

National Domestic Policy Part III

Nothing is as permanent as a temporary government
program.

Milton Friedman



Science, Technology and Education Policy

- **Market failures** occur when free markets should lead people to certain behaviors, but fail to do so. Private companies tend to under-invest in science and technology because the results can be easily copied by their competitors.
- Companies will not invest much in education because firms can only capture a fraction of the return on that investment. It's just not that profitable for them.
- Yet the levels of science, technology and education have profound implications for a country's economy, workforce, development, standard of living, security, energy, environment, etc.
- When markets fail, the solution usually takes the form of **government policies and institutions** ... intellectual property rights, research subsidies, public education, research universities, etc.



Science, Technology and Education Policy

- Historically, government spending on science has been good for the economy. **Innovation** is estimated to drive approximately 85% of economic growth.
- The overwhelming portion of the government's education money is spent on student loans, grants and work-study programs. Resources are set aside to cover job-retraining programs for individuals who lack private-sector skills or who need to be retrained to meet changes in the economy's demands for the labor force.
- National policy toward elementary and secondary education programs has typically focused on increasing resources available to school districts for **nontraditional programs** (such as preschool and special needs), or **helping poorer schools stay competitive** with wealthier institutions.
- **distributive domestic policy**
- For some good case studies on science and technology policy see Science, Technology and Global Re-engagement





Distributive: Education Policy

- **guiding principles of US education policy:** Education should be free and universal with control centered at the local level.
- Education policy has become a significant topic of public debate.
- Americans historically have been supportive of public schools but now are concerned with **issues of quality**.
- **Responsibility for education is divided.**
 - local school boards
 - state departments of education
 - national Department of Education
- Until the 20th century, public education has been almost the exclusively the province of state and local governments, with **responsibility for public education vested in the local community**.



Education Policy: Purposes of Public Education

WHO
ARE
WE?

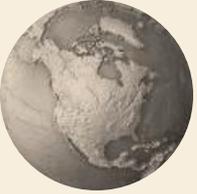
- created **educated workforce** that operated the machines that would make the country an industrial power
- reinforces a **distinct American identity** built around the concepts of liberty, equality and tolerance for diversity
 - promotes values of good **citizenship**
 - open to most citizens, **equalizes opportunity** for all regardless of income and family situation
 - **accessible** to immigrants and **assimilates** immigrants into American life
 - fosters **common language**
- trains workers to compete in a **global economy**



Education Policy: Development of Public Education

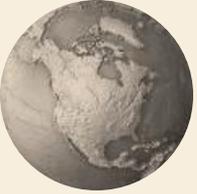
- US education in the early years was primarily **private** and **religious**.
- 1785: Congress set aside **revenue** for the maintenance of public schools and began national government's involvement in helping people pay for education beyond high school.
- **Morrill Land Grant Act** (1862 and 1890): Act provided land to states to build public colleges that focused on agriculture and mechanical arts (Texas A&M, U Maryland, Rutgers).
- **Smith-Hughes Act** (1917): Promoted *vocational* and *agriculture* classes to train students to work on the farm.
- **GI Bill** (1944): Guaranteed paid college tuition and living expenses for WWII veterans.
- **Brown vs. Board of Education of Topeka** (1954): Outlawed *segregation* in public schools.





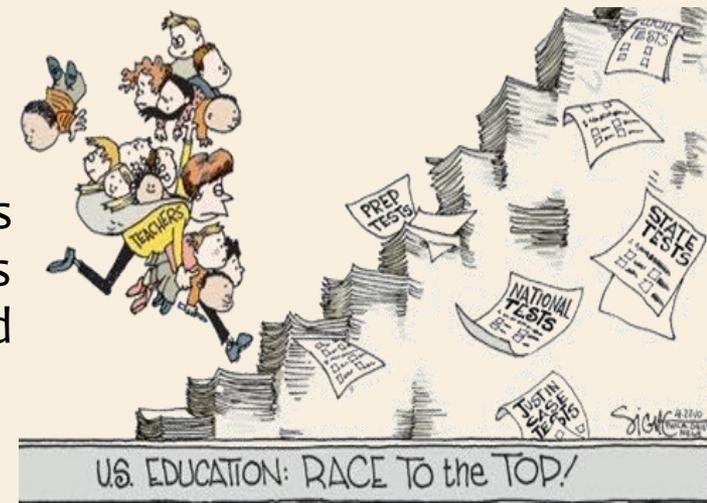
Education Policy: Development of Public Education

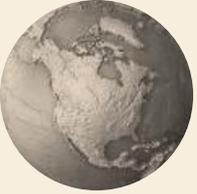
- **Cold War:** Education became part of the national defense. The **National Defense Education Act** (1958) was passed to upgrade science, *language* and *math* scores in response to the Soviet launch of Sputnik.
 - reasons education legislation failed in the 1950s: (1) *public vs. private* school education, church vs. state (2) *integrated vs. segregated*, racial discrimination and (3) *national vs. local* control
- 1964: Congress passed **Head Start** for preschool children, and the **Elementary and Secondary Education Act** (ESEA), part of the **War on Poverty**, which supplied educational *materials* for underprivileged public school students and provided funding for *research* on how to assist children from disadvantaged backgrounds.
- 1968: ***Pickering vs. Board of Education*** stated that teachers are protected by the *First Amendment* (freedom of speech) and can't be fired if their opinion is different from that of the school board.



Education Policy: Development of Public Education

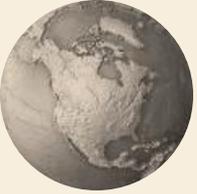
- 1972: **Title IX** protects people from discrimination based on gender in education and in athletic programs and activities at public schools.
- 1974: **Lau vs. Nichols** found in favor of the families of 1,800 Chinese students, who sued San Francisco school district for discrimination. Students were failing due to language barrier. English for Speakers of Other Languages (**ESOL**) created.
- 2001: **No Child Left Behind** expanded national government's role in education and aimed to improve education for disadvantaged students. Created *standardized testing* for students and *accountability* for school systems.
- 2009: **Race to the Top** contest was created to spur innovation in public schools. States that adopt new strategies to help struggling schools are able to win millions of dollars for the state's board of education. Created more standardized testing.





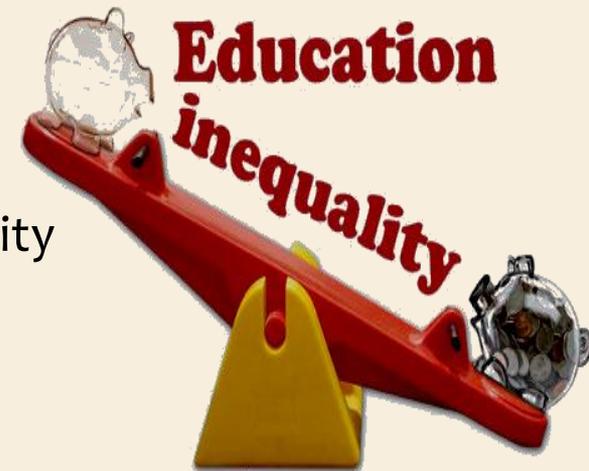
Education Policy: Inequality of Resources

- Education is a **universal** institutional service, available to all, but the **resources and quality of education vary** by location.
- **Local communities vary** from areas with expensive homes to very poor neighborhoods so the local property taxes available to schools vary. This *inequality is part of the reason for national involvement in education.*
- There is also great **variation across states** in spending per student.
- **indirect control**: National power over education is made possible because school districts or states accept national money and must comply with Title VI of the Civil Rights Act and Title IX of the 1972 amendments to the Higher Education Act.



Education Policy: Inequality of Resources

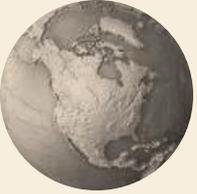
- Today, the **national government assumes more responsibility** for public education than it has in the past but provides *less than 10¢ on every dollar* spent on education by state and local governments.
- **categorical aid**: targeting national funds for *specific programs*, local school officials can refuse national aid
- Nationally, spending on elementary and secondary education *increased* in school year 2013–14 (\$11,066/pupil), *reversing a national decline* in spending for the previous four years.
 - 8.7% from the national government, decreasing
 - 46% from state governments, decreasing
 - 45% from local governments, increasing by necessity





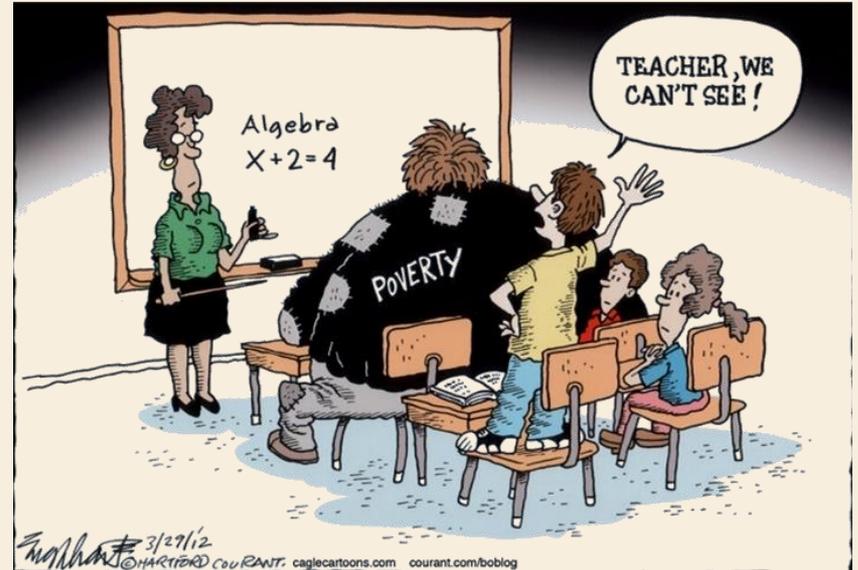
Education Policy: Goals of Public Education

- The goals of US educational policy **have evolved** as society and culture have changed and are continually being debated and revised. Over time, the following have all been goals of public education.
 - prepare children for citizenship
 - cultivate a skilled workforce
 - teach cultural literacy
 - prepare students for college
 - help students become critical thinkers
 - help students compete in a global marketplace



Education Policy: Proposals for Improvement of Public Education

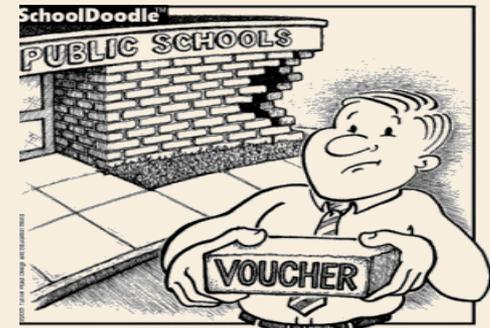
- school choice
- voucher plans
- charter schools
- magnet schools
- national standards
- online education
- improving post-secondary education
- Each set of proposals has its critics and advocates.
- In general, what we need is to provide schools with **greater resources** ... Certainly no proposal for improvement is going to succeed without adequate resources.





Education Policy: School Choice and Voucher Plans

- Under a voucher plan, better performing schools expand while badly performing schools are closed.
- Government gives subsidies (**vouchers**) to **qualifying parents** (parents of low-income students, parents of students in low-performing schools, parents of students with disabilities, etc) to use for tuition in private school.
- Can also use tax code ... Allow parents to claim a **tax deduction** for all or part of private-school tuition.
- DC adopted a voucher plan in 2004. Congress defunded it but it was reinstated as part of a budget deal in 2011.





Education Policy: School Choice and Voucher Plans

- Recent reform efforts in school funding (tuition tax credits, voucher plans, choice plans, etc) are evidence that there is growing attention to, and **public support** for, competition among schools so that parents can identify and support the best schools and exert more individual control over which schools their children attend.
- Popular opinion, especially among *minorities*, has helped to fuel the drive for voucher programs.
- Among private schools, the share of nonreligious, independent schools has increased in recent years perhaps in response to a perceived growing/future demand. Private schools are regulated by the states, regulation that varies from state to state.

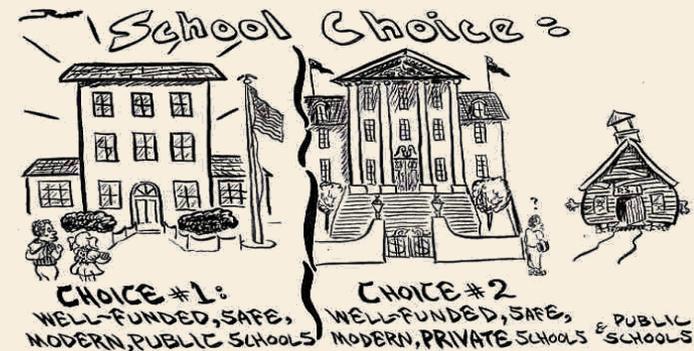


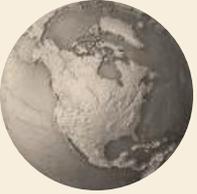
[State Regulation of Private Schools](#)



Education Policy: School Choice and Voucher Plans

- pro-voucher arguments:
 - Parental choice promotes competition and enhances achievement.
 - Vouchers are based on the idea of free market competition.
 - Private schools make public schools (and schools in general) better.
 - Vouchers encourage innovations that can be adopted district-wide.
 - Vouchers give low-income parents choices currently only available to wealthier parents.
 - Society benefits from citizens that are better educated.



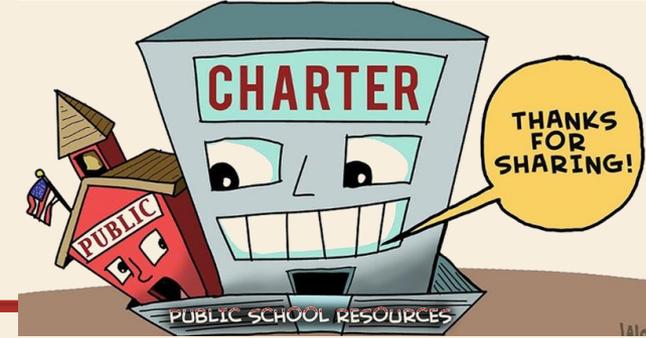


Education Policy: School Choice and Voucher Plans

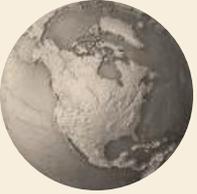
- **anti-voucher arguments:**
 - Vouchers undermine public education by taking needed funding away from public schools.
 - The most involved and informed parents and students leave public schools, further undermining them.
 - There is less accountability in private schools.
 - Vouchers may create a stratification of schools, leading to a stratification of US society.
 - Private schools lead to social and economic segregation.
 - Private schools only accept certain students (brightest, most talented, etc), leaving public schools with students requiring more time and resources (students with disabilities, ESOL students, etc).
 - Most parents don't have the experience / background needed to make good educational choices.
 - Vouchers further exacerbate the growing divide between rich and poor in US society.



Education Policy: Charter Schools



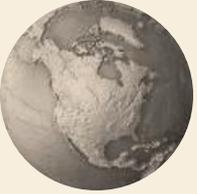
- A charter school is a term for a school that receives government funding but operates independently (under a **charter**) of the established public school system in which it is located, and in some cases are privately owned. Began in 1992.
- Because they are **public schools**, they are open to all children, don't charge tuition and don't have special entrance requirements.
- They offer **innovative education programs** (focus on a specific approach to instruction or a specific academic area, longer school day/year, unique teacher training or techniques, etc) to improve student performance.
- Public charter schools are required to **meet all state and federal education standards**. They are judged on how well they meet student achievement goals established by their charter contracts.
- Numbers have **increased**: 67% are independently run non-profit single-site schools, 20% are run by non-profit organizations that run more than one charter school, and just under 13% are run by for-profit companies. However, less than 5% of students nationally are in charter schools.



Education Policy: Charter Schools

- **pro-charter arguments:**
 - Charter schools break the monopoly exercised by centralized school boards and allow students as well as parents to exercise choice.
 - Charters are allowed the freedom to be more innovative while being held accountable for advancing student achievement: freer to choose what to teach, what to spend money on and whom to hire (adjust curriculum to meet student needs, create a unique school culture, develop next-generation learning models, etc).
 - A higher percentage of charter students are accepted into college.



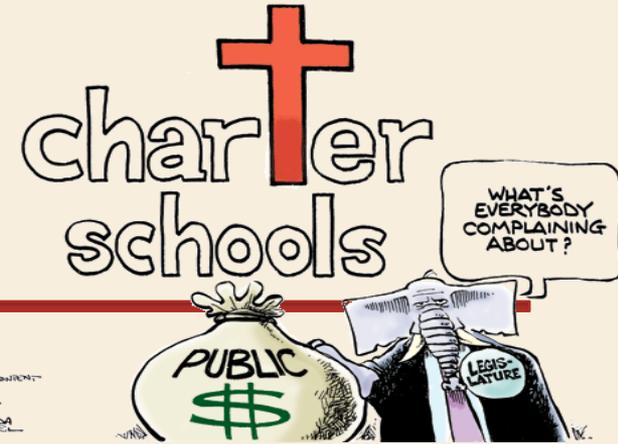


Education Policy: Charter Schools

- **anti-charter arguments** (often come from teachers unions):
 - Charter schools hire under-qualified **teachers**.
 - A number of private **for-profit** education companies have had questionable practices. There are far too many are cash cows, seen by hedge fund managers as prime ground for investment opportunities. The industry is rife with fraud and corruption and it's hard to get rid of the bad charters.
 - They have **mixed results in testing**. Research into student progress on math tests concluded that 17% were superior to traditional public schools, 37% were worse than public schools and the remaining 46% had academic gains no different from that of public schools.
 - Because they compete to get higher test scores than regular public schools, they have an **incentive to avoid students** who might pull down their scores. Some charter schools “counsel out” or expel students just before state testing day. Some have high attrition rates, especially among lower-performing students.



Education Policy: Charter Schools



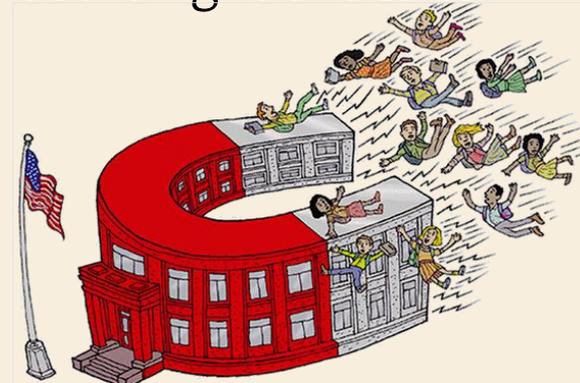
- anti-charter arguments:

- Even the best-funded charters, with the finest services, can't completely negate the effects of **poverty**. Becoming a charter is no guarantee that a school serving a tough neighborhood will produce educational miracles.
 - SEED charter boarding school in Washington DC has remarkable rates of graduation and college acceptance but SEED spends \$35,000 *per student*.
- Charters contribute to a trend toward **re-segregation** in public education.
- They **drain resources from struggling districts** and even lead to closing traditional public schools.
- Despite the hype, there is a **lack of innovation** in charters.
- Many charters are religiously-based, which means that the charter school concept is really a back-door way of financing faith-based education with public tax money.



Education Policy: Magnet Schools / Programs

- Magnet schools emphasize instruction in **particular areas** (science, math, language, etc) with **diversity** as an explicit purpose in an effort to improve quality and attract students. There are magnet schools at the elementary, middle and high school levels.
- Magnet schools are free **public schools** that can be highly competitive and highly selective. They're renowned for their special programs, high academic standards and commitment to diversity.
- Students who apply to these schools may go through a rigorous testing and application process. Some magnet schools have boarding facilities to allow students from other communities to attend.



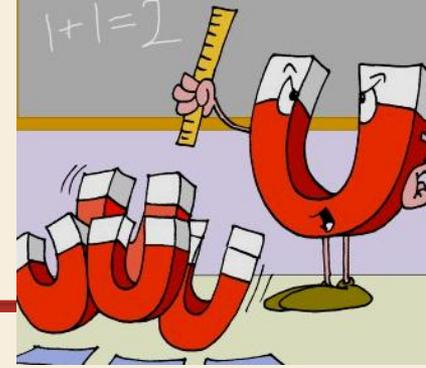


Education Policy: Magnet Schools / Programs

- Some magnet schools are established by school districts and draw only from the district, while others are set up by state governments and may draw from multiple districts. Other magnet programs are within normal schools, schools within a school. In large urban areas, several magnet schools with different specializations may be combined into a single center, such as Skyline High School in Dallas.
- Magnet schools were first launched in the 1970s to help desegregate public school systems by encouraging children to attend schools outside their neighborhoods. **Student diversity** is still an explicit goal of most magnet schools. Access to **free transportation** is a key component in facilitating racial diversity in magnet schools.
- Currently, there are more than 4,000 magnet programs in the US, with over 1.5 million children enrolled.



Education Policy: Magnet Schools / Programs



- **pro-magnet arguments:**
 - Racial and economic segregation is one of the biggest obstacles when it comes to student achievement and magnets' mission is **desegregation**.
 - Teachers in these programs are provided with specialized training and have increased retention rates.
 - Magnets have lower dropout rates, less absenteeism and higher scores on state tests.
 - Students, teachers and parents who participate in magnet programs are more engaged in the educational community of their new schools.
 - Students of color in magnet programs feel closer to their white classmates, and white students report feeling closer to students of color.
 - Successfully encourage families to enroll their children in school zones outside of where they live, and thereby help desegregate public education.
 - Offer students the chance to achieve their full potential and give families a choice for their child's education.



Education Policy: Magnet Schools / Programs

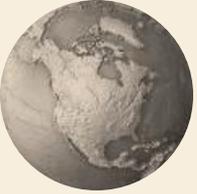
- **anti-magnet arguments:**
 - Magnets often hurt neighboring public schools by taking away their brightest students. Their exodus leaves the public zoned school academically disadvantaged.
 - The selection processes often keep children out who could benefit.
 - Low-income non-native English-speaking students and students with special needs can be underrepresented in magnet schools.
 - The selective admission criteria of magnet schools often act as a hurdle for students with failing grades or records of bad behavior or truancy who want to attend.
 - May not really be open to all students who need them.
 - Magnets draw resources from regular school programs and unfairly receive extra funds to operate.
 - Magnets encourage segregation of a different form (intelligence rather than race or wealth).



Education Policy: National Standards



- The federal government influences schools through **court** actions, some **funding**, and specific **programs** such as No Child Left Behind.
- In 2001, the Bush administration's **No Child Left Behind** (NCLB) program focused on creating **standards and accountability**.
 - Required testing in math and reading annually in grades 3-8 and once in high school. States set the standards and created their own tests. Goal was for all students to be at grade level by 2014.
 - Required data tracking and reporting on 4 categories: **low-income**, **race and ethnicity**, **students with disabilities** and **students with limited English proficiency**.
 - NCLB made **Minimum Competency Tests** (MCT) national policy.
 - Testing was used to measure whether states were making adequate annual progress overall and among the 4 groups. If not, supposed to face sanctions such as restructuring school, closing school, offering students choice of attending another school, etc.



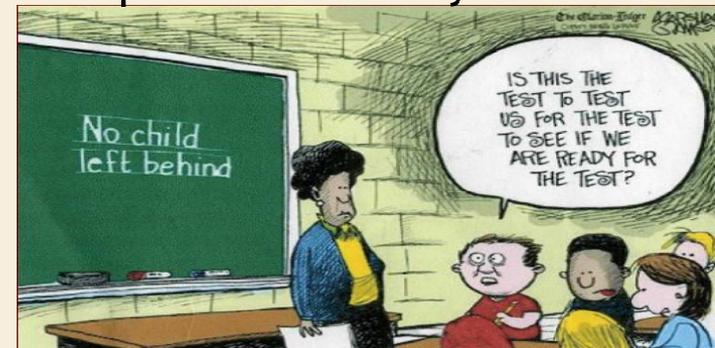
Education Policy: National Standards

- **pro-standards arguments:**
 - Provide information on student progress to improve instruction.
 - Create accountability.
- **anti-standards arguments:**
 - Problems resulted from states being allowed to structure their own tests and reduce standards to make them easier to pass.
 - Teachers teach to the test as the only measure of success and so hurt other areas of the curriculum outside of math and reading.
 - Teach test-taking techniques instead of critical thinking.
 - Contribute to dropout rate.
 - Teaching becomes mechanical instead of creative.



Education Policy: National Standards

- anti-standards arguments:
 - **high stakes tests**: (1) required for promotion and graduation, (2) teacher tenure, salary increase or merit pay tied to performance on these tests, (3) can determine school's continued existence, (4) required for national share of educational spending
 - **MCTs** (TAKS, for example) were created to add value to high school diplomas and are used for student promotion, diagnostics, assessment of local instruction, etc but are biased based on culture/race and do not measure skills.
 - NCLB was **underfunded** so even if schools met requirements they often had nothing to show for it ... bait and switch.



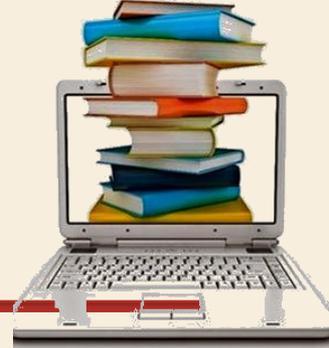


Education Policy: Online Education

- Online public schools are like traditional schools in that they don't charge tuition, serve students in grades K-12, use state-certified teachers, follow state requirements for standards and assessments, and result in a high school diploma.
- Online schools are virtual classes a student takes from home. The classes are taught by teachers through Internet and computer programs.
- Nationally, only about 2% of all students do some form of online learning but it is now one of the **fastest growing areas of education**, expanding by 30% per year.
- A **US Department of Education report** found that online classes for kindergarten through 12th grade students showed better student performance, more time on task, effectiveness across different content and learner types, student achievement was “as good or better than” traditional face-to-face instruction, and a better use of taxpayer dollars.



Education Policy: Online Education

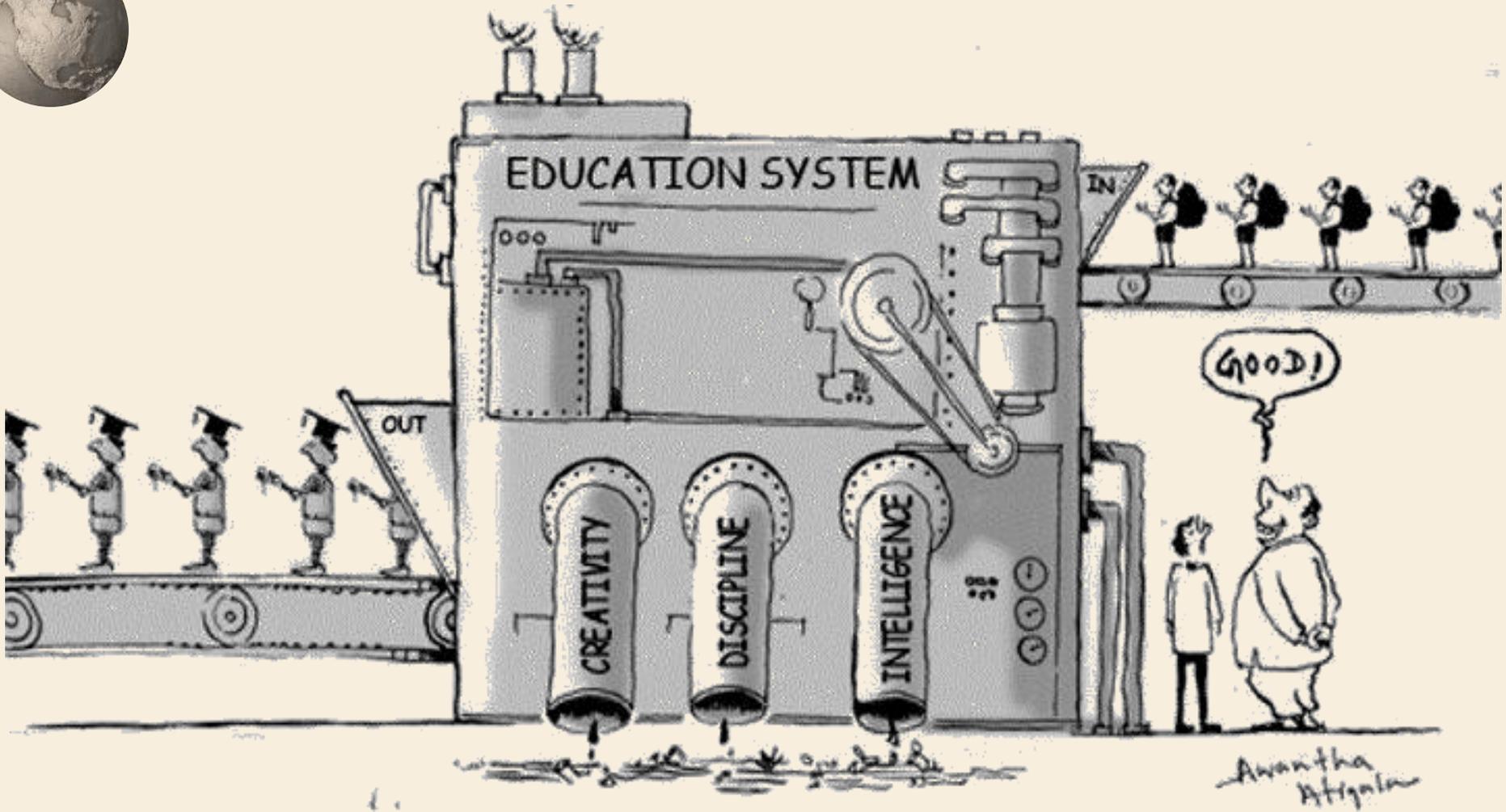


- An **MIT study** found that the amount learned in online classes is greater than in traditional lecture-based classes, and the amount learned is no different regardless of whether a student is well- or poorly-prepared. They all showed the same level of increase.
- **pro-online arguments:**
 - Students receive an individualized education and personalized, one-to-one support.
 - Allows students to learn individually and at their own pace. It allows the most talented and gifted students to move fast and the struggling students to take the time they need to before moving on.
 - Students receive one-to-one support by school staff.
 - Most K-12 online learning incorporates interaction, active learning, personal attention, family involvement, field trips with other students and teachers, etc into its curriculum.
 - Online education is inexpensive, convenient and flexible.



Education Policy: Online Education

- **anti-online arguments:**
 - Online education has little socialization, discussion in the classroom or personal interaction.
 - Using taxpayer dollars to fund online education is a concern for those worried about the current lack of public school funding.
 - Online learning doesn't work for all students. Bright, highly motivated students may thrive, while those who struggled in ordinary schools may continue to struggle online.
 - Parental involvement matters. Parents must help facilitate their children's learning, especially in the lower grades, and many can't or won't.
 - Many parents reported technical issues and a lack of support.
 - Online education is much more time-consuming than necessary.
 - Not all online curriculum is aligned with state learning standards.
 - The current oversight policies in place may not be sufficient for online schools.



Continued in
National Domestic Policy Part IV