

The Making of a Pan(en)demic:
Educational Theory as Key to Effective COVID
Communication

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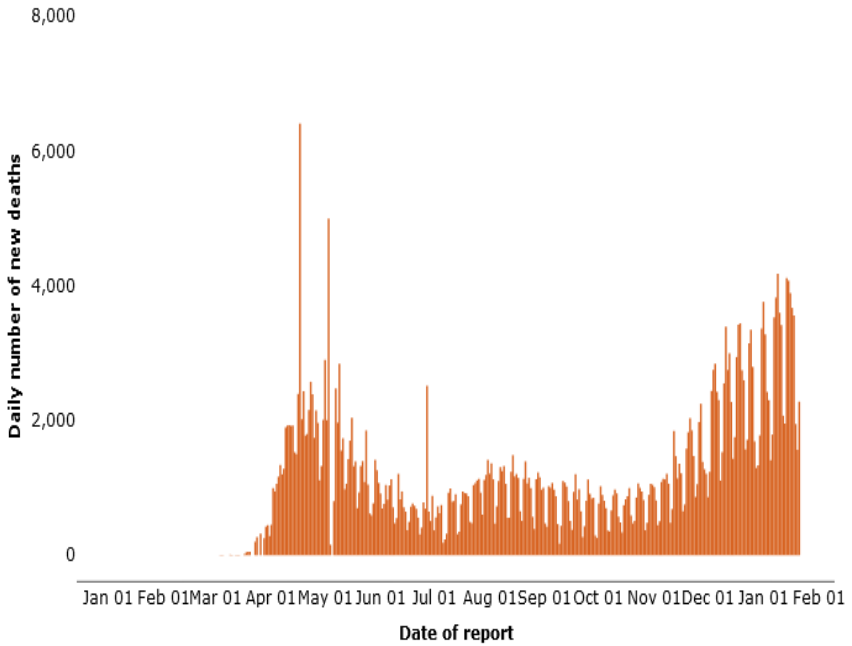
This comparative case analysis contrasts two nations – Viet Nam and The United States of America (U.S.) – in terms of processes each employed and results each achieved in respective response to the COVID-19 pandemic. We use a general theory of teaching to contrast the countries in terms of their approaches to COVID public health education. Viet Nam followed the recommendations of the theory. The U.S. did not. While our analysis does not and cannot prove the theory of teaching tested here acted as the sole causal factor in realization of the disparate results in the countries, our case study does illustrate that the different approaches to public health education used by the countries may be counted among factors contributing to wide differences in the contrasting cases. The argument proceeds by 1) describing differences in relevant statistics between Viet Nam and the U.S., 2) outlining the theory of teaching we use to analyze differences in public health education in the two contexts, and 3) discussing successful implementation of the theory in Viet Nam and failure to implement in the U.S. Finally, we 4) dismiss competing explanations of differences between the countries and 5) offer considerations about how the U.S. may educate citizens away from turning the pandemic

into a pan(en)demic.

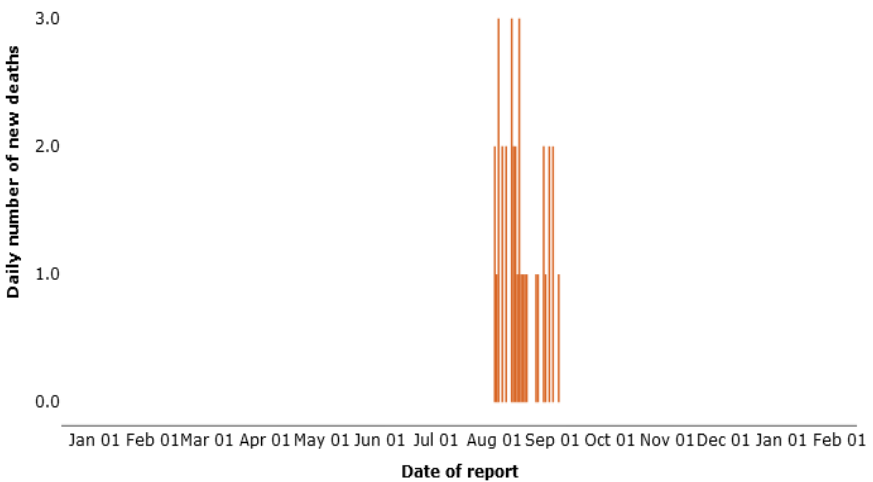
RESULTS OF PANDEMIC RESPONSES JANUARY 2021 IN THE U.S. AND VIET NAM

The U.S., with a total population of 328 million, accounts for about four percent of the total human population of the world (7.6 billion). Viet Nam, with a population of 96 million, accounts for about one percent of the world's population. According to the World Health Organization (WHO), there have been, as of late January 2021, about 96 million cases of COVID-19 worldwide and about 2 million deaths from the disease. The U.S. accounts for about twenty five percent of cases worldwide (24 million) and about twenty percent of COVID deaths (400,000). Viet Nam reports only .0001 percent of cases worldwide (1,154) and .00175 percent (35) of coronavirus deaths. See charts below:¹ because the U.S. is still recording cases and deaths at near record levels for the country, WHO rates it as in conditions of “community transmission.” Because Viet Nam has for several months recorded sporadic cases and no deaths, WHO downgraded its status to “clusters of cases.” Even allowing that the U.S. tested more vigorously than Viet Nam, death tolls in the countries indicate large disparity in usefulness of the countries' responses to the pandemic. We explore the role public health education played in producing Vietnamese success and U.S. failure in meeting the challenge.

New deaths in United States of America by day

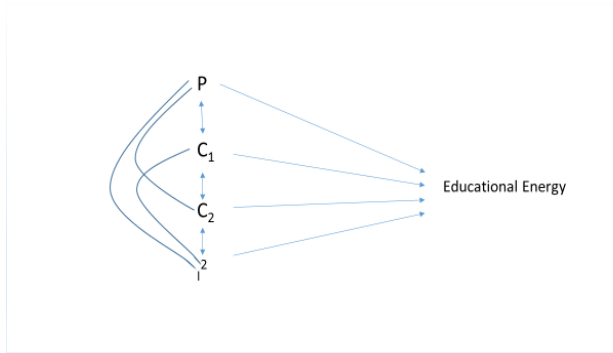


New deaths in Viet Nam by day



EDUCATIONAL THEORY APPLIED TO PUBLIC HEALTH EDUCATION

The theory of teaching we use to contrast public health education efforts in the U.S. and Viet Nam derives from Dewey's *Experience and Education*: "Continuity and interaction in their active union with each other provide the measure of the educative significance and value of an experience."² *Continuity* describes the fact that all experiences come out of the past, occur in the present, and move into the future. *Interaction* notes all experiences involve transaction between the psychology of the person having the experience and the physical and social environments in which the experience occurs. That Dewey says continuity and interaction *measure* the educational significance of an experience makes this theory advantageous for carrying out the comparison made in this paper. As measures of educational significance, continuity and interaction present as independent variables in a model explanatory of educational effectiveness, the dependent variable in the model. Continuity describes three independent variables and interaction describes a fourth independent variable. Here is Dewey's heuristic model, with variable labels explained below:³



Scientific interpretation of Dewey on continuity, interaction, and educational significance allows comparison across cases via a small set of highly leveraged variables. While we are not testing Dewey’s model by comparison between COVID public health education in the two countries, we are, using Dewey’s heuristic, comparing the countries in terms of variables descriptive of educational efficacy. Dewey’s theory takes us beyond ideological thinking in educational theory to action which produces educational success. As Dewey says, “What is implied in the constructive ideas of philosophy is that they have authority over activity to impel it to bring possible values into existence, not, as in the case of science, that they have authoritative claim to acknowledgement because they are already part of the order of nature.”²⁴

While Dewey does not define the variables in the model, we know from what he says about continuity that educational significance is related to previous experiences students bring to the pedagogical encounter, the present quality of the pedagogical encounter, and lasting effects of the pedagogical encounter on students’ future experiences. Dewey’s comments about interaction indicate the more closely

engaged in lessons students become, the more likely students learn lessons well. More recent educational theory may be referenced to further define variables in Dewey's model. Variables in Dewey's heuristic are neither arbitrarily chosen nor unrelated to sound theory of teaching as judged by educational theorists working independently of Dewey. Variables in Dewey's heuristic are widely accepted as crucial to effective teaching and are mirrored by Egan's ideas about the imaginative appeal of lessons,⁵ Beane's two notions of curricular coherence: internal and external,⁶ and Raider-Roth's work on trust in learning.⁷

'P': Egan's developmental theory of imagination understands 'imagination' as 'capacity to make meaning.' The theory is developmental in that it presumes all humans at all ages have all the imaginative capacities Egan's theory describes; but some capacities are more to the forefront of meaning-making at specific times in a lifespan. Egan distinguishes five stages of imaginative development: Somatic, Mythic, Romantic, Philosophic, and Ironic. Somatic imagination, tied to bodily feelings, is operative prior to full development of orality from birth to about two and one-half years. Mythic imagination, in which meaning is made in terms of abstract binary concepts, predominates from ages two and one-half to eight. Years eight to fifteen see Romantic imagination: a focus on extremes of experience come to the forefront of meaning-making. In the late teens and early twenties, humans tend to think in terms of general theories, a type of meaning-making Egan labels Philosophic imagination. In the early twenties and beyond, humans develop Ironic imagination, coming to see all general understandings contain aporia.⁸ For Egan, the focus of instruction becomes the way(s) learners imaginatively construct understanding of what is going on around them. Educators working in accordance with Egan develop sensitivity to cognitive tools learners use when making sense of the world.

'c₁' and 'c₂': Beane distinguishes two senses of curriculum coherence: big picture (c₁) and life-meaning (c₂). Beane uses the metaphor of a jigsaw puzzle for big picture curriculum coherence. Curriculum, like jigsaw puzzles, requires a big picture to put pieces together and give meaning to individual pieces. Life-meaning coherence asks about external curriculum coherence, capacity of curriculum to connect to experiences learners have outside contexts in which curriculum is purposely presented. Curricular "glue" is Beane's metaphor for external curriculum coherence.⁹ When learners use what they study to better navigate their extra-curricular lives, curriculum will 'stick to them like glue.' Beane says to maximize curriculum coherence big picture *and* life-meaning coherence must be served, "connecting pieces of the curriculum ... will promote coherence *only if they enhance the sense of purpose and meaning for young people;*" ... "we can systematize, align, and sequence all kinds of things without their necessarily making any kind of sense for young people."¹⁰

'I': Describing the learning self as a relational self, Raider-Roth's central research focus is instructional effectiveness as determined by intimacy and trust among educators and learners. The stronger the ties that bind learners and educators, the stronger commitment to and confidence in what they learn. According to Raider-Roth, "trusting their knowledge means that they can discuss, use, and depend on their understandings in order to build new ideas, as well as identify concepts that they do not understand."¹¹ The variable 'I' is squared in the model to indicate social distance between lesson and learners, whether widening or diminishing, develops from both sides simultaneously. Bateson coined the phrase 'complementary schismogenesis' to describe processes of mutual distancing among social groups. We may coin 'complementary affinogenesis' to describe processes of mutual affinity among groups.¹²

If scientific presentation of Dewey's views is off-putting, potential for schismogenesis may be mitigated by a restatement of Dewey's views phenomenologically as life worlds pedagogy. The life world is everyone's paramount reality and consists of stocks of knowledge (P), pragmatic tasks (c_2), and patterns of interpersonal understanding (i^2).¹³ Using life worlds pedagogy to approach instruction, a teacher's job is to get students to adopt curriculum (c_1) into their life world. Adoption of curriculum into life world creates greater or lesser educational energy (E) depending on how deeply or shallowly curriculum reaches into the life world.

'E': What Dewey calls educational significance, we call educational energy. 'Educational energy' (E) may sound strange, but it expresses with exactitude metaphorical ways people talk already. Teachers speak of students' "aha moments" when "light bulbs come on." This connects E to electricity. Expressions like "hit by a ton of bricks" when encountering life-changing experiences seem more than metaphor as they express physicists' formula for energy: mass times velocity. The well-known observation "education is the kindling of a flame, not the filling of a vessel" expresses the warm glow accompanying coming to know. With more philosophical precision, think of E as what philosophers recognize as epistemic emotions, like surprise, curiosity, and (un)certainty.¹⁴ 'E' describes the emotional intensity with which students learn. This need not localize learning to what Collins calls "dramatic" emotions. Emotions may be long-lasting: "Whatever we call them, we must also be able to talk about the long-term emotional tones, even the ones that are so calm and smooth as not to be noticed. In theoretical terms, it is the long-lasting ones (that I discuss as emotional energy, EE) that are of greatest importance. But I will attempt to show that the dramatic, short-term emotions are best explained against the backdrop of the long-term emotions."¹⁵ Dewey

recognizes this sort of E, discussing the commonplace but false belief that humans are improbably (if not impossibly) expected to act intelligently. Dewey observes, “This view would be more credible if any systematic effort . . . had ever been undertaken with a view to making the method of intelligence, exemplified in science, supreme in education. There is nothing in the inherent nature of habit that prevents intelligent method from becoming itself habitual; and there is nothing in the nature of emotion to prevent the development of intense emotional allegiance to the method.”¹⁶

Taken together as ideas explanatory of educational energy, insights of Dewey, Egan, Beane, and Raider-Roth demonstrate how responsibilities generated by a general theory of teaching extend to patterns of communication in public health education. The capacity of public health educators to speak coherently about response to the pandemic, their ability to appeal to ways of making meaning prevalent among the publics to which they speak, the skillfulness with which public health educators gain the trust of the citizenry they address, and recognition of improvement in quality of life among populations under public health instruction explain differences in population-wide responses to public health education. The next section bears this out via variable-by-variable comparison of the U.S. and Viet Nam COVID public health education.

USING DEWEY’S HEURISTIC TO ASSESS EFFECTIVENESS OF COVID PUBLIC HEALTH EDUCATION

Among differences cited as affecting COVID outcomes in the U.S. and Viet Nam are Viet Nam’s speedy, decisive response; its rigorous isolation of infected persons; and concern to protect vulnerable populations. The U.S. failed all these categories.¹⁷ Also included among important factors is quality of public health education. Not surprising-

ly, messages were most effective in gaining voluntary compliance with mitigation/prevention protocols when messages were clear and consistent, tailored to an audience, designed to build widespread trust, and projective of positive futures. We redescribe these commonsense ideas in terms of variables in Dewey's heuristic. Viet Nam achieved good scores on all variables in Dewey's model, resulting in high E as the Vietnamese accepted COVID curriculum widely and deeply into their life worlds. The U.S. achieved poor scores on all variables, resulting in low E, with sporadic acceptance and sometimes rejection of COVID curriculum.

c_1 : The U.S. has been criticized for lack of clarity in public health messaging. Neither behaviors needing to be changed to mitigate the pandemic nor best ways to change those behaviors were made clear to Americans.¹⁸ Since March 2020, the U.S. Centers for Disease Control and Prevention (CDC) reversed itself on the benefits of wearing masks. Originally arguing masks were not helpful, the U.S. Surgeon General recently apologized for that early error.¹⁹ Mask-wearing is politicized in the U.S., some government officials refusing to wear masks as demonstration of disregard for public health recommendations.²⁰ U.S. citizens got conflicting information on availability and recommendations for COVID testing. As late as July, questions arose concerning the merit of lockdowns. Government officials (mayors, governors, the president) vied for authority to control lockdown measures. The long list of characters advising on COVID control measures, each with different opinions, hastened disintegration of COVID curriculum at the federal level.²¹ Scores on c_1 plummeted when COVID curriculum became internally incoherent. Malecki, et al., note, in times of risk, such as infectious disease outbreaks, successful risk management communication relies on two components: hazard and outrage. Smaller perceived risk of hazard produces greater outrage at precautionary social

limitations. The U.S. offered incoherent COVID curriculum: as hazard became minimized, outrage increased. The first part of the message (low hazard, e. g. “COVID is a hoax”) contradicts, by obviation, the second part (take precautions); and leaves Americans resentful of imposition of behavioral change to mitigate the pandemic. Incoherent curriculum resulted in widespread resistance.²² Viet Nam, from day one, gave citizens clear and consistent messages of great hazard. Perception of great hazard cohered with messages about precautions. Coherent curriculum produced widespread voluntary compliance.²³

P: U.S. portrayal of the pandemic took an untoward ‘Mythic’ imaginative turn. Messaging about the pandemic was cast in abstract binary opposites. Chief among these was the “us versus them” approach in claims the disease was a “foreign” menace.²⁴ This rhetoric pitted Americans against the world and had detrimental effects on social interactions in the U.S. (explained at ‘i’ below). Viet Nam took a “Philosophic” approach to pandemic messaging, offering public-health-informed theory about the spread of infectious disease. Epidemiological theory formed the basis for a general approach to disease prevention, including mask wearing, social distancing, and partial lockdowns limiting local/global travel to “essential activities.” Viet Nam tailored messages to other levels of imaginative development. Perhaps its most famous example of imaginative adaptation of COVID curriculum is the viral Tik Tok video of Vietnamese teenagers dancing to popular music and incorporating into the dance handwashing techniques endorsed by WHO. This clever way of emphasizing the importance of keeping personal space as hygienic as possible relative to Corona virus appealed to the Romantic imagination of a young adult target audience. Inclusion in the video of younger children mimicking moves of older peers and applying the movements to the actual behavior of handwashing additionally provided a “Mythic” response

of “doing the right moves” versus “not the right moves.” Viet Nam reinforced its national message at grassroot levels: schools, agencies, organizations, and businesses. Viet Nam Youth Federation took a leading role in this; but community service workers bore the brunt of the work, receiving commendation from medical care professionals for their ability to clearly communicate COVID messages to a variety of life worlds.²⁵ Viet Nam is already developing contextualized instructional strategies for resistant groups which include: Southerners; the young; men; those still fearful of COVID; families with more than five members; white-collar workers with steady, full-time employment; and people with post-graduate education.²⁶ The U.S. has done little to make its message oriented towards science and even less to tailor its message to various audiences. Hutchins’s study of compliance of American adults with COVID prevention protocols found compliance highest in those older than 60 and lowest in those ages 18-29. The study concludes that the U.S. needs to find ways to get the message out effectively to socially active young adults. Grassroots efforts are minimal in the U.S. Seals found county public health offices waited long for messaging from above; and even when they received messaging from state and national sources, local organizations tended to repeat messages as received rather than tailor them to local circumstances.²⁷

i: As discussed at ‘P’, the U.S. took xenophobic and prejudicial approaches to pandemic messaging using stigmatizing language to describe the virus as being of Chinese origin: “the China flu.” The result was blaming Asian-Americans for the pandemic. Things worsened as news about negative economic impacts of the pandemic took centerstage. Already stigmatized groups were further blamed for having caused the economic downturn and, relative to “real” Americans, undeserving of resources. Trust among groups and between groups and the government disintegrated quickly into turf warfare

over shortages of needed materials and equipment. Citizens formed into “masker” versus “anti-masker” camps debating their ideological differences, not the meaningfulness of messages to mask. Ideological debate cast doubt on government advice.²⁸ Viet Nam used racially/ethnically neutral language when describing the pandemic; and focused on health risks for all humans. Non-stigmatizing language minimized prejudice against non-Vietnamese populations. Even when Viet Nam resumed European air travel and a spike in cases appeared, the government did not blame Europeans; but redoubled earlier efforts getting the outbreak under control.²⁹ In Viet Nam, the pandemic received effective intersectoral response from organizations in health, mass media, transportation, education, public affairs, and defense. With clinics and hospitals working together to handle any cases that cropped up, a medical response could be ready to improve sanitation to protect vulnerable populations such as the elderly, those with immune-compromised systems and those with underlying health conditions including asthma, diabetes, and cardiovascular disease. Ready and reliable responses forged connections and created the confidence necessary to fulfill the ethically necessary conditions for a responsible, educational response to the pandemic. U.S. federal, state, and local governments fought over ownership of personal protective equipment as hospitals and clinics begged for materials to care for large numbers of COVID patients. Open disparagement of his COVID advisors by the president called into question the soundness of health education advice from once-honored sources, like the CDC. Disparagement undermined public trust in officials and private trust in fellow citizens.³⁰

c. In Viet Nam, low numbers of cases, few who needed hospitalization, and fewer than 50 deaths overall gave credibility to public health measures. A series of self-report studies among a variety of Vietnamese indicate compliance remains high. In a cross-section-

al study of 18-59-year-olds, Nhu found 92.2 percent reported high knowledge levels about prevention, 68.6 percent had positive attitudes towards prevention measures, and 76.8 percent practiced all prevention measures.³¹ A study of public administrators and health workers found 97.9 percent favoring isolation of cases, 96.8 percent favoring masks, and 92.9 percent in favor of quarantines at localities with new cases.³² A study of chronically ill people revealed 93.7 percent viewed COVID messaging via television or social media, 68.4 percent passed a quiz on COVID knowledge, 90.8 percent reported positive attitudes about COVID, and 77.2 percent practiced prevention protocols.³³ Observational data needs to substantiate these reports. However, rarity of COVID cases and absence of COVID deaths in Viet Nam since September 2020 provide some evidence that most people in the country continue to practice prevention measures. As early as 7 February 2020, Viet Nam was in serious negotiations about how to balance economic and public health security. The country suffered no serious economic downslide.³⁴ Growing numbers of cases and deaths in the U.S. tell the opposite story. Public health education had little effect on the quality of U.S. public health or economic vitality as food insecurity, poverty, and unemployment continue to rise. From 26 February to 24 October 2020, the president claimed over 39 times on many different news stations the COVID virus will “just go away” and the economy rebound.³⁵

E: Although we have no independent measure of educational energy, COVID public health curriculum seems to have found its way into the life worlds of Viet Nam, but not into those of the U.S. Evidence of adoption of public health curriculum deeply and widely into Vietnamese life worlds resides in the fact that the vast majority of people continue to protect personal space and promote personal health by exercising long-term adherence to public health recommendations.

Curriculum messaging remained consistent, coherently science-based, adaptive to multiple groups, honest, and minimally disruptive of social life. Numbers of new COVID cases began declining in August. E produced by inculcation of curriculum in ongoing public health education campaigns created a “new normal” with a safer environment, allowing Vietnamese to confidently return to social and work lives, thereby minimizing economic disruption. Return was accomplished with few COVID “spikes” because curriculum reached into and improved the life worlds of the populace. Low E for public health education in the U.S. leaves Americans still subject to recurring lockdowns and, according to WHO, in conditions of community transmission of COVID.

FALLACY OF “CULTURE, NOT EDUCATION”

Claims that demographics and culture are the real culprits in disparities described here misdescribe Viet Nam and mistake cause for effect. Some assume Viet Nam’s success depends on homogeneous population and communitarian culture. Reverse-wise for failure in the individualistic and heterogeneous U.S. True, the U.S. population is heterogeneous. However, methodologies and findings of COVID research in Viet Nam deny homogeneity. Clearly, different Vietnamese experience different life worlds. To avoid risk of cultural stereotyping, better to argue individualistic *and* communitarian aspects appear in all cultures, rather than erect cultural dichotomies. Consideration of cultures along individualism/communitarianism continua permits observation that public health education in Viet Nam enhanced communitarianism. U.S. public health education exacerbated individualism. Just when Americans most needed to act communally, they were *miseducated* (learned the *wrong* thing with great E) into individualism. Granted, U.S. folks may be relatively inapt pupils when communitarianism is the lesson. However, this, too, points not at American “psychology,”

but at American society's weak(en)ing public structures: U.S. public health systems, especially. The U.S. COVID response revealed systems to be "deficient," "unevolved," "weak," "frail."³⁶ This general assessment may be true of other U.S. public institutions, including education, which may benefit themselves and American society by realizing operational scientific potential. Cries for smaller government may be trumped by making governance more strategic.

SCIENTIFIC PUBLIC HEALTH EDUCATION TO PREVENT A PAN(EN)DEMIC

The U.S. is in the process of moving from COVID pandemic to COVID endemic. COVID-19 has been around long enough to mutate and reinfect.³⁷ Vaccines may help, but as the virus continues to evolve, we will be hard pressed to eliminate it altogether. Under such conditions COVID-19 will become a regular feature of American life, an infection constantly maintained at baseline without new infections arriving from abroad, a pan(en)demic. Questions about the capacity of science to guide understanding of public health crises find their best answers when scientific health messaging proceeds in strong partnership with scientific educational theory. Together, the science of public health and the science of education fulfil a duty to the public and may yet, even in the U.S., provide an opportunity to create meaningful messaging to prevent — not just slow — the COVID threat by crafting coherent curriculum, improving quality of life, and regaining public trust. The stakes are high enough that the importance of this partnership is clear. COVID-19 demonstrates, with a vengeance in the U.S., that failures in educational effectiveness are matters not only of life and death of the mind; but of life and death themselves. As Ha notes, Viet Nam is a country worth learning from.³⁸

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