional adds his or her component onto the raw material that comes down the line. But I've been wondering: What would a subtractive model of education look like? And I'm beginning to think it might look something like what a sculptor does. When Michelangelo wrote about the experience of sculpting, he said that the stone itself told him what to do, that the figure was waiting inside that stone and that his task as an artist was to take away what wasn't essential. "I saw the angel in the marble and carved until I set him free."

And that's what I do with Pete — informally but very purposefully. And it's what I hoped to be able to do with my Duke students. I think I have to sit with a person and be with him or her for a quite a while before I can expect to have much of an effect. And then I think I can ask for permission to pick off some of the armor and maybe find out who's under all of those uniform shells. I trust that there is a core person there, and my belief is that it's probably the same person who was there at 10 years old, before the specialists got to him or her. Once I know who that is, I am able to see some things that excite this student, and I can

introduce him or her to a wider range of such things. There will be some natural skills, and I can help the student hone and develop and expand and challenge those.

And each person will have his or her own visions of successful adult life, collected by being a part of a family and immersed in the media and knowing a larger group of friends. I can show a young person my own model of adulthood as another potential way of living to examine, but I can't expect that he or she will choose it, and I can't personalize a response — when he or she *doesn't* choose it — as a rejection of me.

I realize that this is a hazy vision. I can't tell you what the structure of a subtractive education looks like on a day-to-day basis. I know that it looks small and attentive, somewhat passive on the part of the educator, slow, inexperienced, and out of control, and that it requires the time and the inclination to listen to and believe young people. But I think it also looks different for every practitioner and with every student, and probably on every day.

Even if you agree with me that a subtractive education would be a humane and powerful experience, I cannot offer you a curriculum that you could all follow to get there with every student. That kind of static curriculum would automatically lead us back toward nonresponsive, non-seeing, automatic, additive ways of being. All I can do is tell you what I see in the world, tell you what I think it means, tell you about some of the lives that are hindered by our common practices, and sit together with you to see if there's something different that we can do.

Here's the vision that drives me, and *this* vision is very clear. I'm 48 years old, and I'm optimistically assuming that I have another 35 years or so to work with teenagers and young adults. My dream is that I will live to see the day that the modern high school will be considered the counterpart of the mission, the orphanage, and the poor farm — an institution that was taken for granted and considered beneficial in its time but has since been judged to be inhumane and unthinkable. High school is taken for granted, and it was and is still considered beneficial. But I believe that we have outgrown the institution's usefulness. I believe that we have different ways of service — different ways of *being* — that we can employ on behalf of young people. And I believe that we are fundamentally not the kind of people who want to make our least powerful citizens endure this four-year sentence of disrespect and invisibility.

We are better than our systems. We are better than our structures. We can be brave, help our kids discover who they are, help them go where they want to go, and wish them Godspeed as they leave us behind. **K**

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