

Garry JACOBS\*

## BEYOND THE NATION-STATE: FAILED STRATEGIES AND FUTURE POSSIBILITIES FOR GLOBAL GOVERNANCE AND HUMAN WELLBEING

**Abstract:** Over the past 200 years, the evolution of human society has moved inexorably toward greater interaction and interdependence between peoples and nations around the world. More recently the movements advancing free trade, globalization, liberal democracy, multilateral institutions and international cooperation have lost momentum and are in retreat. This unexpected development raises profound questions regarding the future evolution of global society. This paper examines the sources of the uncertainty and anxiety which characterize the prevailing view of the future. It explores the inherent limitations in our mental capacity to extrapolate, project and anticipate the future based on past experience and present appearances. It draws insights from history to identify the underlying social forces that have guided global evolution over the past two centuries, which continue to play a determinative role in guiding its future. It challenges the view that the resistance of established social forces will necessarily prevent progress in these conditions of uncertainty and complexity. It illustrates the untapped power of inspired individuals, ideas, values and new organizations to provide the vision and leadership needed to mobilize global society for rapid transition to a better future.

**Key words:** *uncertainty, global governance, human well-being, psychological history*

### 1. INTRODUCTION: CONTEMPORARY UNCERTAINTY

Present uncertainty and anxiety regarding the outlook and outcome for humanity's future are prominent characteristics of the human condition. Uncertainty prevailed during the 1st Industrial Revolution when the mechanization of farming resulted in rising levels of unemployment

---

\* Chief Executive Officer, World Academy of Art & Science

in 1890s America, which was aggravated by the onset of machine-driven mass production during the following decade. Uncertainty prevailed after World War I when hyperinflation in Weimar Germany contributed to severe economic depression and soaring unemployment over large parts of Europe. The Great Crash in 1929 was followed by a decade of severe uncertainty resulting from the banking panic that closed 10,000 American banks, unemployment that reached 25–30%, economic depression, impoverishment, rising social unrest and popular disenchantment with capitalism. The uncertainty resulting from Germany's overwhelming military dominance during the first years of World War II led many to envision a coming age of darkness threatening to wipe out centuries-long advances of Western civilization. Following the construction of the Berlin Wall and the Cuban Missile Crisis in the early 1960s, the rapid acceleration of the nuclear arms race generated high levels of uncertainty and anxiety over a large part of the world, leading many to anticipate nuclear Armageddon as a realistic and very probable, if not inevitable, outcome. Similar periods have occurred at critical moments of transition in many other times and places. In every case the future has appeared bleak, impenetrable and on a course to disaster.

But the uncertainty sweeping the world today is historically unprecedented for several reasons. First, the speed of social and technological change is far more rapid than ever before and still accelerating, while the pace of cultural adaptation and evolution lags farther and farther behind and seems increasingly unable or unwilling to respond effectively. Second, the impact of factors influencing humanity is no longer concentrated in single countries or regions of the world. Society has become so interconnected and globalized that the US Subprime Mortgage Crisis morphed into the 2008 Financial Crisis and had powerful economic ramifications for the whole world economy. In Europe it resulted in the Great Recession and rising levels of unemployment, undermined the stability of the Eurozone financial system, spawned Brexit, and generated other threats to the integrity and future development of the European Union. Similarly, the impact of rapid technological dissemination and the rapid economic gains of China and India are reshaping the future of the entire global economy and radically altering the distribution of national power in what appears increasingly as the Asian 21st century. A third reason why uncertainty is higher today than in the past is the result of the rising complexity and interdependence of global society. Not only are the effects increasingly global but so also are the effective remedies, which can only be applied by achieving unprecedented levels of cooperation, coordination and global governance. Fourth, the magnitude of the

challenges themselves is also unprecedented. For they threaten to impact global society with both a speed and intensity unlike anything known until now. The economic and socially-disruptive impact of rapid technological innovations, the political ramifications of rising inequality and the degeneration of democracy, and the existential threat of climate change appear so enormous, compelling and inevitable to our imagination that it is difficult to see the means by which humanity can surmount them.

## 2. HISTORICAL UNCERTAINTY

However different and greater the sources of uncertainty appear today, they still reflect a basic human condition that has prevailed since the birth of civilization. Although the speed, spatial reach, complexity and magnitude are far greater, there are still important insights that can be derived from history. A careful reading of history depicts the course of human events as a zigzag path between contending ideologies moving back and forth from one extreme or another and then rebounding on a course which cannot be accurately described or predicted by previous events. Viewed in retrospect, the visible uncertainties of the past also reveal unseen opportunities unleashed by unseen forces which were long overlooked due to humanity's preoccupation with visibly looming threats.

The Concert of Europe forged in 1815 after the defeat of Napoleon was intended to end centuries of incessant warfare between the nations of Europe by establishment of a perpetual balance of power and continental peace. It did seem to largely achieve this aim through the rest of the 19th century before giving rise to the First World War. But in retrospect that peace was deceptive and at best a temporary solution. For it was achieved by redirecting national competitiveness between European powers from the continent to the rest of the world. The urge for national dominance was not controlled, but only redirected. The peoples beyond Europe were subjected to a century of European imperialism that founded the largest colonial empires in the history of the world. The logic and achievements of European colonialism appeared so impressive that the youngest of the European nations, Germany and Italy as well as the rapidly industrializing Japan, naturally sought to pursue a similar course. Situated in the heart of Europe, landlocked on three sides and cut off from the rich trade routes through the Mediterranean, the recently unified Germany sought to make up for lost time by extending its borders to encompass the German-speaking populations of neighboring countries and later expanding its aspirations to encompass all of Western and Central Europe. Similarly, Italy reached out to conquests in Africa and Japan to Manchuria, the

rest of China and eventually to all of East Asia. The rapid expansion of empires after 1880 seemed to signify a new world order that might well last for centuries. In retrospect we see that the Age of Empires reached its peak around 1910 and then began a slow decline, which went largely unperceived for several decades.

World War I marked the beginning of the end. The founding of the League of Nations in 1920 was intended to prevent the repetition of world war and secure the dominant European empires by establishing the first worldwide intergovernmental organization. The peace lasted a mere 20 years before it brought on a second and far more horrendous global conflagration. The League gave way to the founding of the United Nations in 1945 with the initial participation of 51 signatory nations, but the essential objective remained the establishment of peace and the preservation of the autonomy of existing states and empires. Very few saw what was coming. The wording of the UN Charter was careful not to promise too much to other peoples. Rule of law and respect for the current boundaries of nation states were of paramount importance, not freedom, democracy or human rights. None of its founders, with the exception of the USA, envisioned any major alteration in the overseas empires of the great European powers. While uncertainty after the war focused on the threat and consequences of Soviet communist expansionism, the most dramatic transformations occurred elsewhere. Within two years, India, the crown jewel of the British Empire, gained its independence and within fifteen years the reigning colonial empires that spanned the entire world had all but disappeared, with the exception of the USSR, which founded a new and perhaps the last political-military empire in modern history.

The power of the aspiration for national self-determination had been seriously underestimated. The real intentions of the UN's founders is apparent from the structure of the organization. The General Assembly was designed to give a nominal voice to other nations, but no real powers. None of the founders of the UN envisioned at the time the radical transformation of global society that would soon take place. From a mere 55 member states in 1946, the General Assembly grew to 60 by 1950, then multiplied to include 99 by 1960, 127 by 1970, 154 by 1980, 189 by 2000 and 193 today. The General Assembly which during the initial years was a forum for rubber-stamping the decisions of the great powers in the Security Council soon became a marketplace for the diverse voices and rising aspirations of humanity-at-large. The P5 soon found their own views drowned out by the overwhelming majority of young nations which gradually coalesced in the Non-Aligned Nations. While the constitutional power resided firmly with

the Security Council, the General Assembly became a platform for developing nations to broadcast their views to the world right from the heart of the Western World. The altered structure eventually led to the assertion of the petroleum-exporting nations by the nationalization of major oil production facilities as the first serious challenge to the economic domination of the great powers. Decades later, it has awakened and energized nations around the world to actively pursue their rightful claim to freedom, self-determination, security, prosperity and wellbeing.

Nor was the proliferation of nation states the only significant surprise in store. Deeper psychological forces were at work in the world which went largely unperceived at the time. The spirit of freedom had awakened the aspiration of oppressed and marginalized minorities as well as suppressed nationalities. At the founding of the UN few envisioned a radical change in the relative balance between the sovereignty of the nation states and the rights of their citizens. Pressurized by the newly independent states to acknowledge the aspirations and rights of all human beings on earth, the Universal Declaration of Human Rights was adopted in 1948. Once again the great powers were careful not to accord the power or legitimacy of law to the idealistic statement of principles. This toothless idealistic statement at first seemed to provide no more succor for the downtrodden than the promise of liberty and equality in America's Declaration of Independence had provided to black slaves on Southern plantations. It would take three quarters of a century before slavery was abolished in USA and another 100 years before a modicum of social equality was extended to them through large sections of the country. It would be decades before the ideals set forth in the UDHR would acquire the authority of the public conscience of the world to compel nation-states to respect them.

The inability to envision great transitions until after the fact is a predominant characteristic of history. In July 1989 Soviet President Gorbachev and Chancellor Kohl met to discuss the future of Germany and Europe. They both agreed that the reunification of Germany was inevitable, but neither expected it to happen until well into the 21st century, perhaps 30–40 years later. Yet, it became a reality within two years. Within a few months the whole edifice began to collapse. The fall of the Berlin Wall, the breakup of USSR, the collapse of communist regimes throughout Eastern Europe and Central Asia, and the reunification of Germany were a line of dominos waiting to be toppled. They were followed in quick succession by the founding of the European Union and eastward expansion of NATO, the establishment of WTO and the birth of the World Wide Web.

### 3. PATTERNS OF HISTORY

But all that has occurred or is likely to occur is not unprecedented or unexpected. Among the most visible and apparent patterns revealed by history are the remarkable economic and social advances that have characterized global change over the past two centuries, multiplying world population more than seven-fold while multiplying real per capita income 12-fold. These were accompanied and made possible by the technological advances of three industrial revolutions marked by the development of steam power, electricity and computers. They were also supported by the rapid spread of education, improvements in healthcare, increasing capacities for organization, and the gradual spread of democratic institutions of governance that encouraged the greater development and expression of the capacities of individual citizens.

Over the past 200 years, the evolution of human society has moved inexorably toward greater interaction and interdependence between peoples and nations around the world. This evolution has been spurred by advances in communication, transportation, economy, technology and social organization. Development of international commerce and global markets, wars of conquest, colonial imperialism, immigration, religion, communism, free trade, nationalism, democratic revolutions, international peace movements, international scientific exchanges, development of international law and rules of warfare, international standards, anti-colonial and anti-slavery movements, Industrial Revolution, development of international financial markets, Olympics, professional associations, science academies, military and trading alliances led to the emergence of the first international governmental organizations in the 20th century. Following the end of the Cold War and the collapse of communism, the movement has been spurred by the spread of democracy, nuclear arms control, expansion of the European Union, expansion of global trade under WTO, rising influence of MNCs, globalization of financial markets, growth of global civil society and development of the World Wide Web.

Along the way there have always been periods of rapid advancement followed by periods of stagnation and temporary reversal. Recently the march to free trade, globalization, liberal democracy, multilateral institutions and international cooperation has once again lost momentum and appear to be in retreat. During these times it is not uncommon for society to lose confidence and faith in the future and question whether the very idea of continuous progress is illusory. It is not certain that any of these trends will continue indefinitely or that some will not be suddenly halted and reversed at least for some time, but both human aspirations and expectations indicate

that they cannot and will not be permanently suppressed. The intractable and apparently unsurmountable problems of the day will compel society to seek for new solutions and strive ever harder to overcome the resistances to change. In the past, this has often been accomplished by the force of violent revolution. In these more peaceful, enlightened times, it is to be hoped that the needed transitions be made by peaceful evolution.

However serious the obstacles and intractable the resistance, history testifies to the ultimate power of human aspiration to overcome obstacles that stand in the way of its continued progress. As it has swept aside monarchies, feudalism, empires and tyrannical totalitarianism in the past, that aspiration has the power to sweep aside the economic and social barriers to its further advancement. Based on the experience of the past two centuries, it seems likely that the broad patterns of the advancement will continue. The benefits of economic development will continue to spread to a greater portion of humanity than ever before in history. The concentration of wealth and financial power centered for centuries in Western Europe and North America will shift increasingly toward Asia. The pace of technological innovation and application will continue to accelerate and it will provide unprecedented benefits to ever-increasing proportion of the world's population in ways to improve human welfare and wellbeing through advances in communication, transportation, access to higher quality of products and services at lower prices, education, healthcare and entertainment. The economic power of nations will become a more important source of national security and global influence in the future than mere military might. The institutions for global governance and rule of law, however inadequate they may be, will be more important and essential in the coming decades. Public concern and the need for environmental regulation will become ever more pressing and urgent until humanity musters the leadership and collective will to squarely address global ecological challenges.

#### 4. INSIGHTS FROM HISTORY

Viewing historical events in retrospect, we can readily construct reasonable explanations connecting the dots, but that does not qualify as real knowledge. It is well that we keep in mind these experiences when we hazard to look toward the future and anticipate its direction, course and likely outcomes. Several important insights emerge from these reflections.

First, at the time these events were taking place, almost no one could imagine let alone foresee the eventual course of history unfolding. Mind is like a rear-view mirror. It sees clearly only that which has most recently passed by. Looking backward it can draw clear lines of causality between

events that have already occurred. Looking forward it struggles to anticipate what is coming even a short time in the future. Therefore, in thinking about the future, it is wise to maintain a strong measure of mental humility, mindful of the fact that we are employing an instrument of knowledge with a questionable capacity for reliable future vision.

Second, the anxiety generated by uncertainty often masks concealed opportunities hitherto unimaginable. Humanity in general is far more powerfully influenced by the threat of losing present gains than the lure of obtaining some hitherto unrealized future potential. Our minds are so strongly biased by the sensible perception of what is and the memory of what has been as to underestimate or overlap entirely the potential upside waiting around the corner. Uncertainty is the flip-side of opportunity.

Third, we tend to overlook the fact that uncertainty about the future is only the counterpart and complement to certainty. And for all our doubts and fears about the future, still we know with reasonable certainty from past experience and present conditions about a great deal of what is to most likely to come with the potential for greater knowledge, insight and foresight than humanity has ever possessed in the past. Whatever the level of uncertainty, there are some patterns which can help us discern the likely course of things to come.

Fourth, we tend to overlook the fact that periods of high uncertainty are often followed by new openings that lead to periods of rapid social progress. Indeed, it appears that maximum uncertainty is often followed by maximum social advancement, as if the compulsions of emergency compel society to give up outmoded ideas and institutions and respond creatively. The Great Crash and the Great Depression led to the launching of the New Deal in the USA to humanize capitalism, regulation of the banking system, and establishment of socio-democratic economies in Western Europe, combining the virtues of both communism and market economies, for half a century until the rise of global neoliberalism undermined many of its achievements. So too, centuries of conflict culminating in two horrendous world wars initiated and centered in Europe led to the emergence of the United Nations, the European Community and EU, and an unprecedented unification of 29 nations in an alliance for collective defense to safeguard the freedom and security of all its members.

This transformation of high levels of uncertainty into openings for rapid progress may be led by outstanding individual leaders, as it was by Lincoln during the American Civil War, FDR during the Great Depression and Churchill during WWII. It may also be guided by powerful new ideas as in FDR's New Deal and his conception of the four freedoms. *Glasnost* and *perestroika* were new ideas that transformed the entire Soviet bloc. It can



be energized by a high value such as self-determination, freedom and social equality as in the Indian Independence Movement, the American Civil Rights Movement and the Anti-Apartheid Movement in South Africa. It can be empowered by the founding of a new institution such as the UN, EU and the World Wide Web. Regardless of the type of leaders that guide the movement, the pressure generated by external events can be a powerful spur to sudden, unanticipated change.

### 5. PERSPECTIVES FROM PSYCHOLOGICAL HISTORY

These visible, measurable indicators of the future are not all that we can discern from history. They are the surface expressions and results of deeper social and psychological forces that have been shaping the evolution of human civilization over centuries. They are based on secondary perceptions rather than root-knowledge. They trace the only processes of change rather than their essence.

Beyond and beneath these surface processes, we can draw insights from deeper currents of social evolution which stand out clearly in retrospect. The course of history has been marked by progressive shifts in the social and psychological characteristics of global civilization and culture and these characteristics are likely to persist in future, regardless of temporary reversals and the zig-zag movement of events.

Table 1. Shifting Lines of Social Evolution

From	To
<ul style="list-style-type: none"> <li>▪ Isolated, smaller, autonomous, culturally homogeneous communities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Larger, heterogeneous, multicultural nation-states giving rise to an increasingly interconnected and interdependent global community</li> </ul>
<ul style="list-style-type: none"> <li>▪ Settlement of disputes by use of violent physical force</li> </ul>	<ul style="list-style-type: none"> <li>▪ Negotiated peace and global rule of law</li> </ul>
<ul style="list-style-type: none"> <li>▪ Governance by arbitrary authority</li> </ul>	<ul style="list-style-type: none"> <li>▪ Freedom, self-governance and self-determination</li> </ul>
<ul style="list-style-type: none"> <li>▪ Power based on military might</li> </ul>	<ul style="list-style-type: none"> <li>▪ Power based on economy, science and technology</li> </ul>
<ul style="list-style-type: none"> <li>▪ Development of natural resources</li> </ul>	<ul style="list-style-type: none"> <li>▪ Development of social capital and the capabilities of each human being</li> </ul>
<ul style="list-style-type: none"> <li>▪ Value of financial capital</li> </ul>	<ul style="list-style-type: none"> <li>▪ Value and centrality of human capital</li> </ul>
<ul style="list-style-type: none"> <li>▪ Physical security and wealth generation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Wellbeing, equality and individuality.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Rights and power accorded exclusively or disproportionately to the elite</li> </ul>	<ul style="list-style-type: none"> <li>▪ Universal human rights and more equitable distribution of all forms of social power</li> </ul>
<ul style="list-style-type: none"> <li>▪ Cultural homogeneity</li> </ul>	<ul style="list-style-type: none"> <li>▪ Multiculturalism</li> </ul>
<ul style="list-style-type: none"> <li>▪ Development of the social collective</li> </ul>	<ul style="list-style-type: none"> <li>▪ Development of capacities of each individual</li> </ul>

Our view of the future will appear less uncertain in the measure we keep in mind these likely lines of future social evolution.

## 6. ENVISIONING A BETTER FUTURE

It is ironic that with all humanity's anxious preoccupation with the future and all the information, sophisticated forecasting and modelling tools at its disposal, we know much more about the prospective dangers of continuing on our present course than we do about humanity's potential for enhancing wellbeing.

The adoption of the 17 Sustainable Development Goals by 193 nations in 2015 is a case in point. The SDGs are not simply another in a long line of pious wishes. They represent an unprecedented effort of the world community to translate into action and realize in practice the universal values enshrined in the Universal Declaration of Human Rights 70 years ago. The actual achievement of many or most of these goals by 2030 may be unlikely, but it is no longer beyond imagination, and the potential benefits to humanity of achieving Agenda 2030 by that year or even a decade or two later would be of momentous significance to the future of humanity. Considering how great would be and will be the benefits, it's surprising how little effort has been made to envision how radically and dramatically their achievement will transform the world we live in.

The 17 goals and 169 targets intended to achieve them address virtually every major problem confronting humanity today from peace, food and poverty to employment, social equality and ecological security. Unlike most of their predecessors, the SDGs are not focused exclusively on the poorest of the poor. They apply inclusively to people of all nations and would benefit all sections of humanity in innumerable ways. Peace and economic opportunity in Africa and Latin America would stem the tide of refugees streaming north. Their growing prosperity would generate economic opportunity for more developed countries. Rising levels of education and public health would have many other beneficial effects. A full appreciation of their potential contribution to the welfare and wellbeing of all humanity could be a powerful catalyst for political action.

## 7. CONCLUSION: VIABLE PATHWAYS TO A BETTER FUTURE

Neither the anxiety of looming uncertainties nor the compelling force of social evolution are predictive of future events in the short run. History is replete with setbacks, reversals, reversions to failed patterns of the past,

and new types of blunders never seen before. But an understanding of the limitations imposed by the physicality of our mental perceptions and expectations and an appreciation of the deeper forces driving social evolution can help us avoid useless anxiety and reactionary pessimism, while opening our minds to unseen opportunities to drive forward even in situations that appear helpless and hopeless.

The problems confronting humanity today will not simply vanish because viable solutions exist with the potential to eradicate them. There are entrenched vested interests and powers that benefit from the present dispensation and are either ignorant or skeptical of the greater opportunities for all that would arise from concerted global action. But obstinate resistance to progress has always plagued and retarded human advancement. With the greater knowledge, higher levels of education and more powerful means for communication now available, humanity is better poised than ever before to overcome the obstacles.

Already there are initiatives underway with the potential to break through the inertia and unleash a social movement with the potential to multiply and spread rapidly from place to place, field to field as a reverse domino effect of constructive initiatives. A few significant ones are mentioned here to illustrate the potential.

1. *The Promise of Youth*: Ever since Malala Yousafzai won the Nobel Prize for her courageous efforts to promote the education of the girl child, examples of activist youth leaders keep multiplying in different fields and parts of the world. Emma Gonzales, the 19 year old American advocate of gun control; Timoci Naulusala, the 12 year old Fijian whose opening speech at COP23 in Bonn captivated world leaders at the UN's high level annual conference on climate change; 9 year old Ridhima Pandey from India; and Greta Thunberg, the 15 year Swedish girl climate activist are examples of a new breed which is breeding lots of young offspring quickly. These combined with social movements such as Protect our Planet (POP), founded by former IPCC Chairman and WAAS Trustee Rajendra Pachauri, represent a potentially powerful new social force which both political and business leaders can ignore only at great risk. So far these movements tend to be fragmented geographically and by the causes they espouse, but if organized and their activities coordinated, they could come to become a powerful force for change, as the college campus protestors in USA, Europe and other nations became during the 1960s.

2. *Reviving the Silk Road*: China's Belt and Road initiative, the latest successor to earlier efforts to revive the Silk Route between Europe and the Far East, has immense potential to accelerate the economic development of

nations along the track. Its current version has been politicized by Western nations suspicious of China's motives and jealous of its impressive capacity to envision and launch an initiative that has already been endorsed by sixty nations. Developed to its ultimate potential, it would involve massive infrastructure development and investments in 152 countries in Europe, Asia, Middle East, Latin America and Africa. Whatever the grounds for suspecting China's motives, projects of this type could radically transform the world's development prospects. Beyond the immediate benefit in terms of investment and job creation, the longer-term benefits to these regions and the world would be many times greater.

3. *Conscious Capital*: For half a century, banking regulations insulated the commercial banking industry from financial markets until the protective barriers were dismantled in the 1990s. If resurrected, these barriers would restore stability to financial markets and channel more funds into the real economy. The movement to promote sustainable and ethical investments is already attracting large numbers of wealthy investors managing hundreds of billions of dollars. WAAS is collaborating with the United Nations Office for Partnerships in New York to attract serious players to this movement and educate the public regarding its immense potential for reorienting global financial markets from speculation to job-creating investments in the real economy. Redirecting investments from speculative to productive investments on a global scale will be difficult. A first viable and powerful step to mobilize the support of those who are already convinced of the need for radical change to lend the full social power they possess for change. Alongside these, there are initiatives such as the one proposed by WAAS Trustee Stefan Brunnhuber to create a special cryptocurrency specifically designed for investments in the SDGs.

4. *Network of Networks*: There are hundreds of thousands of NGOs in the world and more than 4000 international NGOs registered with the UN. With few exceptions, the activities of NGOs are fragmented geographically and by specialized issue. But there are many issues on which large numbers of NGOs share common views and objectives, such as ICAN (International Campaign to Abolish Nuclear Weapons) founded in 2007, which presently has over 400 partner organizations from more than 100 countries. The potential exists to create much larger international networks bringing together organizations working in different fields but sharing common interests and policy recommendations, such as an urgent shift from fossil fuels to renewable energy sources. Organization of global civil society represents an enormous resource waiting to be tapped.

5. *New Paradigm in Education:* WAAS has confirmed the need for rapid expansion and radical reorientation of the global educational system in order to prepare the next generation for the drastic changes in political, economic, technological and social conditions. Even if it were possible, adequate expansion, reorientation and revamp of existing institutions globally to meet the demand will be an extremely slow, very costly and inadequate response to the need for rapid global change. But this effort can be complemented and accelerated by parallel development of a global educational system by a pooling of institutional and national resources to develop relevant world-class educational content and programs representing a new paradigm in education.