OPINION REVIEW

Schools for wisdom

David Brooks

Friends of mine have been raving about the documentary ''Most Likely to Succeed,'' and it's easy to see what the excitement is about. The film is a bold indictment of the entire K-12 educational system.

Greg Whiteley's documentary argues that the American school system is ultimately built on a Prussian model designed over 100 years ago. Its main activity is downloading content into students' minds, with success or failure measured by standardized tests. This lecture and textbook method leaves many children bored and listless.

Worse, it is unsuited for the modern workplace. Information is now ubiquitous. You can look up any fact on your phone. A computer can destroy Ken Jennings, the world's best ''Jeopardy!'' contestant, at a game of information retrieval. Computers can write routine news stories and do routine legal work. Our test-driven schools are training kids for exactly the rote tasks that can be done much more effectively by computers.

The better approach, the film argues, is to take content off center stage and to emphasize the relational skills future workers will actually need: being able to motivate, collaborate, persevere and navigate through a complex buffet of freelance gigs.

Whiteley highlights one school he believes is training students well. This is High Tech High, a celebrated school in San Diego that was started by San Diego business and tech leaders. This school takes an old idea, project-based learning, and updates it in tech clothing.

There are no textbooks, no bells marking the end of one period or start of the next. Students are given group projects built around a driving question. One group studied why civilizations rise and fall and then built a giant wooden model, with moving gears and gizmos, to illustrate the students' theory. Another group studied diseases transmitted through blood, and made a film.

''Most Likely to Succeed'' doesn't let us see what students think causes civilizational decline, but it devotes a lot of time to how skilled they are at working in teams, demonstrating grit and developing self-confidence. There are some great emotional moments. A shy girl blossoms as a theater director. A smart but struggling boy eventually solves the problem that has stumped him all year.

A new film endorses an educational approach geared to the workplace, but it neglects intellectual virtues.

The documentary is about relationships, not subject matter. In the school, too, teachers cover about half as much content as in a regular school. Long stretches of history and other subject curriculums are effectively skipped. Students do not develop conventional study habits.

The big question is whether such a shift from content to life skills is the proper response to a high-tech economy. I'd say it's at best a partial response.

Ultimately, what matters is not only how well you can collaborate in groups, but the quality of the mind you bring to the group. In rightly playing up soft skills the movie underemphasizes intellectual virtues. For example, it ignores the distinction between information processing, which computers are good at, and knowledge, which they are not.

If we want to produce wise people, what are the stages that produce it? First, there is basic factual acquisition. You have to know what a neutron or a gene is, that the Civil War came before the Progressive Era. Research shows that students with a concrete level of core knowledge are better at remembering advanced facts and concepts as they go along.

Second, there is pattern formation, linking facts together in meaningful ways. This can be done by a good lecturer, through class discussion, through unconscious processing or by going over and over a challenging text until it clicks in your head.

Third, there is mental reformation. At some point while studying a field, the student realizes she has learned a new language and way of seeing — how to think like a mathematician or a poet or a physicist.

At this point information has become knowledge. It is alive. It can be manipulated and rearranged. At this point a student has the mental content and architecture to innovate, to come up with new theses, challenge others' theses and be challenged in turn.

Finally after living with this sort of knowledge for years, exposing it to the rigors of reality, wisdom dawns. Wisdom is a hard-earned intuitive awareness of how things will flow. Wisdom is playful. The wise person loves to share, and cajole and guide and wonder at what she doesn't know.

The cathedrals of knowledge and wisdom are based on the foundations of factual acquisition and cultural literacy. You can't overleap that, which is what High Tech High is in danger of doing.

''Most Likely to Succeed'' is inspiring because it reminds us that the new technology demands new schools. But somehow relational skills have to be taught alongside factual literacy. The stairway from information to knowledge to wisdom has not changed. The rules have to be learned before they can be played with and broken.

Guess who else is a socialist?

Timothy Egan

One of the side benefits of a well-watched national political debate is the exposure it brings to something obscure and forgotten — like Denmark. Who doesn't love a country that gave us a dish of frikadeller and rugbrod to go with paid parental leave and universal health care?

''I love Denmark,'' said Hillary Clinton during Tuesday's debate, by way of dismissing a quasi-socialist nation of 5.7 million mostly white people as not the best place to look for solving the problems of a multiethnic democracy of 322 million.

But in fact, the United States may be closer to Denmark than many think. In the reddest of red states — say, Idaho — you can find the kind of socialism, through publicly owned utilities or the federal dam that farmers rely on for their water, that would be right at home among aquavit-sipping Danes.

Once you label something socialist, it brings to mind dour Soviet types trotting out dreary worker clothing for the spring fashion line. Or, here at home, those insufferable parlor room Marxists who think it would be utopia if only we nationalized every Starbucks. In that sense, the worst thing about socialism is the socialists.

Free of the label, a hybrid economy where health care, education and pensions for the elderly are provided, side-by-side-by-side with creative capitalism, works pretty well in the Nordic countries, Britain and Canada. And most of the tenets of what is considered democratic socialism have majority support in the United States.

But ''socialism'' as a word is poison in this country, except among the young, in large part because it's associated with failed authoritarian Marxist states. A recent Gallup poll found that half of Americans would not vote for a socialist. More people said they could accept an atheist as president more than someone with the scarlet S.

So we don't like ''them.'' But we do like many of their ideas. We can thank Senator Bernie Sanders, self-proclaimed democratic socialist, for this healthy debate. This week, Donald Trump called him a ''communist.'' If so, you can find broad public support for most of the things advocated by the commie from Brooklyn.

A majority of Americans feel ''money and wealth in this country should be more evenly distributed,'' according to a CBS News/New York Times poll. Sanders wants to raise the minimum wage; so do 71 percent of Americans. Sanders believes corporations have too much influence on politics, as do 74 percent of Americans. And one of the biggest socialist programs — the single payer Medicare system that is a lifeline to more than 50 million people — is also one of the most popular.

Nearly one in four people gets electricity from a consumer-owned or co-op utility — socialism throughout the heartland. And when President Obama considered privatizing a big government utility and dam operator, the Tennessee Valley Authority, he was met with squawks of protest from some of the most conservative precincts in America.

Obama is no socialist. A socialist would have nationalized General Motors, instead of returning it to capitalistic solvency. A socialist would not have presided over a doubling of the stock market, without adding new taxes to Wall Street's biggest beneficiaries.

For true socialism in action, look to the billionaire Trump. As a developer, he's tried to use eminent domain — ''state-sanctioned thievery,'' in the words of National Review Online — to get other people's property. There's your communist. He has no problem taking from others to serve the public ''good.''

Capitalism at its best gives us iPhones and 400 kinds of ice cream and rewards enterprise and innovation. The free market has no small amount of magic. At its worst, capitalism produces pharmaceutical companies that gouge for lifesaving drugs, insurance companies that drop people once they get sick, and a system where secretaries pay a higher percentage of their earnings in taxes than billionaires who do nothing.

Socialism at its best can run an army, a health care system and provide quality education for those who otherwise couldn't afford one. Libraries and fire departments are socialist institutions. So is the Interstate System of highways created under President Eisenhower. Ditto the nation's most popular cultural enterprise, the National Football League, which shares its television billions with losers among the teams. At its worst, socialism is grim and stifling, a dead-end for creativity.

We don't like ''them.'' But at its best the system can run an army, and health care, and provide quality education.

The key is to find a balance, as Hillary Clinton said in Tuesday's debate. ''Our job is to rein in the excesses of capitalism so it doesn't run amok,'' she said. In that sentiment, you could hear the historical echo of two great progressive presidents, Teddy Roosevelt and his cousin Franklin, both of whom sought to save capitalism from itself.

She also said, ''We are not Denmark.'' Nope. Not by any stretch. Denmark has a slightly higher tax load on its citizens than the United States. But it also has budget surpluses, universal health care, shorter working hours, and was recently rated by Forbes magazine as the best country in the world for business.

TIMOTHY EGAN, *a former national correspondent for The Times, writes about the environment, the American West and politics.*

Our vanishing flowers

Stephen L. Buchmann

TUCSON Ours is one of the most colorful relationships of history: We need flowers for our very survival, and in turn flowers — the plants that exist as crop cultivars or horticultural cut flowers or potted beauties — rely on us to reproduce and spread. But all is not well in this storied partnership: We who behold or nurture flowers are condemning their wild relatives to extinction at an alarming rate, and the world is quickly becoming a lesser place without them.

Our prehistoric ancestors certainly made use of flowering plants. Imagine an early human forager 200,000 years ago, a woman walking from her camp searching for edible leaves, fleshy berries, tubers and hard seeds. She is a keen observer of nature, noticing and remembering when food plants and animals were scarce or abundant. Patches of flowering plants beckon as colorful and scented beacons in otherwise drab monotones of brown earth and green vegetation. Because of her past associations with flowers, she'll return to the patch in a few weeks when the tasty berries have ripened. She knows what many moderns have forgotten — that flowers are the harbingers of the fruits and seeds that sustain and keep us healthy.

Flowers are relative newcomers: Only recently in the Earth's 4.5-billion-year history have they adorned special plants. For most of the distant past, except for the colors of male birds, butterflies and other insects, fish and lizards, the world was an expanse of brown and red soils and rocks, and green forests, savannas and meadows. Then something extraordinary happened. About 130 to 160 million years ago, the group of plants we know as angiosperms invented flowers and never looked back. Opinions vary since so many flowering plants have yet to be discovered or named, but the Earth may hold at least 350,000 uniquely different species.

Early insects that had fed on sap, leaves and sugary exudates in the ''extrafloral'' nectaries of ferns, cycads and their allies, began to visit the earliest flowers (such as Archaefructus) in search of protein-rich pollen and sweet nectar. Unknowingly, in their search for food these early flower-visiting insects became contaminated with and carried precious microscopic pollen grains. Pollinating animals became regular and dependable floral visitors, exactly the go-betweens that sessile plants required.

Turn your Rome Beauty or Red Delicious apple upside down and examine it closely. Those five small brown appendages are remnants of the once green sepals, and inside those are the shriveled remnants of the anthers and pistil, the reproductive organs of the apple blossom. Your sweet apple began its life as a delicate and ephemeral blossom on a fruit tree until visited by a pollinating bee. Once fertilized, the flower's ovary grew thousands of times in size until it became a tasty apple.

This is the secret of flowers. They entice animals with their colors, shapes and scents, then reward them with pollen, nectar, essential oils, resins, shelter and even warmth. Flowers exist as living billboards signaling to insects, birds and bats, and sometimes us, for the sexual service of pollination they require. Flowers develop into fruits containing the seeds that become the next generation of plants — and the basis of many human foods.

Although the wind-pollinated cereal crops — including rice, wheat, maize and barley — keep the world's 7.2 billion people from starvation, the colorful fruits and berries we relish keep us healthy and happy. Given a choice, who would prefer a bland, starchy maintenance diet? We can't forget that the fruits and seeds of wildflowers, shrubs and trees also feed many of the world's herbivorous wildlife, from Chesapeake Bay northern cardinals to African hornbills, along with fat bears, skunks, bats and even crocodiles. This is the vital link between flowers and food for many animals — including us.

In a staggering loss of diversity, 68 percent of the world's flowering plants are threatened or endangered.

Flowers and fruits are the basis for many medicines, while providing cotton, flax fibers and beverages. Roses, jasmine and ylang-ylang contribute their fragrant molecules as ingredients in the world's costliest perfumes. Cut flowers are a multibillion-dollar industry. It's becoming ever more apparent that we need flowers to maintain our health, our food supply, and for our happiness and mental abilities. Flowers also make us smile; they lift our spirits. Psychological studies indicate that floral scents may enhance long-term memory formation.

But now we are losing many flowering plants to extinction before we even knew they existed. An estimated 68 percent of the world's flowering plants are now threatened or endangered. This staggering loss of diversity is due to anthropogenic causes, including habitat loss, degradation and invasive species.

Conversion of land for housing our ever-expanding human population and for new roads, mines and farms erases wildflowers' living space and threatens yet more native plants. Invasive (weedy) plants populate new areas, competing for space, light and nutrients with those already growing there. It is these trends that are driving the massive loss of flowering species.

Clearly, we cannot save all the native flowering plants, but we must not lose them all either. It would be impossible to individually rescue every species, like Hawaii's Brighamia, or save them all in gardens, like Franklinia from Georgia. The greatest biodiversity of flowering plants occurs in rain forests like Peru's Tambopata National Reserve. Governments and individuals must value and preserve existing parks and reserves, as well as expand and create new ones. The preservation of vast tracts of land to conserve rare species is useless, however, unless conservation laws are enforceable and local security forces are employed to prevent overcollection. This effort cannot simply be conservation on paper. There must be realistic funding for effective security, including park guards, while allowing for reasonable levels of ecotourism and bioprospecting.

It is my sincere hope that the delegates attending the 2015 United Nations Climate Change Conference in Paris later this year will notice the handsome floral bouquets adorning the tables and stages — and listen to the important messages they are telling us.

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RETHA MEIER

Thelymitra campanulata in southwestern Australia is under threat from urban growth.

Overselling breast-feeding

BREAST-FEEDING, FROM PAGE 7

tion to breast-feed exclusively for six months if you are a stay-at-home mom with a breadwinning partner. In a country where the average working mother returns to work six weeks after having a baby, and nearly 30 percent of new mothers take no maternity leave at all, breast-feeding for any length of time is very hard to do.

The effect of the moral fervor surrounding breast-feeding goes beyond mere shaming. It also reflects, and reinforces, the divisions of race and class that have long characterized American social life. Although 89 percent of women in the top income quintile breast-feed, 68 percent of those below the poverty line initiate breast-feeding. Whereas 79 percent of white women breast-feed, 63 percent of black women do. Breast-feeding is a lifestyle choice the majority now make, but it is more common among white middle- and upper-middle-class parents.

In other words, the breast-feeding imperative has elevated the parenting habits of that relatively privileged minority to a universal standard of good parenting. In 2012, the surgeon general and the American Academy of Pediatrics identified breast-feeding as a public health issue. Although that designation doesn't mean much, practically speaking, it was intended to make clear that breast-feeding is a civic responsibility, not just a personal choice. In so doing it portrays women who don't breast-feed — who are more likely to be poor and African-American — not only as bad parents, but as irresponsible citizens.

Demographic differences in breast-feeding rates also justify government interventions that punish poor women who do not breast-feed. This isn't just the unobtrusive little ''nudge'' in the right direction. It's more like a shove, with a kick for good measure.

Middle-class women primarily experience breast-feeding advocacy in the form of education campaigns and limits on their access to formula in hospitals. Poor women are vulnerable to more explicit coercion. The Special Supplemental Nutrition Program for Women, Infants and Children, known as WIC, which serves more than 50 percent of infants born in the United States every year, offers different benefits to breast-feeding and non-breast-feeding mothers and babies. Women who breast-feed are eligible for WIC for twice as long as women who do not breast-feed, and they get an ''enhanced food package,'' which includes vouchers for a wider range of more nutritious food. Unlike formula-fed babies, who are eligible only for infant cereal and fruit and vegetable-based baby food, breast-feeding babies also receive meat-based baby food, which is richer in iron. The difference in benefits is intended to create incentives for poor mothers to breast-feed, but withholding food from mothers at nutritional risk, and from their babies, seems more like punishment to me.

It's a perfectly good choice, but it's not the only choice, and it may not even be a better choice.

And that is just the problem. All too often, breast-feeding advocacy crosses the line from supporting a woman in her decision to breast-feed into compelling a woman to breast-feed. If breast-feeding is the measure of our moral worth, it isn't long before the idea of a mother not breast-feeding her child summons the familiar tropes of bad parenting and irresponsible citizenship that we have long deployed against poor women and minorities.

Does all this mean that women should stop breast-feeding? No. If you want to, if it's easy for you, if you are healthy, if your baby is thriving on breast milk, then by all means do it. If I had to do it all over again, I probably would. But it would be different. Even though I might breast-feed as a way to nourish my baby, I could no longer use it as a talisman to ward off evil and disease. It's a perfectly good choice, but it's not the only choice, and it may not even be a better choice.

Surprisingly, the question of choice, which is central to so many women's issues, is almost totally absent from discussions about infant feeding. Some breast-feeding advocates actually identify ''choice'' as the language of the enemy. Breast-feeding, they insist, is a maternal obligation.

But it is not choice that is the enemy. There is a difference between supporting a woman's decision to breast-feed through policy changes like improved maternity leave, flexible work schedules and on-site day care facilities, and compelling women to breast-feed by demonizing formula. A woman should breast-feed because she wants to, not because someone tells her she has to.

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