Chapter #16

EDUCATION REFORM IN TRINIDAD AND TOBAGO THROUGH THE LENS OF COMPLEXITY THEORY

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ABSTRACT
The education system in Trinidad & Tobago has been subject to ongoing reform though thousands leave secondary school each year with minimal qualifications. Threats to equity and social justice continue because the failures occur primarily in the state-led sector, and not in ‘prestige’ schools. Historically, there has been a concerted effort to maintain this dual system while implementing reforms. Adopting a complexity theory approach reveals an educational landscape conditioned by powerful elites and their ideologies about a ‘good’ education, which stymie reforms today. Fifteen teacher educators gave their views on the failure of education reforms to take root, and through qualitative data analysis the researcher sought to determine whether complexity theory was of potential value in conceptualizing education reform in the future.

Keywords: Trinidad & Tobago, educational reform, complexity theory, equity, secondary education.

1. INTRODUCTION

This paper explores complexity theory as a ‘new direction’ in educational reform for Trinidad and Tobago, where many decades of reform, especially in the secondary system, have not borne the required fruit. While it may seem that this context is too small and, perhaps not easily relevant to international trends, I want to suggest that the conditions and obstacles to change bear close resemblance to those of other postcolonial societies (Hickling-Hudson, Matthews, & Woods, 2004). The paper takes the position that historical relationships in education is a useful starting place in attempting reform, and enlists complexity theory in exploring how such conditions may be overcome.

There are two secondary systems, both financed by the state, but with only one having legitimacy in the society (Campbell, 1992). Powerful denominational groups, the elites of different ethnic backgrounds, and the inherited, prevailing ideologies about a ‘good’ education, maintain the ascendancy of one system housing only a minority of students. Reforms meant to address these inequities are directed mainly at the ‘other’ system (state schools), and have largely failed. Conventional ways of conceptualizing educational reform have not factored in the emotional, social and ideological ties that the population has for a classic, grammar-type denominational education. Whole-system reform began in earnest in 1962 on independence from Britain. Oil and natural gas helped to finance loans from international agencies, and by 2001 the country had achieved Universal Secondary Education or USE (De Lisle, 2012). However, quality education has been elusive - if by ‘quality’ is meant that, “...every child has an inherent right to an education that will enhance the development of maximum capability regardless of gender, ethnic, economic, social or religious background” (Ministry of Education, 1993, p. 1). Recently, complexity theory has been receiving widespread attention in the international literature (Lemke & Sabell, 2013, Morrison, 2006) as a more meaningful option to the traditional ways of conceptualizing reform.
2. BACKGROUND

Trinidad and Tobago is a two-island Caribbean nation with a past marked by European colonization, African slavery and Indian indentureship. The inherited British model of schooling was (and, still is) elitist. Independence and decolonization saw efforts by the state to build more secondary schools, of different types to cater for all abilities, but the population continued to desire the older model. Colonial society was highly stratified with the whites (British and French mainly) at the apex of the social pyramid, the Coloureds or Mixed population occupying an intermediate socio-economic position, and at the bottom were the Africans and Indians (Campbell, 1992). Secondary education was established as early as the 19th century, mainly by denominational bodies in the form of exclusive grammar schools, which charged fees. The poor also had aspirations of their children accessing such an education since it led to jobs in the public service or teaching, or a university education and the professions. It was a route to social mobility and a life away from menial and manual labour, the only option available for the majority of the descendants of enslaved and indentured labourers.

The possibility of attending one of these schools energized the primary system and the last two years of a student’s school life was marked by intense preparation for the College Exhibitions (CE) – scholarships awarded to a few poor students in the 19th and early 20th centuries. Its successor, the Common Entrance Examination (CEE) (Mackenzie, 1989), which ended in 2000, had the same effect (De Lisle, 2012). The present-day Secondary Education Assessment (SEA) – a reform in its own right - continues this trend, though by now all students have assured places in the secondary system through USE. Students’ scores are used to allocate them to different types of secondary schools – the Ministry of Education does the allocating (De Lisle, Keller, Jules, & Smith, 2009). High performing students are sent to the ‘prestige’ sector. State schools offer a more varied curriculum, on the ‘comprehensive model’, preparing students for careers in business and in technical and vocational fields. It is not lost on the public though that by placing higher performing students in grammar schools, the state acknowledges that state schools are meant only for average and under-performing students – thereby, possibly shooting its attempts at reform in the foot.

The powerful denominational lobby has in the past swayed governments from enacting reforms geared towards a more equitable secondary system. In the independence era proposals to dismantle the grammar schools and establish comprehensive schools were met by such a huge outcry from denominational bodies (Roman Catholic, Anglican, Presbyterian, Muslim and Hindu), that the new, nationalist government backed down. The state even thought it prudent to sign the Concordat of 1960 which recognized, not only that the denominational bodies owned and controlled their schools, but also that the state was now responsible for paying salaries and a certain percentage of the upkeep of those schools (Stewart, 1981). They became known as ‘government assisted’ schools, and because the government paid all the expenses of state schools as well, the arrangement was called the ‘dual system’. A continuing controversial decision of that time was to allow the denominational schools to have a say in 20% of their intake. Many feel that through this ‘loophole’ the children of the wealthy and influential could secure a place at a prestige school without necessarily having excellent performance in the CEE or the SEA (London, 1989). Today the children of the wealthy are educated mainly in denominational secondary schools (and they come from all ethnic groups), whilst the children of the poorest groups tend to be found overwhelmingly in state schools (mainly African and Indian). Thus, there is an evident socio-economic and ethnic separation in who attends which type of secondary school as well as segregation according to intellectual ability.
The author contends that the root of the failure of education reform today can be traced to the events that fashioned this dual system. The prestige sector influences how state schools are regarded, because the ideologies in the society about education continue to prize denominational schools, and a classical curriculum. To wear the uniform of a prestige school signifies that one is ‘bright’ (London, 1989). This historical and contemporary background of the growth and development of the system is important as it represents the contexts into which reform efforts are inserted today. Powerful groups such as denominational bodies, the elites of all ethnicities, and, even the state, advocate for a particular type of secondary schooling based on ideologies and values about what is a ‘good’ education. Unsurprisingly, parents, teachers and students also hold fast to such beliefs, even though they may be located in the state system. For a small, developing nation, these are complex contexts into which to position, and hope for leverage, for educational reform.

3. THE STATEMENT OR THE PROBLEM

The issue focuses on the possible reasons why education reforms have failed so spectacularly in Trinidad & Tobago, particularly in secondary education. The small, prestige sector remains high-performing whilst the much larger state sector is typified by consistent underperformance, indiscipline and sometimes violence (Williams, 2013). Yet these are the schools that educational reforms were designed to transform. The reform process has been linear and traditional, following blueprints dictated by international donor agencies. The complex historic roots of the system have not been given due consideration in conceptualizing and implementing reforms and so, there is scope for considering another approach.

4. THE PURPOSE OF THE STUDY

The study explores the views of teacher educators about the failure of education reforms and assesses their perspectives in the light of what complexity theory has to offer as an approach to reform. Complexity theory takes the view that education is an ecosystem and is therefore sensitive to the contexts from which the system emerged. Such a view may augur well in bringing the polarized groups who act as gatekeepers for the status quo into a discourse, and could also prove beneficial to those who are still held in thrall by ideologies of education that can no longer serve them.

5. RESEARCH QUESTIONS

- What do teacher educators feel are the most significant issues that prevent meaningful reform of the education system in T&T?
- What explanatory power does complexity theory hold for clarifying these issues and suggesting new and possibly different directions for educational reform?

6. LITERATURE REVIEW

6.1. Education reform in Trinidad & Tobago

Research relating to education reform in Trinidad & Tobago seems to indicate that the social institution of education has been largely taken for granted in the process of reform. For instance, in pursuing national development through public sector reform to enhance
efficiency, quality and accountability, education is construed merely as an unproblematic part of that whole. That education remained largely immune to the efforts of researchers led Lewis and Lewis (1985) to say that “…the colonial model of education has proved remarkably resilient, difficult to dislodge even today…” (p. 159). Similarly, Jules and Williams (2016) feel that the intransigence of the system to move in the directions prescribed by reform is due to the “… legacies and structures that owed their genesis to many years of colonial policies and practices” (p. 288). Another example is seen in the pursuit of national development through the building of an industrial economy. Education was called into service to provide the knowledge and skills necessary to support the growth of a cadre of mid-level technicians and craftsmen through the development of technical-vocational curricula, available in state schools. This was a major reform involving the building of huge senior comprehensive schools outfitted with expensive industrial arts workshops - notwithstanding the deep-seated stigma associated historically with such a curriculum.

Other reforms attempting to make school governance more participative also have this taken-for-granted aspect. Groups and constituencies in education are regarded as if they are neutral players, all wanting and seeing the need for a democratization and decentralization of the system. For some groups, notably principals and school supervisors, decentralizing decision-making is welcome in dismantling the centralized governance structures of the past, though Hutton (2015) notes that stakeholders, especially at the school level, are slow to believe in this new reality. He sees it as a relational problem in that governments function in bureaucratic structures which engender a lack of responsiveness to those at the lower echelons. London (1996) described this as a “… culture which in the past encouraged loyalty, passivity and rigid adherence to ministerial regulations and rules. A reactive rather than a proactive administrative style was promoted and rewarded, and simply telling personnel that they now have the right and responsibility to change things may prove ineffective” (p. 200). In fact, the model of supervision and control established in the plantation era by the élites is difficult to supplant today by reform attempts that do not seek to deliberately encourage a collaborative culture. There may also be groups, especially the denominational lobby, who do not necessarily want deep-seated change, because their schools have always been high performing. Sustaining reforms geared towards ‘shared governance’ and ‘collective accountability’ (Hutton, 2015, p. 515) will be difficult without taking into account how the system was configured, and how to remedy the deep divisions between the two arms of the dual system in secondary education.

In addition to school building, institutional strengthening, and curriculum development, reform efforts focused on professional training for principals and teachers. In the case of principals, De Lisle (2009) notes that the training did not give a central place to dismantling the “…value commitments and practices…” of school leaders which continued “to act as barriers to change, creating conflict with core concepts that are often promoted in formal training” (p. 80). Leading and changing schools in postcolonial contexts, he suggests calls for “…both reflective practice and conceptual change in practitioners. Such approaches to training will be more efficacious because they seek to alter personal and professional identities, thereby enabling education leaders to confront old beliefs and adopt new ideological systems that are change-focused and supporters of school improvement (p. 75).

It is clear that reformers have not realized the power of deeply-held values and ideologies about education, derived from colonial conditioning, that continue to be hegemonic in the population. Reforms have been based on a generic or neutral idea about education, quite at odds with the reality. As a result, quantitative expansion of the system (school building, new curricula, professionally trained staff, and student services) has been the most visible accomplishments of this long period of reform. Improvements in quality and equity are still
to be realized. Reform efforts deliberately seem to skirt around thorny and controversial issues such as the dual system in secondary education. Reforms then have not taken seriously on board the schisms, the mindsets and the ideologies that lock the system into a constant reiteration of a plantation pedagogy model.

6.2. Complexity theory

Alhadeff-Jones (2008) and Snyder (2013) posit that there comes a time in the evolution of a system when the centre can no longer viably hold things together as it does not possess all the information that various groups at all levels are generating. Even a decentralized model would find difficulty in doing so. According to Snyder (2013), a simple system has few parts and is easily monitored, whilst a complicated system has a multitude of moving parts which are all known. However, in a complex system such as education, much of the information related to diverse groups is unknown, and behaviour cannot be reliably predicted based on past responses. The complex, he suggests

... is the realm of the unknown unknowns. It is a space of constant flux and unpredictability. There are no right answers, only emergent behaviours. ... The policy maker’s role in this space is to create safe spaces for patterns to emerge, which is best done by increasing levels of interaction and communication within the system to its largest manageable level. (p. 8)

In this view, a reform should be based on a continuous process of acquiring information about how various groups are responding. This differs from the linear reform process where ‘roll out’ is the major visible ‘event’ (giving politicians ‘mileage’). Reform is cast as a ‘project’, with pauses where information is considered, and even re-tooling and tweaking. Understanding education as a complex system suggests that reform should not involve a big political unveiling, but a more tentative approach, tapping constantly into what stakeholders know and deliberating on the best ways forward.

Drawing on general systems theory, cybernetics and ecological studies, theorists have identified self-organization, emergence and feedback as key concepts in understanding complex entities. For instance, within a social institution such as education, groups organize themselves (the denominational lobby in Trinidad and Tobago), and create relationships (links with ethnic elites). When a change is imminent (reform in secondary education), negative and or positive feedback loops develop and grow larger (channels of information and communication by key actors and others as they share and react to the reform). Their emergent behaviours are based on various reactions to the change which may not necessarily be homogeneous, so that information is needed on the details of these responses; some may be less opposed than others based on their unique perspectives or contexts (Morrison, 2006).

In conventional ways of doing reform, all this interaction, information and interest may lie well outside of the official scope of the project. But, according to complexity theory paying attention to these complex adaptive behaviours, learning how to identify them, and steer them possibly in other directions, may be what ‘reform’ should be about, especially in polarized contexts as is the case in Trinidad and Tobago. Casting education as a ‘sprawling ecosystem’ (Snyder, 2013, p.6) with a multitude of groups, each having their own historical connections, ideologies and values, is a more realistic picture on which to base efforts at reform, as it would necessarily mean increasing dialogue across all parties. The present model is more reminiscent of ‘the funnel’- wide consultation at first and then a narrowing of focus and drilling down at the various sites, to enact a prescribed course, looking for a certain outcome.
7. RESEARCH DESIGN

A qualitative approach is taken, exploring the perspectives of teacher educators at a School of Education in Trinidad and Tobago, selected because they work with teachers on a daily basis in schools across the country. They have a first-hand appreciation of how reforms are faring while being privy to the actions and views of principals, teachers, parents and supervisory and curriculum staff from the Ministry of Education. They have experience as subject-specialists in secondary schools, or as supervisors or administrative officers in the Ministry of Education. The researcher solicited their views via e-mail (sent out individually) on the failure of educational reform (without mentioning complexity theory). Twenty members were contacted and 15 responded (6 males and 9 females) to the following e-mail:

_I am envisaging writing a paper and I would like a little input from you. I am thinking about all the education reform that we have implemented and all the far-reaching changes in education in recent times, yet educational achievement/performance for the majority of students has not improved, judging solely by CXC results as a marker. I am asking you to write me a few paragraphs (or longer, in fact I would prefer if you could elaborate) as to why you think that this continues to be so. There may be many reasons but perhaps one or two that you believe are the most important and why._

8. DATA ANALYSIS AND FINDINGS

Responses were subject to qualitative data analysis i.e. reducing the data via codes and organizing according to significant emerging themes. The analysis was guided by what the teacher educators emphasized in their critique of educational reforms, and whether their statements revealed a ‘gap’ that could be meaningfully filled by an alternative approach grounded in the tenets of complexity theory.

There were two major points: (1) _Time_ - The urgency with which reforms were implemented, and the slap-dash nature of the implementation process, indicated the influence of political expediency. In Trinidad and Tobago a political party has a five-year term in power and then has to face the polls. There are two major political parties, largely defined by ethnicity, and the campaign trail can become overheated with bitterness and accusations. It is a Westminster form of government, often described as ‘the winner takes all’, meaning that the winning party has the right to people state boards and other statutory bodies, and extend their influence. Consequently, there is a ‘dog eat dog’ fight during each general elections, and this continues in Parliament with the Opposition frequently denying support to bills proposed by the government. Relationships are so polarised that a new party in power often seeks to discredit, discontinue and dismantle the previous regime’s efforts at reforms – for example,

_The Single Sex School Programme, where some former Junior Secondary and Senior Comprehensive Schools were converted to either all boys or all girls schools. ...lasted for about three years and was overturned by the succeeding government. I am unaware of any positive impact of this reform effort on student achievement._

(#3)

(2) Policymakers and planners lack comprehensive knowledge and understanding about the contexts targeted for reform. This relates to the first point in that in the extreme urgency to conceptualise a reform, seek funding, and design, implement and evaluate it, there is little time left for researching schools and iteratively gathering information from all major
stakeholders. (It also relates to the first point in another way – policy makers and planners are inextricably linked to politicians). As a result, ‘taken-for-granted’ knowledge fills the gap.

*Education reform is often state-centric and top-down, a technical-rational approach is taken without the necessary meaningful consultation with major stakeholders. As a result, there is little buy-in and the reform is doomed even before it starts. Consultations that occur are usually ritualistic and if stakeholders are aware that their voice really does not matter; that their contribution does not significantly change decisions already made, then support is also withheld. (*#4*)

There are a number of challenges that persons at the ground level of the education system experience (teachers in the classroom, administrators, parents, counsellors and school support services, entrepreneurs, denominational boards), but these do not seem to be considered when the managers of the system diagnose the needs of the system and suggest reforms. (*#5*)

These issues also relate to the specific problem of literacy. Many students leave state schools with minimal literacy skills, and this has been continuing for decades, despite reforms. What is needed is not a specific focus on literacy, but, recognition of the nature and characteristics of the clientele. For example,

> ... reform has never addressed the issue of text complexity. It’s not recognized as an issue in any reform documents, yet it is expected that students will be prepared for examinations on complex texts, that often exceed their ability to negotiate them ...

> An even larger issue, ... stems from inadequate proficiency in Trinidad and Tobago Standard English. There is nothing new I can say about this phenomenon. Annually, it accounts for thousands of Creole speaking students’ failure to achieve Grade 1 or 2 at English. What is frustrating is that we know children who read voluminously eventually internalize the structure of English, even if they are immersed in Creole-speaking contexts, but too many of our adolescents make other recreational choices except reading. (*#9*)

There are a number of other issues raised, many at a micro level, which also speak to the taken-for-granted nature of the practices which encourage inequities. They relate in some way to the larger issues of political expediency, and ignorance of pertinent and crucial relationships in schools. For example,

> Teachers work in isolation. Many teachers do not collaborate, share ideas or share best practices. They teach alone, work alone and do not seek help or guidance... Conversations about teaching and learning are often negative. Teachers are very often in survival mode and as a result do not believe that they have time for anything beyond delivering their lessons in the way they best know how to do. (*#11*)
To me, the biggest reform we need is in the examination system, because it is encouraging superficial teaching. Remember that the failures we are speaking about here are not the children of the educated middle and upper classes, it is the children who often have few supports beyond what they receive from school. (#9)

In a country of hills and valleys, rivers and swamps, villages and cities, I have come to reflect on the contrasts within the education system of my beloved country. We love geographical contrasts in small areas, but do we love disparities within education? Do we love that certain schools are considered elitist? Do we love that students access secondary schooling based on performance at eleven plus [SEA]? That some schools will have only the top performers and others only those who can barely read and write, thousands of them? (#13)

9. DISCUSSION

Data analysis reveals persistent inequities and issues which encourage disadvantage that go unaddressed by the traditional approach to educational reform. These include - the inadequate knowledge of the system by authorities in education, meaning that the authorities are largely unaware of, or ignore, or take for granted, the needs of the various stakeholders at the different types of secondary schools; a reformed system that leaves the high-stakes examination system intact; the plight of low-achieving, Creole speakers of English (who are in the majority); the embattled position of teachers, especially in the state sector; and, last but not least, the urgency with which politicians expect positive results.

It is not far-fetched to see that because of ‘funnel vision’ such ‘problems’ continue to exist (and, even escalate) in a climate of continuing reform. If reformers would cast the net wide in information-gathering (and treat this as a continuing process), they would be likely to catch more of the multifarious issues that emanate from ideologies, values and policies that tend to privilege a small sector of students and marginalize thousands. A major tenet of complexity theory is the salience of information and communication within a sprawling ecosystem such as education. Further, complexity theory by its commitment to regular and on-going meetings, and feedback loops, structures ‘safe’ spaces for groups with entrenched and opposite positions to interact in a prolonged way over key issues, hopefully building a broader awareness than just an emphasis on a particular type of secondary school. A simple example is that principals’ associations do not necessarily need to be configured according to school type. Another is that staff of neighbouring secondary schools could agree to discuss common issues, rather than be content to be rivals. The present approach to reform seemingly takes the position that all these groups, affiliations, factions and, their related ideologies of education, are a veritable hornet’s nest, and tries to steer clear by generalizing the research process and generating prescriptions for progress. This though leaves inherited values and norms intact, an uneasy foundation for successful reform.

10. CONCLUSION

Complexity theory is an approach that seeks out who is generating information, what that information is (facts, processes, ideas, criticisms, values), how it changes as the reform continues, and how that information could be directed towards a better research effort. For a traditionally-oriented and politically-driven education system such as that in Trinidad and Tobago, frank and respectful dialogue across disparate groups, is at present a non-starter. However, one way in which information sharing could be maximized is to construe reform
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as research. Long before specific reforms are actually contemplated, the Ministry of Education might consider setting up groups across traditional loyalties to, not only gather data from their constituencies, but also to bring such data to wider audiences for a thorough airing. Once a reform is embarked upon, all manner of information about its progress is disseminated, monitored and discussed by these groups, because the reform may be doing well in certain contexts and not in others; and, there may be scenarios where the reform is being sabotaged.

Research through such a means can reveal nodes (groups) and norms (interactions) which represent valuable information in thinking out how a reform will be accepted and its likely trajectory. In the present climate of adversarial relations between some of the major players in education, expanding research into the system, which is necessary for any organization (beginning with quantitative data), could be a way to develop solid knowledge of all parts of the system, prior to any reform undertaking. Hopefully, such data would lead naturally to more qualitative approaches, as issues arise, that may unearth the knowledge and insights from groups nearer to the chalkface. It may be that the tenets of complexity theory cannot be fully implemented in local reform efforts right now, but its cardinal point that more contextual information is fundamental to successful reform can be a starting place, and more research into the system could bring us closer to confronting the issues that have in the past led to educational failure.

REFERENCES


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