Limits of Human Intelligence

Gerald E. Loeb, M.D., 1998-2017, summary of unpublished book-length treatment

Trashing the educational establishment because it doesn't produce enough clever graduates to run our increasingly complex society has become a national pastime. The fault lies not in our teachers but in ourselves, that we are animals.

Like any other animal species, humans have a genetically defined range of innate intelligence. This has not changed significantly in ~5000 years of civilization. Early civilizations developed by locating and optimizing the training of under-utilized talent. When there were vast numbers of intelligent but uneducated peasants, human intelligence looked like an unlimited resource. Now that industrialized societies are sending more than half of their populations into higher education, the student bodies can't be "all above average" (as at Lake Wobegon).

There are still lots of pockets of under-utilized intelligence in many societies: women, minorities, immigrants, malnourished children, etc. Like the oil industry, we may not have reached peak education, but we can expect to invest more in resource location and recovery while we get less in return. Recruiting our brightest college graduates into newer and more lucrative professions and then blaming the teaching profession for poor performance does not constitute an effective strategy. Our teachers are drawn from the same genetic intelligence pool as the rest of society, increasingly from the shallow end.

We should also think about using the limited resource of human intelligence more intelligently. Sophisticated technologies often convert simple tasks (tilling a field) into complex ones (programming a GPS-enabled robotic vehicle). Fortunately, sophisticated technologies will increasingly enable average humans to punch above their intelligence (Google searches, Wikipedia, spell-checkers, spreadsheets, templates, etc.), but only if they are carefully designed. Of course, all of these technologies entail large and rapid shifts in job markets, exactly the kind of thing that tends to disenfranchise those who are less well-endowed intellectually. Expect more unhappiness, and not just with schools and teachers.