India’s Education System, its Policies, and the World Paradigm

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Abstract

The purpose of this literature review is an attempt to understand and discern the reasons for change in the Indian educational system. The review presents a brief historical preview of the education system in India and attempts to gauge how policy has shaped the current education system. In addition, the review looks at the national and international trends in policy and the guiding forces behind educational policy decisions and well as attempts to build case for the need for systemic change being the most feasible change effort that can address the current educational needs of the country. Finally, the review attempts to raise questions regarding the role of policy and the systemic change effort.
In the last few years, India’s economy has burgeoned in leaps and bounds (Chandrasekhar, 2003). We can see the evidence of this progress by the number of jobs that have been generated and the vast number of people who are moving into the major metropolitans from smaller towns and villages to fill these positions (Bhagat, 2001; Chidambaram, 2006, 2007; Rajaraman). However, most of the jobs that are being generated do not require the employees to “create” anything new. In the Business Processing Units (BPOs) that have mushroomed all over the country, our newly minted graduates are spent addressing mundane processing details, whether its updating credit card information for people overseas or creating tax returns (Berman, Bound, & Machin, 1998; Bhagwati, Panagariya, & Srinivasan, 2004; Booth, 1996). We have an entire generation of people dedicated to doing the jobs of, as Robert Reich calls, routine producers (1991).

We need more symbolic analysts (Reich, 1991); workers who can solve problems and create solutions and not simply stick to carrying out instructions with great efficiency. We need to create opportunities for these symbolic Analysts to not only increase the individual worker’s standard of living and to give him/her the ability to push above the poverty line, but also collectively contribute to economic development of the nation (Acemoglu, 1999; Bartel & Sicherman, 1998; Bishop, 1992, 1998; Caselli, 1999; David, 1990; Krueger, 1993; Self & Grabowski, 2004).

But how does India produce these symbolic analysts?

The Wave Analogy and India—A Brief Historical Preview

If we intend to create these symbolic analysts, we need to better understand the concept of routine producers and symbolic analysts. We can start with looking at the wave analogy in
Alvin Toffler’s *The Third wave* (1980). In his book, Toffler notes that almost all societies in the world, while tracing their developmental history, progressed through three waves: *the agricultural wave, the industrial wave,* and finally, *the information wave.* Societies, in the *agricultural wave,* lived in small, close-knit communities where everyone aimed to be self-reliant. In the Industrial wave, people moved from their small, close-knit villages to vast sprawling cities inundated with skyscrapers and large factories that chugged away through all hours of the day. People were working like machines and the society around us changed to accommodate those changes. Then came the *Information wave,* which we are at the helm of and are witnessing the changes brought about with the extended use of technology in every aspect of our lives.

Let’s attempt to apply the same wave analogy to India. The wave analogy as proposed by Toffler does not completely apply to India. While we were riding the agricultural wave all the way up to our independence in 1947, the developed countries in the world were well on the helm of the industrial revolution (Bhambhri, 1985, p. 39). Immediately after independence, the government made it a priority to move the country at par with the rest of the world and usher in the industrial wave. Numerous research institutes and universities such as Indian Institute of Technology (IIT), All India Institute of Medical Sciences (AIMS) opened up, which aimed exclusively to produce research and services that would harken India into the industrial age (Ganesh & Sarupria, 1983). While the rest of the “developed world” had well over a century to progress from the agricultural age into the industrial age, India, stunted by the colonial rule was only able to jump on the bandwagon in the 50’s (Ganesh et.al. 1983, p. 192). By the time the 70’s rolled around, computers were rapidly taking over and pulling societies all over the world to meet the information wave (Toffler, 1980), and India was still attempting to establish its foothold
in the Industrial age (Ganesh et.al., 1983, p. 192). We were still working on developing mindsets of our citizens to move them from the agricultural age to that of the industrial age while the rest of the world was working on moving people from the industrial age mindset to that of the information age.

At this point, let us take a detour to understand the distinction between the industrial age mindset and the information age mindset. The features of the industrial age and the information age can be best illustrated by the following key markers.

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(Reigeluth, 1994)

Going back to the issue pertinent to this discussion—to compound the problem of playing catch-up, in the mid 1990’s the Indian market opened up and the so called “license-raj” abolished (Gupta, 1997; Tilak, 1988). Countries from all over the world started investing in India. India, stuck in the middle of trying to enter the industrial age, was now faced with the information age (Gupta, 1997). Unfortunately, we had an entire generation of workers who were very well trained in the industrial age mindset, gearing up to service the information age. As a result, the only kind of work that we were capable of doing was that that involved routine production of
services and products; consequently reducing us to a nation of routine producers in the information age. If we want our citizens to become symbolic analysts and not just remain routine producers, we need to have them embody the key elements of the information age—customization, autonomy with accountability, initiative, diversity and so on (Reigeluth & Squire, 2000). And to alter the existing trend and change routine producers to symbolic analyst, we need to address the root cause of this problem where all our citizenry, at one point or another, are “supposed” to go through; our schools (Bishop, 1992, 1998).

The Indian Education System

A Quick Glimpse of the Existing Education System

The Indian education system is financed predominantly by the federal and the state governments (Patel, 1996). “Education under the Indian Constitution allowed the state government to take decisions on all matters pertaining to school education, including curriculum, within their jurisdiction. The Centre [federal government] could only provide guidance to the states on policy issues”(NCERT, p. 1). In 1976 the constitution was amended in 1976 and in 1986 the country as a whole had a uniform national policy of education (NCERT)¹.

The current K-12 education system is broken up into the primary, secondary and higher education. Primary education encompasses grades 1 through 5, followed by secondary education covering grades 6 through 10, which is then followed by higher secondary which covers grades 11 and 12.² According to a latest UN report released in July of 2006 on the statistics tallying the

¹ An analysis of the amendment can perhaps be a point of discussion in a separate article.
² The information is corroborated from the author’s personally experience of having been educated in this very system.
attendance rates in the primary education sector in India reports that the attendance rate is 82.5 percent and the primary school completion rate is 61.7 percent (Bhalotra & Zamora, 2006).

Why Change?

Why our schools? Why do we need to change our schools to change the populace of the country from routine producers to symbolic analyst? John Bishop in his articles “The impact of academic competencies on wages, unemployment, and job performance” (1992) and “Occupation-Specific versus general education and training” (1998) points out that having the ability to read, write, and do math does not guarantee that the student will have the ability to earn higher wages. Bishop argues that productivity and higher wages are linked with advanced social and cognitive skills, which is not guaranteed by a rigid curriculum in reading, writing, and mathematics. Therefore, in order to not only develop these cognitive skills but also increase the wage-earning potential of the average citizen, which would then directly affect the economic growth of the nation, the education system is the first place where we need to begin our discussion on change.

The Sustained Divide

Even before we delve into a conversation of re-designing our education system to produce a citizenry of symbolic analysts with the mindset that embodies the key-markers of the information age, we need to discuss the surmounting problem with the Indian education system, one of which is the great divide between the elites and the socially marginalized population of the country (Patel, 1996; Ray, 1973; Taylor, 1991). A significant number of studies have been conducted in the area to bring this divide to the forefront of the discussion on the educational policy and initiatives in India.

“The Indian education system is a direct legacy of British colonialism solely interested in its educational policies in the creation of an army of English-knowing natives to run efficiently the
internal administrative machinery. A new elite was born into the Indian society in the latter half of the 19th century—a privileged minority whose hallmark was its acquaintance with the English Language which set it apart from the rest of the population, mostly illiterate and poor. The distance between the minority and the majority has continually become greater” (Ray, 1973).

In addition, W.H. Taylor notes, to address the problem of this educational divide, which stemmed from the already existing hierarchy based on social demarcation of separating groups of people based on their caste affiliations and which consequently, due to lowered self-esteem and position in society, led to higher drop-out rates after grade 8, several programs that would help such socially marginalized students acquire vocational skills in the 1980s were started. Schools such as Navodya Vidyalaya were started in an effort to help the marginalized populace gain the vocational skills necessary to acquire a job, increase their economic growth potential, and thereby rise above the social divide that they have been cloistered in for generations (p. 327). In fact, Jayandhala B. G. Tilak in her 1988 article “Vocational education in South Asia: Problems and Prospects” points out that the drive to push education toward a more vocational design, especially at the secondary level, has been a matter of discussion and change initiatives since the middle of the 19th century when India was still a British colony. In addition, even after the colonial rule “[v]ocational education was being viewed as a solution to the educational problems in the developing countries” (Tilak, 1988, p.245) and it still continues to be viewed so. In addition they helped “stabilize agricultural life and curb educational “over-production”” (Tilak, 1988).

Balogh and Grub, in two separate articles, published almost two decades apart point out that institutions of vocational training are viewed as extremely effective and efficient quick-fix, band-aid approach to alleviating the marginalized and bringing them into the mainstream; it has also been assumed to address two different enrollment problems—a) keeping students of lower
socio-economic sections from dropping-out and, b) preventing excessive number of secondary school graduates from pursuing higher education—and for stemming migration from rural to urban areas (Balogh, 1969; Grubb, 1985). Unfortunately, vocational education not only helps sustain the very issues of social segregation that it was to aiming dilute (Balogh, 1969; Blaug, 1973; Foster, 1965a, 1965b; Grubb, 1985; Taylor, 1991; Tilak, 1988), but it also is “traditionally oriented to the transmission of specific, technical skills based on a narrow conception of individual capacities and abilities” (Benavot, 1983, p. 73). The vocational design does not allow for the individual talents to grow thereby encouraging the growth of a majority of the population with skills to accomplish hands-on tasks but a complete lack of skills that would enable the population to think critically, which has been maintained as an elite domain of the selected few who have the power and the opportunity to pursue higher academic education (Benavot, 1983; Gordon-Lanford & Fiala, 1981; Meyer & Gordon-Lanford, 1981; Ray, 1973); thus, creating a population of *routine producers* trained and ready to serve the rest of the world and their information age demands.

**Changing the Existing Education System**

*Educational Policy*

Educational planning as defined by Douglas Windham is the “examination of many feasible alternatives, then making a choice among them according to an objective” (Windham, 1975). And this very process of finding the “feasible alternative” can be quite challenging as the educational planner, on one hand, “is told to gear the expansion of the educational system to quantitative forecasts of the demand for highly qualified man-power. On the other hand, he is urged to project what is quaintly called “social demand” for education, that is, the private
consumers’ demand, and to provide facilities accordingly. Finally, he is furnished with calculations of the rate of return on investment in education and advised to supply just enough schooling to equalize the yield of investment in human capital with the yield of investment in physical capital” (Blaug, 1967, p. 262). This “rational” approach to policy formulation is viewed by Psacharopoulos and Windham as the macroplanning effort to formulating educational policy that is within the framework of economic advancement and is informed by an interdisciplinary approach to economics (McGinn, Schiefelbein, & Warwick, 1979). However, Klees rejects this very notion stating that “conventional economic wisdom argues that the public provision of education should be cut back and that the private sector should be encouraged to supply more educational services” (Klees, 1986. qtd. in Adams, 1988). Therefore, if economics is the so called driving-force behind educational policy, it is only select portions of economics that are informing it. Perhaps as Adam suggest, this may very well be one of the reason why educational policy has failed to accomplish its goals (Adams, 1988). In addition, Adams lists several other reasons for the shortcomings of educational policy as being, “(a)the shoddy record of national educational planning; (b) the limitations of specific procedures for educational target setting or evaluation, for example manpower forecasting and rate-of-return analysis; (c)the importance of individual decision making within macroeducational planning; (d) the administrative and political obstacles to implementation” (Adams, 1988, p. 401)

Now, according to the National Council of Educational Research and Training (NCERT) report, the educational system in India, across all states is guided by common policies dictated by the central (federal) government. In addition, the drive toward educational reform, in India specifically, as discussed earlier, has primarily been within the framework of economic development focusing on alleviating the economic deprivation of the socially marginalized
population of the country which is the stated “social demand” (Blaug, 1967). The government had previously identified, as discussed earlier in this review, that the social demand in the country is to create opportunities for the underprivileged section of the society and the policy created addressed this very issue by suggesting that educational opportunities that focus of vocational training be made easily and readily available to all. Thus the *Navodya Vidyalayas*! Unfortunately, these institutions of vocational training are not accomplishing what they were supposed to, vis-à-vis, the upliftment of the socially and economically marginalized—a provision dictated by policy failed as had been predicted by several policy makers and economists discussed in this review (Rao, Cheng, & Narain, 2003). The reasons for educational policy shortcomings, as noted by Adams, could well be attributed to the failure of this particular policy initiative.

*The Current Change Initiative in India*

The National Knowledge Commission (NKC) (a Government of India appointed commission with a singular goal of analyzing current sociological shifts and mapping them with the existing education system and making recommendations every five years to educational policy makers based on the analysis) in their report, released in 2006, stressed 5 aspects of the knowledge paradigm; namely, Access to Knowledge; Knowledge Concepts; Creation of Knowledge; Knowledge Applications; and Delivery of Services (National Knowledge Commission, 2006). In the report the NKC stresses how all these aspects are interrelated and how a complete educational change cannot be brought about if all the above mentioned aspects are not all addressed. However, in their recommendations, based on the five aspects of the knowledge paradigm that the commission identifies, the NKC suggests that changes be made in the following areas: (a) Libraries; (b) Translations and consolidation of knowledge resources; (c)
Regularizing language; and (d) Setting up knowledge networks. A quick glance at the list of recommendations does not seem to address the problem that the nation is facing today. The recommendations made by the NKC focus a lot more on setting up and improving the knowledge base as well access and connection to the knowledge base. However, nowhere on the recommendations does the commission identify the incompatibility of our Indian education system with that of the evolving societal changes as an issue.

**The Best Approaches to Change**

In the first half of the 1980s, Marshall Smith of the University of Wisconsin, after spending a considerable amount of time analyzing school systems concluded that “coordinated and coherent education reforms at the level of the individual schools” (Vinovskis, 1996, p. 58) was pertinent to successful school reform movements. He emphasized, along with Stewart Purkey, the importance of changing the overall culture of the school as opposed to simple piecemeal efforts and suggested that this is was the best way to improve the school system (Purkey & Smith, 1983).

Smith continued to work on school reform, and the more time he spent on it, the more he was convinced that adopting a holistic approach to educational reform was the most effective. He, later, along with Jennifer A. O’Day, surveyed various local change initiatives and published the article “Systemic Reform and Educational Opportunity”, which was the first discussion that introduced the term systemic reform in context of educational change (Vinovskis, 1996). In this article, although Smith’s previous work was essentially confined to the role of schools and schools districts in educational reform, he along with O’Day shifted their focus to the role the state could play (Vinovskis, 1996). In the article they suggested three major changes which are typical of the ideal systemic reform model—(1) Revisiting the curriculum so it is in synch with
the desired changes; (2) Align state policy such that it supports the change effort; (3) Restructuring the existing governance system within the school such that it supports the change effort (O’Day & Smith, 1993). In the very same article they also noted that they did not have any prescriptive solutions to enabling this reform effort and the changes that they listed were mere suggestion that typify a systemic change effort (O’Day & Smith, 1993). Even though in their suggestions, Smith and O’Day do state that the role of policy is imperative to a successful change effort, they do not mention how that can be accomplished.

To support Smith and O’Day, Vinovski points that “while federal and state policy could provide assistance and even set guidelines, the impetus for the reforms had to come mainly from the local schools or the local districts” (1996, p.58). However, Sikes and Plastrik commenting on the systemic reform model proposed by Smith and O’Day, disagree and argue that “[i]f, content and performance standards are instituted as a form of voluntary guidance, many policy makers would predict they will be ignored by schools, teachers, and students” (1993, p. 27). In addition, along with realizing that policy initiatives are intertwined with educational reform, we must also realize that “[e]ducation is a creature of the state. It is subservient to political policies. Political decisions in other words, define limitations within which schools perform their functions. These decisions provide the legal structure underlying education’s goals” (Ivie, 1980, p. 268).

Heinrich Mintrop’s Changing Core Beliefs and Practices Through Systemic Reform: The Case of Germany after the Fall of Socialism, published in 1999, traces the role of policy change and its implementation when East Germany, after the fall of the wall went through a system-wide educational reform effort, which was guided primarily by policy initiatives. The main goal of the system wide educational reform in East Germany was for East Germany to be successfully integrated with the more democratic society of West Germany; the goal was not to improve
student or teacher performance but “the creation of institutional isomorphism of Eastern
Germany with their Western cousins” (Mintrop, 1999, p. 275). In order to meet this aim, the
newly formed state governments formulated policies that would be implemented across all
schools included in the region which was formally eastern Germany. In a similar change effort
in the Netherlands, the Netherlands Ministry of Education, Culture, and Science, placed
heightened emphasis on the role of policy in the late 1980s and early 1990s in order to make
their educational system more compatible with the global economy and the internal (labor)
market of the European Union, which turned out to be a successful endeavor (Hoekzema, 1995).
Therefore, policy, if clearly driven and with a clear objective could possibly drive a systemic
change effort.

Conclusion

We can perhaps conclude with stating the education system in India is in need of a
change and that change needs to be implemented across the entire system. We need to start the
process of producing more symbolic analysts than routine producers by affecting the paradigm
of our educational system. We need to design educational systems that are based on the key
markers; educational systems where the competencies are in synch with the key markers of the
society that we are currently living in, vis-à-vis, the information age.

It is imperative that we understand that piecemeal solutions to the impending problem of
not being able to provide quality education to one and all in India will not and cannot address the
issue that we have in hand. In addition, to implement a change at a level that addresses the
education system as a whole, policy changes need to be addressed as well. Arguably, if in an
educational system, a signal policy change were to be made that would be conducive to the
systemic reform process, then the change effort should eventually fall in place. Does this however guarantee that the process will end up being implemented exactly as we had envisioned it? On the same note, would it then be possible to devise a policy that would facilitate the kind of the process that we would want to have implemented? These are some questions that need to be further addressed and extensive research addressing these questions need to be conducted.
References


