

# Financial Literacy and the Curricularization of Knowledge

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## Abstract

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The chapter examines the notion of cumulative vs. noncumulative knowledge as it applies to the financial literacy. The ~~mass~~ public education programs may have a tendency to curricularize knowledge, which means shifting knowledge from cumulative, descriptive kinds closer to noncumulative or normative kind. When certain claims cross the border from cumulative, descriptive realm into the noncumulative, normative realm, they become vulnerable to rejection and may compromise large bodies of cumulative knowledge that support the normative claims. We should use the pragmatic and institutionalist epistemological thinking to prevent this from happening. We must know how institutions operate in the real world, and what are the likely unintended consequences of the curricularization of knowledge.

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## Keywords

Financial literacy

Cumulative and non-cumulative knowledge

Paranoid consciousness

## Are Financial Literacy Programs Effective?

Do financial literacy programs really affect people's behavior? Empirical evidence, insofar as it is at all compelling, tends to suggest a negative response to this question. For example, a meta-analysis of 137 papers (Fernandes et al. 2012) finds that "these interventions explain 0.1% of the variance in downstream financial behavior". The World Bank is one of the global champions of the financial literacy programs. Ironically, its own researchers had to conclude that "financial literacy and capability interventions can have a positive impact in some areas (e.g., increasing savings) but not in others (e.g., reducing loan defaults) (Miller et al. 2015)". 'Can have' is not necessarily a ringing endorsement, and the conclusion follows the meta-analysis of 188 papers on the subject. Yet, the World Bank member countries continue spending millions of dollars trying to affect how people make financial decisions.

This could have been a simple story of the foolish insistence on an ineffectual neoliberal agenda. However, the story is much, much more interesting than that. The story may tell us something about the paradoxes and dangers of contemporary education as such; the kind of massive, state-organized education with the broad agenda for social change. It is also a story of what happens to knowledge once it becomes curriculized. Without a doubt, mass education has been one of the major achievements of the global civilization over the last century. As all such achievements, this one has costs beyond the staggering monetary one. In this chapter, I will show that one of the unintended consequences of expanding education is expansion of the domain occupied by normative, noncumulative knowledge that may, in certain circumstances, lead to the spread of the paranoid consciousness. The hope to encourage more rational behavior through expanding curriculum may be misplaced. It becomes more misplaced with the rapid advent of social media and democratization of reasoning.

Why do policymakers so desperately want to make people behave more rationally with their finances? One does not need to look too far to understand. All financial crises, including such devastating one as that of 2007–2008, can be explained, in part, by irrational behavior of consumers of financial services. In the developing world, many obstacles to economic growth can be traced to **people's** inability to ~~make rational~~ economic decisions on investment, savings, and current consumption. Americans save too little, borrow and spend too much. **The Chinese** save too much, borrow and spend too little. Russians do not invest and refuse to take even the minimal risk with their money. If only people learned to be a little more rational, enlightened – the reasoning goes – all could have been different, and the global economy might have been spared the deep crises and enjoyed growth that is more robust.

Everyone involved understands the limits of financial education. After all, the investment bankers who invented and then sold the same derivatives repeatedly to different entities did not lack financial literacy skills. Quite the opposite, they are some of the most sophisticated financial minds. No one is calling for sending financial firms' executives to

a re-education camp; governments prefer to regulate rather than educate them. Yet where it comes to the population at large, governments want to educate it into rational economic beings all the same, because even small changes can, in theory, lead to significant consequences. The consumer confidence index is considered one of the major indicators of the overall economic health. Nevertheless, it is what it sounds like – the mood of many people. It is so intangible that the temptation to manipulate it through the available social policy instruments is almost irresistible.

Behavioral economists tell us that humans tend to choose poorly, often against their own interest (Kahneman and Tversky 1979). *Homo economicus* is shown to be fictional. Financial literacy is an attempt to change that, and therefore, to superimpose a norm on reality. To be fair, a norm ~~by~~ definition does not coincide with reality; it describes where we ought to be, and therefore it cannot describe where we are. Also to be fair, any education is ~~an attempt to~~ make something out of people that they are naturally not. It is always an imposition of an ideal on human beings. Without such an aim, education does not have a reason to exist. The problem I want to address is not about the intent of the financial literacy programs and not even of its efficacy. It is a case of the expansion of normative knowledge through the means of curriculum, which in turn is a likely consequence of the mass education as an instrument of social policy.

## The Noncumulative Knowledge: The Freewill Clause

In his 2007 encyclical letter, Pope Benedict XVI (Ratzinger) has laid out an epistemological theory of ethical and scientific knowledge made distinct by the principle of cumulativeness.

Let us ask once again: what may we hope? And what may we not hope? First of all, we must acknowledge that incremental progress is possible only in the material sphere. Here, amid our growing knowledge of the structure of matter and in the light of ever more advanced inventions, we clearly see continuous progress towards an ever greater mastery of nature. Yet in the field of ethical awareness and moral decision-making, there is no similar possibility of accumulation for the simple reason that man's freedom is always new and he must always make his decisions anew. (Benedict XVI 2007, 24)

The distinction between cumulative and noncumulative knowledge was probably first made by C. Brinton (1984), who described the difference between scientific knowledge and that in arts, literature, and philosophy. Brinton reminds that humans have achieved greater control of the nonhuman environment, but have not done much of a progress on human behavior. However, Benedict XVI had first explicitly applied the notion of noncumulative knowledge to ethics and gave an explanation to the root cause of the noncumulativity of certain knowledge: freedom. The argument is as simple as it is convincing:

These decisions can never simply be made for us in advance by others—if that were the case, we would no longer be free. Freedom presupposes that in fundamental decisions, every person and every generation is a new beginning. Naturally, new generations can build on the knowledge and experience of those who went before, and they can draw upon the moral treasury of the whole of humanity. But they can also reject it, because it can never be self-evident in the same way as material inventions. The moral treasury of humanity is not readily at hand like tools that we use; it is present as an appeal to freedom and a possibility for it (Benedict XVI 2007, 24).

We are not free to reject the cumulative knowledge of science, because it has the implied reliance on verifiable evidence. However, with ethics, the free will is not bound by the rules of evidence; otherwise, there is no free will. In effect, all normative knowledge is noncumulative, while descriptive (positive) knowledge is cumulative. The distinction becomes useful to us for the analysis of financial literacy education. Let us pick it up from here, for neither Brinton nor Benedict XVI seems to elaborate on the concept of noncumulativity.

## Curricularization

Benedict drew the border between cumulative and noncumulative knowledge between material and ethical knowledge. It worked just fine for the purpose of his letter, but it is not enough for my purpose. I will show how the borders between the two kinds of knowledge can be redrawn and how curriculum can be the bridge that allows for crossing.

Let us consider criteria on which the World Bank ranks countries on financial knowledge:

1. Percent of adults with understanding of inflation
2. Percent of adults with understanding of simple interest
3. Percent of adults with understanding of compound interests
4. Percent of adults who can think in real monetary values (money illusion)
5. Percent of adults correctly calculating a simple division
6. Percent of adults with basic numeracy skills (to identify better bargains)

And are the criteria for behavior and attitudes:

1. Budgeting: Making a plan for spending money and keeping to the plan
2. Not overspending: Not spending money on nonessentials or nonaffordable item

3. Living within means: Not borrowing more than affordable or for essentials
4. Choosing financial products: Having chosen the financial product on his/her own
5. Attitude towards the future: Focusing on the future rather than on today
6. Nonimpulsiveness: Not being impulsive (The World Bank 2016)

What kinds of knowledge do these two lists represent? The first one is clearly descriptive and cumulative. Indeed, we know what inflation is, and there is little normativity about that knowledge. Inflation can be good for you if you are obtaining a mortgage. On one hand, a sudden jump in inflation rate can allow you to pay off your mortgage much sooner than otherwise would be possible. On the other hand, it can be bad for you if you are an investor. Before investing into a business, you would have to make sure its profits are higher than the inflation rates. We know that double-digit inflation is generally bad for country's development, because it deters investment, but very low inflation or deflation also deters investment. Those are all more or less descriptive and cumulative claims, which can be fine-tuned or even eventually disproven, but do not require an act of free will or an ethical choice to accept or reject.

However, in the second list we see the signs of implied normativity. The claims are not in the explicitly normative form yet, but normativity is easy to deduce. You *should* make a spending plan and stick to it, without splurging beyond your means. You *should* not borrow too much. You *should* think about your financial future. This is an example of the new quasi-morality, the new and expanding normativity. In the educational discourse one may find other instances of the same phenomenon: Thou shall eat healthy food, thou shall recycle and care for the environment. Thou shall be tolerant and accepting to people from other cultures and with disabilities. In some cases, the new commandments simply did not exist in the old religious and ethical systems, but in some cases they directly challenge and attempt to replace them. For example, Jesus has directly argued against financial literacy "Therefore I tell you, do not worry about your life, what you will eat or drink; or about your body, what you will wear" (Matthew 6:25–34). The Quran contains explicit prohibition against charging interest, which presents a problem for contemporary market economy. The conflict resulted in the entirely new ethical system of Islamic finance. Of course, in still other cases, the new commandments simply restate, expand, or reinterpret the old ones (tolerance is the prime example here). Together, they constitute the new canvas of normative claims, in complex relationship with each other.

It is very important to note that the two World Bank lists are not independent of one another. They are connected as means and ends. We teach people about inflation in hope that the descriptive knowledge *becomes* the normative, that people will learn to choose financial services wisely because they understand what is inflation and can calculate

simple and compound interest. The descriptive should lead to the normative, make the latter easier to accept. Of course, there is nothing automatic in transition from the former to the latter. One can calculate well and still take huge gambles. One can argue that any normative, noncumulative knowledge depends on certain descriptive, cumulative knowledge. For example, to choose not to harm other people, a child first learns that hitting or biting someone else hurts.

The distinction between the normative and the descriptive is not absolute, and the border is penetrable. For example, we may teach school kids to count to ten as a part of anger management program. It is an attempt to support the ethical knowledge (rejection of violence) with regular descriptive knowledge about a certain technique. Of course, a child still has the free will and can choose not to use the technique and resort to violence. Moreover, the lack of knowledge about the counting to ten technique can also limit the free will of the child, unable to cope with his or her emotions. Therefore, the distinction is not always clear, but the connection between the two kinds of knowledge does seem to exist. Cumulative knowledge is necessary, but not sufficient condition for noncumulative knowledge.

The practice of education is not homogenous in this respect: in some areas, we simply give people descriptive knowledge without a clear normative aim. For example, we teach someone to solve quadratic equations with only the broadest hope that it will help one to become a productive member of the society. However, in other areas, the normativity cannot be plausibly separated from descriptivity. For example, history curriculum is impossible to take out the patriotism vs. multiculturalism value divide. Financial literacy education seems to be a case where we actually have a choice – to keep it completely descriptive, and more or less stick to the first list, or expand it to include the second list. This makes it an interesting case. Financial literacy education is not as objective as math, and yet not as value-saturated as history. It is in between and can go either way.

In the pragmatic sense, we may **not** have much of a choice on the matter. Any expensive intervention needs to be evaluated. **Such a** condition makes the expansion of normativity almost inevitable, or at least, very difficult to resist. Could the World Bank simply stick to the first list of criteria? I theory yes, but in practice its member countries want evidence of real change in people's behavior. Otherwise, competing demands for funding will easily win the attention. The demands for accountability will make educators lean toward normativity, because descriptive knowledge itself does not change behavior. Only normative, noncumulative knowledge moves and motivates. If I am evaluated by how much people in my care change, I will definitely try to change those people. Therefore, I will tell them what I want them to do, and thus present a normative claim. Just presenting facts does not seem ever enough. As a clever educator, I can hide my real intentions really well. However, as long as I remain an educator, I have aims about my students, and denial of my aims is nothing but a sophisticated manipulation. In one way or another, I will have ethical or quasi-ethical commandments up my sleeve.

In general, epistemology is not independent of funding. This may sound odd, but it is simply an extension of pragmatist thinking. The ways of socially mediated knowing have direct effect on truth claims. Much of epistemology has evolved from the model of an **independently wealthy** gentleman thinking, not burdened by the way social institutions and economies operate. In that mode of thinking, justified true belief may be perceived as not dependent on the availability of pecuniary resources. Yet embeddedness in massive (and therefore expensive) educational practices requires that the knowledge has impact. Cost drives accountability, and accountability, in turn, drives the drift toward normativity of knowledge. First, we try to measure whether education programs have effect. Next, we reshape programs in such a way that behavioral change becomes the direct aim of education.

The scope of this chapter does not allow developing a full argument on pragmatist epistemology in its interactions with the institutionalist thought. To get a sample of such an argument one may consider Shane Ralston's (2010) work. My position is very simple: institutions such as education do affect the characteristics of knowledge that is embedded in them. In our particular case, the institute of education seems to facilitate the drift of cumulative, descriptive knowledge toward noncumulative normative knowledge.

I will borrow a useful term 'curricularization' coined by Reijo Kupiainen. He describes a Finnish Children and Media Program that attempts to "map the required developments in children's media environment and to promote media education and media education projects. Most of these projects have been implemented outside school". He calls this "some kind of curricularization of leisure and everyday life" (Kupiainen2010, 337). He pointed out only to the phenomenon of education 'seeping' into nonschool environments. I think, however, that the phenomenon is larger and includes the reverse flow of certain subject matters from noneducational to educational setting. Curricularization is shifting certain kinds of knowledge from the cumulative to noncumulative realm through the means of expanding curriculum.

## The Paradox of Cumulativity

When we pull knowledge from the descriptive into the normative, the intent is to increase its potency as a regulator of human behavior. Again, intervention programs seek to demonstrate their impact. However, the unintended effect is that with normativity knowledge also acquires another quality of noncumulativity. It triggers the free will clause and its acceptance becomes a matter of choice. In our attempts to increase the effect of such knowledge, we in fact *reduce* such effect. It is almost as if trying too hard in education has the opposite effect. It is one thing to teach someone about the differences between simple and compound interest and ignore how one uses this knowledge. It is quite another thing to teach someone to avoid high risks and put away some money for retirement. Suddenly, the knowledge loses all the potency of evidentiary support and

becomes a matter of personal choice. Knowledge becomes belief. Beliefs may be strong because they can move us, but they are also always weak because we do not have to accept them.

Choice is a powerful instinct, with its own built-in immune system, capable of radical reframing of any question. Any direct or implied 'you should' statement is interpreted as an attack on one's freedom of choice. Once a claim is presented in a normative form, a person will measure it up not so much against the evidence, as against one's own desires and other beliefs.

In other words, normative claims will evoke an entirely different reference system, and make it overall less likely that the person will behave in accordance with the claim. It is also complicated with desires. How do we know what we want? Most people, especially young people do not know exactly what they want. We do not have access to knowledge about our desires independent of prior similar experiences. A young person presented with a choice through a normative claim has very little knowledge of oneself to go on. That creates a situation of random choices that lock a person into a position. Moreover, once I make a choice within certain system of beliefs, it will predict my future choices, because of the drive for the internal consistency.

For a Christian who takes Jesus' call for not caring about the future literally, any new claims encouraging him or her to save and to consider personal financial future will make very little impact. One danger of curricularization is the conflict with normativity in other domains. The broader an array of normative claims, the more likely they are to conflict with each other; this is simply a matter of probability.

However, the further problem is that shifting knowledge into the normative, noncumulative domain has the domino effect on all the descriptive knowledge associated with that area of normative knowledge. In other words, noncumulativity is contagious. It devalues evidence all the way down. Consider the case of climate change denial. Presented with a normative claim (thou shall reduce emissions), a part of the population will inevitably reject it. In fact, it is clear that many climate change deniers dislike the stated or implied solutions much more than the facts supporting the claim. It is the slowing down of economic growth that they hate, not the statistics on weather patterns. The refusal to accept the choice at the end of reasoning provokes people to rationalize their refusal by questioning the beginning and the middle of the reasoning chain.

Where it is a matter of choice, the multiplicity of outcomes makes it inevitable. It is so not only because of the natural variations within the population. The very fact that you have chosen A makes me more likely to choose B, because I am a different person and I value my identity as distinct from yours. So, there will be a group of people who reject the notion of global warming, even to be different from those who accept it. To justify their choice, they have no choice but question the host of descriptive claims that support the

normative one. In their eyes, the painstakingly accumulated descriptive knowledge of climate change will become invalidated. We make normative choices first and accumulate evidence to support them later. To invalidate evidence, one seeks new evidence of bias or conspiracy those who find and present the evidence on climate change. This is another example of the pragmatist and institutionalist thinking. Indeed, some epistemologists will argue that nothing like this should happen. If we have hard, verifiable fact, it would make the adoption of the justifiable belief easier. I am, however, trying to show the opposite: the acceptance of belief is in reality an action independent of the evidentiary foundation. It, in turn, corrupts the evidentiary base. We philosophers may not wish it to be so, but if we wish to remain relevant, we have to acknowledge the reality. We must see how the paranoid consciousness is born and sustained.

## The Rise of the Paranoid Consciousness

In an influential *Harpers* essay, historian Richard Hofstadter (1964) paints a broad historical picture of what he calls ‘the paranoid style’ in American Politics. Apparently, it has been around for a long time, before the American Right has appropriated it. He cites the panic about Bavarian Illuminati, the anti-Masons, the anti-Catholics (and anti-Jesuits especially), the populists, the alarmists about Mormons, the White Citizens’ Councils, and Black Muslims. Hofstadter names three beliefs of the right-wing thought contemporary to him: in conspiracy culminating with the New Deal, in Communist infiltration into the American government, and in the network of agents in mass media, education, religion, undermining the American will to resist.

Today’s contemporary paranoid theories may be less grandiose; they are more fluid, and perhaps shallower but broader. Hofstadter described the fringes of American politics, but now the paranoid consciousness has moved toward the very center of it, capturing the highest office in the USA and threatening to do so in several European countries. It is happening, in part, because instead of one big, coherent conspiracy, we deal with many small, vague, incoherent, yet still clearly related to each other beliefs: that liberals are somehow out to weaken America, that Hillary Clinton has committed treason, that global warming is a Chinese hoax, that Obama is a Muslim born in Africa, that vaccination brings autism, that Orlando shooting was staged, that the Twin towers were blown up by FBI, etc. We have no objective way of measuring either the depth or the breadth of the paranoid thinking, but it is fairly obviously not in retreat. Why is that? We live in the most educated societies ever, with secondary education becoming universal, and higher education undergoing a new wave of massification. The populace has never been as educated, but it is no less paranoid.

What interests me in Hofstadter theory is the relationship between the paranoid consciousness and education. His own hypothesis is partly psychoanalytic and partly epistemological. I will not argue with the psychoanalytic part, but the epistemological

argument is flawed. He claims “They see only the consequences of power—and this through distorting lenses—and have no chance to observe its actual machinery”. In other words, making politics more explicit and allowing more groups access to politics would help. That is obviously wrong, for many of the contemporary paranoiacs are in the legislative bodies or close to them. They know how politics is made.

Hofstadter believes the paranoid ‘resists enlightenment’, and that by implication, more enlightenment would help. But that claim clearly contradicts his own observation:

The higher paranoid scholarship is nothing if not coherent—in fact the paranoid mind  
Paranoid consciousness

is far more coherent than the real world. It is nothing if not scholarly in technique.

McCarthy’s 96-page pamphlet, *McCarthyism*, contains no less than 313 footnote references, and Mr. Welch’s incredible assault on Eisenhower, *The Politician*, has one hundred pages of bibliography and notes. The entire right-wing movement of our time is a parade of experts, study groups, monographs, footnotes, and bibliographies. (Hofstadter 1964)

The paranoid mind is nothing if not enlightened. It analyzes commonly available claims, employs critical thinking, seeks evidence, evaluates it according its own standards, and makes own conclusions based on that evidence. In other words, the paranoid mind is exactly what we want an educated person to be. No, the paranoid is not uneducated. If you have a reason to doubt, please check any of the major conspiracy sites and forums. You will find there massive depositories of evidence, of irrefutable arguments and unassailable logic. If you go bottom up, from basic facts to conclusions, these piles of evidence and argument are very weak. If you look from the tops down, from conclusions to evidence – they are very strong. To build these massive towers of paranoid knowledge, one needs educated authors and readers. Education, if not careful, may provide the building blocks for these towers.

I believe that the recent perceived widening of the paranoid consciousness across much of the world can at least partially be explained by the creeping curricularization of knowledge. Or, to put it differently, the large-scale public education agenda had led to appearance of many more quasi-ethical constructs, which in turn devalued the evidentiary, cumulative knowledge. While the populist backlash is obvious, its mechanisms are poorly understood. I think the epistemological mechanism of the paranoid consciousness is close to what I have described as the curricularization.

Education may trigger paranoid consciousness. Teaching people to look for evidence and apply critical thinking can actually make their conspiracy theories stronger and their paranoid beliefs firmer. Those who believe that the answer to the paranoid consciousness is simply more education may be mistaken. Education itself may be a partial culprit here, because its natural tendency is to curricularize knowledge unintentionally reduces the realm

of cumulative knowledge. Specifically, financial literacy education may actually damage the cause of the rational financial behavior, because it presented its content as normative claims, and thus triggered resistance.

The consequences of paranoid consciousness are serious. They may not affect education itself that much, but in the political realm, these consequences wreak havoc. The always quite narrow field of mutually comprehensible rational political discourse may become even narrower. Representatives of different political parties become trained in rejecting the pillars of evidence, supporting normative claims significant for the other party. What used to be descriptive statements in need of further evidence are gradually becoming articles of faith. Consider, for example: ‘The government is too big’, or ‘We must cut taxes’, or ‘Education is a civil right’, or ‘Poverty can be reduced through education’. Fifty years ago these might have been simply hypotheses, mostly in the realm of the descriptive, cumulative knowledge. Now the same statements firmly belong to the realm of the normative, the noncumulative ethical knowledge. They no longer require support, and if evidence for or against them is presented, the opposing political side will turn on the conspiracy theory thinking to destroy the uncomfortable evidence. I could never imagine myself writing this, but here we go: education can be a threat to democracy. It is not the only, but an important, contributor to the curricularization of knowledge.

## The Curricularization Hygiene

Obviously, this does not mean that all education always produces the expansion of normative knowledge. It is this particular historical form of publicly funded, socially constructed education that tends to do that. Just because certain drug has side effects does not mean it should not be taken. Similarly, the many great public and private benefits of mass education are simply beyond doubt. The economic benefits of educated populace alone make the thought of reducing the scale of education unthinkable. However, it would be prudent to consider the down side.

Unfortunately, this is not the first time the humanity is making the error. All world religions have experienced the same or similar problem. They created large sets of normative knowledge in hope of influencing people’s behavior. The larger the set, the more the free will clause, formulated by Benedict XVI, is applicable. They inadvertently have made knowledge more questionable, more arbitrary, and stopped its accumulation. As a consequence, all universalist religions first suffered endless splintering, and loss of relevance in significant parts of the developed world. The temptation of curricularization is difficult to resist.

What are possible ways of containing the curricularization of knowledge? The problem I point to is implicitly understood in the so-called social norms approach (Berkowitz 2004). Although somewhat controversial, the approach influences human behavior by presenting knowledge in strictly non-normative forms. For example, most university freshmen

overestimate the percentage of their classmates that engage in binge drinking. The approach is simply to tell the objective truth: only a very small portion of other freshmen drink in binges. However, the approach simply does not work when the majority of the population is in error. For example, prior to 2008, a very large group of Americans thought that real estate markets could go only up, and bought houses and second houses at inflated rates and with unsustainable mortgages. Those who saw the danger of the situation could not resort to pointing out at the majority's behavior, because the majority was wrong. The social norms approach, even if it works, presents a limited solution. And it highlights another side of the same dilemma: the descriptive knowledge is not powerful enough to influence behavior.

No matter how tempting, education is a pretty poor instrument of public policy. It cannot nudge people's behavior in any meaningful sense. Let us consider the financial crisis of 2007–2008. As the reader might guess by now, I do not believe education could have prevented it. If someone before 2007 tried to do the financial literacy intervention with certain normative emphasis, it would trigger the noncumulative contagion and, potentially, the paranoid consciousness. "They are saying these things because they want to keep all the money to themselves". In other words, credibility of such a program would be damaged and unintended consequences result. No financial literacy program would have made any difference. To the contrary, it might have made it worse.

However, in the example above, an early intervention by regulators could possibly have deflated the housing bubble or at least soften its bursting. The US Federal Government could have tightened requirements for lending and limited the sales of derivatives. Of course, regulation is also an imperfect policy instrument, for if excessive, it tends to dampen development. The philosophical analysis of regulations is beyond the scope of this chapter, but one can intuit that regulatory regimes can also trigger the paranoid consciousness and have unintended effects.

With education, however, our best bet is, whenever possible, to specifically stop just short of normativity, even when it would jeopardize our ability to evaluate or increase effectiveness. As I argued above, the curricularization is an unintended consequence of accountability. I have nothing against accountability as such and consider it necessary for any publicly financed interventions. However, it would be foolish to ignore the systemic negative consequences. The only solution that presents itself is careful regulation of education itself, with an explicit prohibition of normative claims. School curriculum should be stocked with incomplete pyramids of knowledge, stopping short of ethical implications. The public interest is to protect the large area of cumulative knowledge and vigorously defend it against the expanding normativity that leads to devaluation of evidence. It is in public interest to keep the realm of noncumulative knowledge very small and contained, and prevent it from spreading.

Another implication is for pedagogy. In contemporary education, common are methods where students are asked to take a stand and defend their position. I myself used them for many years and found them engaging and productive. However, now I wonder if teaching students to withhold judgment is much more important. Perhaps, we can think of special efforts to teach young people to turn normative claims back into descriptive ones.

## Conclusion

The case of financial literacy demonstrates that massive public education programs may have a tendency to curricularize knowledge. When certain claims cross the border from cumulative, descriptive realm into the noncumulative, normative realm, such claims become vulnerable to rejection, and may compromise large bodies of cumulative knowledge that support the normative claims. We should use the pragmatic and institutionalist epistemological thinking to prevent this from happening. We must know how institutions operate in the real world and what are the likely unintended consequences of the curricularization of knowledge.

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