

Quest Paper Final Draft

Pluralism in Education: Varied Pathways to Productive Employment **Quest topic for 2025, April 4th**

Pluralism in Education: Varied Pathways to Productive Employment, is this assigned Quest topic. Pluralism, tightly defined, is a system in which two or more different states or principles coexist. For purposes of pluralism in education, this is not a discussion of school choice, that is public, private, or parochial, but instead the incorporation of a menu of factors such as diverse curriculum, more educational opportunities in the Arts, vocational experiences, collaborative pedagogy, critical thinking, respect for differences, equal opportunity and certification based on credits for experience.

For clarity, I'll announce my editing assumptions and biases for this paper as follows:

- The most important time in education is 0 to 5 years, followed by K-12.
- Pluralism is most critical in the long stretch of time between K-12, and that period will be my focus.
- College and University training is very specific to the student and may be helpful, or not, as statistics to follow will show.
- I'm aware of, will comment on, but will not focus on costs and the alarming specter of Artificial Intelligence.
- Sources are in the digital paper but won't be read.

This title suggests that a primary reason for education may be to get a job, and that may often be the case. But society seems to want more. In fact, if education writ large, were humming along smoothly, we'd hear little discussion. Thus, when voices in one's head whisper: "Doesn't the system already prepare students for jobs? Is there a problem here?"

That the topic choice is prescient, is evidenced by seeming conflicts between the March 4th Journal Gazette and the March 3rd Wall Street Journal. The Wall Street Journal had this front-page header just below the fold: "Schools Revive Shop Class," with a sub head: "Hands-on-skills stage comeback, driven by college costs, demand for choices." Inside, the article took all of page seven. The Journal Gazette featured a report from the Indiana Commission for Higher Education addressing what they termed a "worrisome," stagnant 53% college-going rate and 68% overall college completion rate, with women enrolling in college over men by 59% versus 46%." These trends are linked and conflicting, and college faculties are properly concerned that the small college closure rate was one per week in the first half of 2024.

Here are selected clip-quotes from the Wall Street Journal about more shop classes:

- "With higher-education costs soaring and white-collar workers under threat by generative Alternative Intelligence, the timing couldn't be better."
- "We want kids going to college to feel these courses fit on their transcripts along with Advanced Placement and honors."

- Stigma to Vocational Studies? “I’ve not met a single person who looked down on someone (who is) doing trades . . .these are secure jobs.”
- “. . . roughly half of college graduates end up in jobs where college degrees are not needed.” ([degrees aren’t needed](#)) according to a 2024 analysis of 10 million resumes from the Burning Glass and Lightcast Institutes.
- “Experienced employees are hard to find . . .you can pretty much write your own ticket. . .”

Note the assumption is not “college for all.” This fits with reports from the Pew Foundation Research that: only 22% of Americans believe most people can afford college; Almost one third of Americans do not believe that a college education is worth the cost and 47% believe it is worth it only if they don’t have to take out loans. Only 5% think higher education provides excellent value for money. “Is it worth it,” asks Pew? “Yes, but not for everyone,” they say, as they cite costs, student debt and job rewards.

- <https://www.universityworldnews.com/post.php?story=20240531153022807>

Proper understanding of these trends requires both history---“did education ever provide this function?” ---and background---“what changed within education, within our society and culture?” What employee skills do employers seek to achieve productive employment? At baseline, employers expect basic math, reading and writing, and some may need digital and data literacy relevant to their industry. Other technical skills come from the students’ choices of study or new skills taught by the employer. Artificial Intelligence, that is Chatgpt, provided the following list of needed employee skills, surprisingly placing soft skills above technical skills. The AI-generated, list includes adaptability, communication skills, problem-solving, critical thinking, managing emotions, initiative, meeting deadlines and working collaboratively. The absence of some will insure job failure. A pediatric psychiatrist was once asked: “When does a child develop a sense of irony?” After nearly an hour, she returned to answer: “Some people never do.” Such is the case with many soft skills, and that deficit becomes the ceiling for job success.

Productive employment in a job is one issue, but only one, and before we tackle varied pathways, we should first review, as briefly as possible, the state of public education. It is challenged and too often chaotic. As Godfather Marlon Brando said to the famous gathering of Mafia crime families: “How did things ever get so far? I don’t know. It was so unfortunate. . .so unnecessary . . .” When did we have a system that worked, and when was it changed? And, why?

It is 2025 in the USA. Controversy would be rare if Arab Madrassas, Jesuit schools, Private schools, public schools and Home Schooling produced the same outcomes. But there are important differences. Both Legacy media and social media are shrill critics of public education, and what were once accepted as common goals, are too often framed in accusatory terms such as “dumbed down,” or as “indoctrination instead of education.” Will more emphasis on jobs silence the complaints? Or does college prep remain the goal as suggested by the Indiana Higher Education Commission? The following studies provide insight.

- From Pew Research, April 2024: 51% of Americans say public K-12 education is going in the wrong direction---not enough time on academic subjects, reading, math, science and social studies (69%). Too much politics and personal ideology. Only 16% said the direction was right. 32% unsure. Parents and non-parents agreed. Political differences: Republican-leaning 65% wrong/Democrat-leaning 40% wrong direction.
- The Congressionally created, National Assessment of Educational Progress statistics (NAEP 2024) results, say that only 67% of 8th graders achieved basic reading skills the lowest ever. The trend began prior to the pandemic in both grades 4 and 8, and scores are 5 points lower than 2019. The 2024, 4th grade---city, suburban and rural, result showed 40% were below Basic Proficiency. <https://ignite-reading.com/insights/naep-reading-test-results/>
- TIMSS, of the International Association for the Evaluation of Educational Achievement, IEA, measures international mathematics achievement grades 4 and 8: the average mathematics scores for U.S. 4th and 8th graders in 2023 reverted to levels last seen in 1995, effectively erasing nearly three decades of progress.
- A Pew survey of public K-12 teachers found that 82% say the system is going in the wrong direction citing political climate and COVID (60%). https://www.perplexity.ai/search/2024-naep-assessment-is-that-o-2MNQUwJIRKWTG_vXj5Mkww
- Both teachers and parents cited bad behavior and discipline, crowded classrooms, lack of basic skills, underfunding (51%) and mental health problems.
- Teachers expect education to worsen within the next 5 years; worse 53% against 20% better.
- Safety: Pew Research: A majority of students fear a shooting could happen in their school. 82% of low-income parents share this concern vs. 53% of those with higher incomes.
- Teachers cite too much influence from parents; parents cite excess ideology from teachers.
- Enrollments are down by 12 million since 2020 with more declines to come. In most developed countries the total fertility rate is below the replacement level of 2.1.
- Causes of K-12 public schools enrollment decrease: About 50% from declining birth rate---20% to private schools, and 20% were lost to home schooling. From 2019 to 2022 home schooling rose 51% to 4.3 million. (Stanford research, T.Deer)
- School absenteeism is 75% higher than pre-COVID levels
- The national graduation rate for four-year high school is about 87%

- Bureaucratic constraints dampen teacher creativity
- Plus, disagreement on Core Curriculum: pointing to failure rate in the 3 Rs.

It's useful to start at the beginning. When did educational pathways best work to prepare students for jobs? Purists and those familiar with our colonial background will recall that the first North American schools were mainly for the wealthy and organized to train parsons and ministers for churches. They were also intended to create a citizenry that could govern or be governed. *Bible* study, the three R's and opportunities to work or apprentice were the main elements of colonial pluralism. The first public school is generally acknowledged to be the Boston Latin School founded in 1635 and attended by Sam Adams and John Hancock. That the problems of dropouts and discipline are not new is attested to by the fact that Sam Adams was once disciplined for not attending morning prayers and for drinking in public. Ben Franklin quit school at age ten to work in the family candle-making shop and apprenticed to his brother at age 12 in the printing trade. His work as printer in the U.S. and London allowed him much reading time to self-educate.

Going deeply into the past, to 356 B.C., recall that Alexander III of Macedon, Alexander the Great, had tutors who taught him mathematics, horseback riding and archery. At age 13, his father, King Philip II, hired Aristotle to teach him and other youths at the Temple of the Nymphs, where the curriculum included philosophy, medicine, morals, logic, art, politics, science and religion. Aristotle fostered a keen interest in scientific inquiry and introduced him to the works of Homer and other poets. Alexander became king at age 20. The rest is history.

Through history there are more stories of eclectic pathways in education, citing George Washington, born 1732 and Abraham Lincoln, born 1809. They were in many ways alike having had limited formal educations. Washington's Father died when he was eleven, leaving him to help on the family farm and to learn through reading. He also worked on 190 land surveys from age seventeen to age twenty. Abraham Lincoln attended several "ABC schools" taught by neighbors, but his formal schooling totaled about a year. He read borrowed books, among them the *Bible* and Shakespeare, a biography of George Washington and Grimshaw's *History of the United States*. He also later read law and passed the Illinois bar exam.

Stories, this last one personal, serves to illustrate the results of an earlier, non-governmental organic pluralism, that served both students and the needs of the State. My Grandfather, William Horatius Cast, often called Billy, was born in 1865 and, when his mother died; he left home at aged twelve to work on his sister's farm, quitting school at the eighth grade. Later, after buying a small plot of poor, clay soil, he opened a tile factory to supply northwest Indiana where the 28,000-acre Beaver Lake was being drained and much of the region was under water for six months a year. The Swamp Act of 1852 had allowed those who drained the swamp to keep land for farming, and it was successful in reducing the lake to 10,000 acres. When he was approaching 50, his tile factory burned and, long story short, he bought into a bank where he became President until its closure during the bank panic of 1931. He had purchased about 900 acres of

land and returned to being a farmer until his death at age 82. Like those before him, he used reading and experience to adapt to enormous change.

Indiana's Industrial Revolution, from about 1880-1920s, obviously provided abundant opportunities and pathways to employment. A combination of classroom and workplace learning was the standard for over 2000 years. Compensatory advantages came from supportive families, overcoming hardship, and learning from experience. With basic skills, sufficient curiosity, a lifetime of reading, and a culture of opportunity, educational pluralism was circumstantial and largely self-determined. And the sky was the limit. If the very lean one-room schoolhouse once served the needs of student and State, what conditions changed? As different skill requirements grew, did other factors keep pace?

A question: Does a woeful ignorance of geography and history handicap citizenship and job success? A 2016 National Geographic study showed college-educated students (18-26 years old) averaged 55% in geographic literacy. The State of Indiana requires 6 credits covering history and government including the Federalist Papers and the Bill of Rights. That is not true in all states, with Ohio only requiring one-half credit in government and Michigan integrating civics into U.S. history without a standalone course. The answer is suggested by a quote from George Santayana: "Those who cannot remember the past are condemned to repeat it."

Here is a more recent education model, operating 315 years after Boston Latin. Hoosier education in the 1950s was the golden age of public-school vocational training, shortly following the end of World War II, it was common for many students K-12 to take shop class, home economics or career and technical education, today called CET courses. In 1950, 25% of secondary students were enrolled in full-time vocational studies, however that dropped to 19% by 1965. From the 50's into the 80's the federally encouraged idea of "tracking" or "laning" caught on as a response to social changes and a growing influx of immigrant children. Ability or perceived ability was used to assign students to different tracks with college-bound students taking advanced writing, math, history and science while those on a non-college track took more vocational training along with basic academic courses. However, social class and ethnic identity defined much of the result, and not surprisingly, the college track became more prestigious and vocational education acquired a stigma.

How about a State solution that gets the right student on the right path to the right job? That phrase has the proper ring to it. Here is the German model, a unique combination of rigor, vocational learning and individual development. German education demands compulsory full-time attendance through the secondary level. Students are sorted into different educational paths after grade 4 of primary school, called Grundschule. Students are then sorted into one of three secondary school paths: The lower level, Hauptschule emphasizes vocational training and the intermediate level, Realschule grade 5 through 11, prepares students for mid-level jobs or higher vocational schools, while Gymnasium, the more prestigious third channel takes grades 5 through Grade 12 to prepare students for university. Students' assignments are determined by the students' annual performance and the recommendation of teachers, not by a single test. However, parents may appeal the process. There are complexities, but simply stated,

Gymnasium students get a diploma, the dropout rate is 3%, and when graduating the students are somewhat ahead of our college freshmen as they head into higher education. There are ways for students to “escape” from their lower assignments. About 14% of lower school students upgrade to intermediate level, and Intermediate level students who do well may earn credits allowing them to go to a university or conservatory.

Would this system work in the United States? Even in Germany dissatisfaction is increasing. Immigration is creating more dropouts based on language differences, a teacher shortage exists at all levels, and the system produces growing, undesired socio-economic stratification. Most in the U.S. are critical of making the decision so early, and in all countries, girls’ brains mature earlier than boys. This is already exemplified in the U.S. by the fact that 87% of the Veterinary Medicine class at Purdue is female, largely based on grades.

And so, if the German, State assigned-track model is troubled and showing many of the same stresses as the U.S. system, what global complications affected both countries since the 1950’s? A few of us can recall the end of WWII and what followed: ---the Cold War, establishment of the U.N., Arab-Israel War, Independence in Africa---Asia---Caribbean, decolonization of French, British and Portuguese colonies, the Viet Nam war, widespread civil unrest with worker and student protests, and dissolution of the USSR with reunification of Germany. Nation change and immigration affected many populations.

The current U.S. trend is for more STEM in education, that is science, Technology, Engineering and Mathematics, disciplines that can foster critical thinking, creativity and technical skills. Vocational education is also a fertile ground for blending STEM with hands-on education as we have seen from Alexander the Great to the Twentieth Century. Simplistically, one can make the case that lack of hands-on education, fewer collaborative activities and the absence of vocational education have gone hand in hand with excessive computer and iPhone time to create isolation, emotional fragility, diminished soft skills, and failing educational outcomes.

Education takes place on student backgrounds of cultural difference that provide both compensatory advantage and a subtractive disadvantage. A school may have a fixed curriculum, the same for all students. One size can fit all if one unreservedly accepts different student outcomes. Instead, however, if one divides students by ability, then more optimal outcomes, albeit unequal, may be produced for each cohort. However, it will very likely promote social stratification and bring a need to confront and manage stigma. As to family background and ethnic values, either may support or easily destroy any and all efforts for success. Cultures change slowly, and data rarely changes feelings.

How has government intervened? The 1980 Refugee Act and subsequent changes in English as a Second Language (ESL) programs, along with increasingly multicultural curricula made for more complex classrooms and more difficult teacher education. Later, the 2001 No Child Left Behind Act. required annual standardized tests, school choice options, research-based instructional methods, and new labor intensive

“accountability systems,” and over-promised that “every child would read and do math at grade level by 2014. At a cost of billions of dollars and an estimated increase in a paperwork burden of nearly seven million hours per year, the impact of NCLB on test scores was modest in math with no measured effect on reading. Unfortunate gaming of the system resulted in exclusion of the neediest students and dropout rates increased among students of color. In highly segregated schools with over 90% of students of color, only 42% of freshmen advanced to grade 12. (Information from: The Civil Rights Project at Harvard University, et al) When computing cost to benefit ratio, No Child Left Behind has raised annual costs with minimal benefit.

In short, College was emphasized, and standards were aligned with post-secondary expectations. In 2015, Every Student Succeeds (ESS) replaced No Child Left, with a shift to more local and State decision making, but state plans must be submitted to the U.S. Department of Education. So-called “holistic” approaches have been found to be more difficult to monitor and to compare between schools and between States. And, accusations of “dumbing down” of classroom standards and teacher training requirements are still being debated a decade later.

What of civility, behavior and manners---basic discipline? “Can’t teachers control a classroom?” parents ask. “Not so fast,” teachers answer. One of George Washington’s books was the *Bible*, and another favorite, *The 110 Rules of Civility*, a book of French Jesuit origin dating to 1595 and translated in 1640 by Francis Hawkins, the 12-year-old son of a doctor. (Amazon Books, \$7.48 hardcover) George copied all 110 rules to his notebook by hand. The first rule of civility, from which came the rest, was “Every action done in company ought to be with some sign of respect to those that are present.” Historians point to Washington’s respect for that learning as critical to his leadership success.

Was a decline in school discipline a fault of family or society in general? Perhaps yes in part but ponder this. More “stuff” was added to education, often “bolted on,” mandated and monitored by government. Here are four court decisions, none were unanimous: *Tiner v. Des Moines*, *Goss v. Lopez*, *Wood v. Strickland*, and *Honig v. Doe*, all of which limited the disciplinary authority of public schools and teachers. In *Tinker*, 1969, the court declared only a student’s speech or behavior that *materially and substantially* disrupts school activities may be controlled. Justice Black dissented, as did Justice Harlan, writing that one doesn’t need to be a prophet to know that “after this Court’s holding today, some students will be ready, able, and willing to defy their teachers on practically all orders.” In *Goss*, 1975, in a 5-4 decision, education was *declared to be a property right* requiring teachers to provide students due process and evidence even for minor discipline. Again, in a 1975, 5-4 decision, the *Wood* decision raised the *personal liability standard* for the school and teachers, so that even when acting in good faith, unintentional violations of a student’s rights would support a “should have reasonably known,” personal liability lawsuit. In 1988, in *Honig*, a 6-2 Supreme Court majority applied procedural protections to disabled children, even dangerous ones, for example violent children with weapons. I need not go into the ever-broader recent interpretations of Title IX, and the uneven applications from school to school---to date not addressed by the Supreme Court--- that have resulted in campus kangaroo courts that attempt to

deny the accused an attorney. We see the results of CYA and lawyering up leading to bloated administrations and higher costs. Purdue paid a student \$237,000 for a flawed procedure in Doe v. Purdue.

The Question: the paper's title is, in effect, a question. "What are the varied pathways to productive employment? If we learn from the past, basic education through middle school will underpin many if not most jobs, as even some current Amish experience attests. Government is good at sending money but inefficient at providing services. Local control, nearer to the actual site of education seems preferable. Diversity is well defended as a necessary and valuable experience but note the irony that the more diverse we are, by definition, the less we have in common. Schools must implement ways to encourage students' feelings of belonging, because the concept of commonality, team spirit, and personal involvement create pride in one's school, company or city.

Lastly, a final statement of opinion. Varied educational pathways are made up of the same elements in different ratios, but no elements should be ignored. If one cannot hire Aristotle as a tutor, the next best thing is to blend proficiency in mathematics, writing and reading---that includes geography, history and biography---with vocational studies and team activities. Collaboration, highly desirable, may range from a group-cooked meal to wood shop, from a jazz quartet to a chess team, and from group contests with robots to a project building a dune buggy. The trend to STEM is good only if basic tools are mastered that allow one to handle inevitable change. Earlier estimates of "twelve job changes in a working lifetime" are now estimated at "over 15," and working at something you are good at," is a key to stability. The arts should not be neglected. Music, art, philosophy, religion, morals, and logic are more than preparation for a job or a fun college major. They foster vital soft skills, getting along well with people and, importantly, they make life worthwhile.

Words, 3876. Here's an estimate based on different speaking rates:

130 WPM 30 minutes

140 WPM 28 minutes

150 WPM 26 minute. Test rate is 150 to 164