ID 013: The Infra-Structuring of Adult Learning in Singapore

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Abstract

Infrastructures are typically invisible systems that operate in the background to enable forms of life and work. Infrastructures are commonly associated with public systems such as roads, electricity, and internet. These systems enable the circulation of people, resources and ideas. There is a certain coherence and logic to infrastructures which could be regarded as materialised expressions of ideas, ideologies and social life. Therefore, infrastructures are both material and symbolic networks in which people live, imagine, identify opportunities and tap-on circulating and proliferating resources. Infrastructures are networked forms of production and distribution or "social-material assemblages" that are constantly being made and re-made through everyday practices (Anand 2011). Infrastructures not only produce and distribute resources but also political authorities through mapping and regulating things like accessibilities, possibilities and aspirations.

Using the notion of infrastructure, this paper explores how adult learning in Singapore which is being imagined and configured for a changing economy, invites questions about the public good, opportunities, and purposes of adult learning. My analysis of how Adult Educators mobilize adult learning as training highlight their negotiations of the human capital framework, and how government officers who manage adult learning as a form of public service reveal the political authorities that legitimize it.

Introduction: The adult learning system as infrastructure

The design, development and delivery of adult learning are deeply shaped by education and training systems, labour market and employment systems. Adult learning lies at the cross-road of these systems, and it has become increasingly important for governments managing and/or initiating social and economic transformation.

Through learning, the government is able to move closer into the labour market by focusing on skills development, integrating the education system into the economy, and converting citizens into worker-learners through various programs, schemes and incentives. The two main institutions that have come to define the priorities and trajectories of adult learning in Singapore are state governance and the market economy.

There are relational dimensions which could be analysed accordingly: scholars taking the systems perspective have been able to identify adult learning patterns and typologies of education and training systems and labour markets, and discern those linkages to governance and political systems (Saar, Ure & Desjardins 2013).

This paper aims to make a similar contribution by focusing on another relational aspect of the adult learning system: I use the notion of infrastructure to highlight how adult learning means different things to different people, its entwinement with paradigms or frameworks of thinking that materialize as standards and forms of bureaucracies, and the negotiations and navigation that people make around dominant as well as between competing ideas about adult learning. I am interested in how people imagine and create opportunities for themselves within the adult learning system, and what they do to reproduce, resist and/or appropriate the system.

By thinking about adult learning in terms of infrastructure, I analyse it as part of the balance and inseparability of people's negotiations with dominant systems, bureaucratic structures and the market economy. In my research, I privilege the voices of various actors within the adult learning system. I foreground how they describe and explain adult learning, identify opportunities, discern issues, and situate themselves within the system. The actors come from across the adult learning sector where they are adult educators, managers, government officers, and business owners of training companies. But for the purpose of this paper, I only highlight the Adult Educator and government officer. By listening to what they say and framing their "thinking, saying, doing and relating" (Bound, Chia & Karmel 2017) as infrastructure and/or infra-structuring, this paper highlights the discursiveness of the adult learning system as it showcases the negotiations adult educators make around the human capital framework and the tensions they experience as they try to deal with it. I also focus on the work of managing or governing adult learning by a government officer as it reveals the political legacies and authorities that structure adult learning.

Continuous education and training in Singapore: state governance and the market economy

The Workforce Development Agency (WDA) was established in 2003 under the Manpower Ministry as a national Continuous Education and Training (CET) body. It was set up in the aftermath of several financial and economic crisis that resulted in increasing unemployment. The government agency was tasked to develop and manage training programs to help workers gain the necessary skills and qualification in order to find and keep their jobs. One of the main objectives was to match job seekers to available jobs, and equip them with the skills for these jobs by providing the relevant training. The longer term objectives were to "build professional expertise in pedagogy and curriculum development for adult learning and skills certification, and provide the national coordination for continuing education and training, as well as workforce development efforts" (eresources.nlb.gov.sg).

Thus, the CET sector was developed to cater to post-formal education needs, and it continues to provide a means for workers outside the formal education system to gain training and certification through a national qualification system based on skills and competency standards.

The centrepiece of the CET sector is the Workforce Skills Qualification (WSQ) which functions as a national credentialing system that assesses and funds training and certification of skills and competencies. WSQ aims to provide recognition of skills and competencies; make entry and progression in the workforce more accessible for workers based on their prior learning including work experiences and credentials other than academic qualification, and function as an authoritative body for quality assurance of skills training and attainment.

The priorities of the CET sector then were the labour market and employment system as far as skills and training were concerned. These priorities have not changed but new strategies are emerging in response to global economic trends and conditions, changing social landscapes and demographics, and the inevitability of technology.

In October 2016, SkillsFuture Singapore was set-up by the Singapore government to enhance the integration and alignment of skill formation and work-based training. The agency aims to embark on initiatives that emphasise the value and importance of building deep and future-relevant skills, and to create a culture of lifelong learning where individuals "take ownership for acquiring new skills and deepening skill sets throughout their careers" (Workforce Development Agency, 2014, slide 4). A component of this is a new strategic policy direction encouraging a shift from heavy reliance on classroom learning towards the inclusion of workplace-based and work-based learning.

The changes in state organisations and their priorities also reflected a transition in public policy "from the distribution of social goods and public services to raising and facilitating individual aspirations" (Chia & Cho 2017, p.2). By integrating a market worldview with state planning of manpower and education on adult learning policy, the Singapore government seeks to "assist aspirational individuals to become advanced human capital so that they can equip themselves with the skills to tackle economic uncertainty and social risks created by the global economic restructuring" (ibid).

Negotiating the human capital framework

A human capital framework of adult learning is distinguished by its emphasis on learning for and/or at work. It engenders an awareness and acceptance of continuous learning as crucial for work and remaining in work, and for skills formation. The human capital framework of adult learning can be traced to the economics of education agenda linked to productivity growth. This brought economists with concerns for quantifiable measures and analyses to manage education "into a field that had been traditionally dominated by educationalists with humanistic and progressive ideals" (Desjardins 2017, p.2). The human capital framework focuses on the economic assumptions and (cost-benefit) value of learning. It conceptualizes adult learning primarily as "training" referring primarily to professional, vocational and technical education related to work. With increasing growth and investments on "training" or adult education for work, scholars observed how the human capital framework has become increasingly dominant in defining adult learning with implications for the development, provision and governance of adult education (ibid).

Talking to Adult Educators, I got a sense that people do become the right fit for the institutions of market economy and state governance but they also recognize and value something else beyond the human capital framework.

Debbie is in her late 40s'/early 50s' and has worked in the IT industry for over twenty years in different multinational companies before her current career as an Adult Educator. In response to my questions about her work in adult learning, she told me about the importance of training programs that resonate with the policy emphasis on provisioning of fundamental skills and/or compensatory adult education needed for the new economy. Debbie focused on the individual worker/learner and view learning needs in terms of worker deficit, and adult learning as the provisioning of required skills to address the deficit:

"As an adult educator, I help companies to look into their Human Resource and Learning and Development needs. For example, I have worked with a manufacturing company to develop and implement an "On-the-Job-Training" (OJT) program for their production line operators. So these are adult learners and I have to give adult learning. And there are many ways like classroom learning, workplace learning and so on, to help people learn on the ground and at the workplace in order to do their job. So this is very much a learn-use-apply situation for the purpose of completing the task and performing their role. For this group of workers whose jobs are more hands-on and their cognitive level is not there, you can't put them in a classroom and then tell them because they won't understand you. You can't train them or equip them by going for a class or sending them out for class. So the only way is to have their own experienced seniors to show them. That's why we call it On-the-Job-Training".

Yet in the same instance, Debbie also referred to "training" as mentoring and coaching:

"Workers should understand why they are doing what they are doing. They would be more motivated if they

know that they are contributing to and play a critical part in a process. You see, you want the worker to understand and not be a robotic equipment. I think if they can see the value that they put into a process, don't you think they feel themselves valuable? Then they won't be saying things like, 'without me it is okay.' And they won't be dismissive of themselves because we are all essentially human beings. So, adult learning could be a way of recognizing the worker as a human being who wants to do a job well, has capabilities and the means to understand, and not a piece of equipment. I mean, if you are using an equipment or a robot you just program steps A, B, C, D, E, F and they do exactly what you want. So if anything goes wrong, you just troubleshoot and repeat the steps that have gone wrong, you know. But if it's a human being, it's different. When they see that if a situation is changed, they would, you know, based on their experience in handling be able to discern, understand and respond accordingly."

Debbie's framing of adult learning in terms of a deficit model of skills, individual responsibility, and as a dialectic between cognition/thinking versus doing is deeply reflective of the human capital paradigm. She saw learning more as a "solution" to the complex problems of poor work performance and ethos, and worker's low morale. But in her elaboration of training as mentoring and coaching, Debbie emphasized that workers/learners first need to be recognized and valued as an important actor in the organization. She argued that workers/learners have to be "conscientized" into an understanding and realization of their value to the organization. However, she did not regard these issues as workers' rights and she did not see the need for organizational reforms. Here, the worker's sense of value and dignity which depend on employment practices and organizational models were implied but Debbie felt that training and learning were primarily the responsibility of the adult worker/learner, and training would lead to good and desirable outcomes.

Unlike Debbie, there are Adult Educators who recognize the implications of adult learning. Nina, an Adult Educator in her mid-40s' was able to distinguish between individual needs, employer motives and the national agenda of adult learning. I asked Nina if she thinks the adult learner is well served given the new focus and investments made and/or to be made in adult learning in Singapore through national schemes such as SkillsFuture, Skills Framework and WSQ, which aim to give greater recognition, enable better delivery and ensure quality of adult learning. These organisations and schemes seek to build multiple education and training pathways into an integrated CET system, proliferate learning and training choices, enhance regulation for quality assurance, and promote use of technology.

"Adult learning whether it is classroom, workplace, on-the-job, or wherever you call it, is fundamentally training and development, and workforce development. Mostly, it serves, I think, for the employers to make workers more productive, more effective, and do more things in a shorter time, and in a more effective way, that sort of thing. It is not so much about the workers' individual development. Even for national training organisations, the focus is on the national vision, national agenda, that kind of thing. The national vision or agenda as I understand it is that the government is trying to make people more competitive for the market so that we can attract more investments and businesses to create more jobs in Singapore. I think that's the government's agenda, which might be different from the employer's who may not be interested in creating more jobs! For example, if employers can actually replace all their workforce with robots, I think they will replace all their workers very quickly! So, their agendas and interests are quite different. Employers don't care how many jobs are created, and so long as the Singapore economy is growing they don't care as long as they can make profit by reducing the expenses or make people more productive, and produce more using less resources. Primarily, adult learning programs are focused on enabling workers to just do their own jobs well, to make them more efficient and more effective in what they are currently doing. Currently, adult

learning does not necessarily help workers to expand their job scope or provide opportunities for them to pursue higher levels of learning, or learn things in different areas".

Nina's explanation highlights the economic purpose as a primary objective rather than the transformative effects and/or other purposes of adult learning which contribute to social and individual well-being. She described the overlapping interests of the government and businesses, which downplay or negate the roles, functions and needs of adult educators and learners themselves, and ignore crucial humanistic and progressive goals of adult learning. The "government's agenda" and "business motives" need to be unpacked and analysed.

Nationalizing training/adult learning

I suggest that the current priorities of adult learning are drawn from the longer histories of meritocratic competition, pragmatism and paternalistic authoritarianism (Tan 2012). These histories are deeply embedded in Singapore's education and economic policies which have sought to achieve economic growth, uplift society and at the same time ensure social peace and political stability (Brown & Lauder, 2001).

Speaking to me at her office, Sally, a government officer in a middle-management position, explained the adult learning system and some of its challenges. She described how adult learning has come to be "nationalized" in Singapore, and expressed the need to reform the system.

"Before the WSQ system which came into place in 1990, there was already a thriving learning environment already. Funding from the government was very minimal then and there was nothing to be gained for the employer. Worker's training was conducted primarily by the business organizations themselves. There were companies that provided training for workers paid for by their employers. Private companies like Nelson Buchanan & Oostergard provided training on things like communication skills for senior managers. There were also performance standards set by the Productivity and Standards Board (PSB). So, WSQ took reference from the Australian system and gathered all these bits – the standards, guidelines for training, accreditation and funding, and gave training a shape, form, and structure at the national level, which I think is very valuable." (Sally).

Under the WSQ system, training gained recognition and became part of policy action targeting adult workers to equip them with skills to meet the needs of industries and support national agendas:

"The national WSQ comprises a nationally recognized framework of competency standards, skills upgrading pathways and qualifications for the adult workforce. The system parallels and complements Singapore's preemployment training system (of schools, the Institute of Technical Education, Polytechnics and Universities) which supports fulltime entry level training for young people entering the workforce for the first time. The WSQ has been developed for adult workers and is designed to be accessible by adults. The skill sets and training programmes in the WSQ are relevant to the needs of Singapore's industries, prepare people with the skills to become employable or to improve their employability, and carry national authority. The Service Excellence Training Approach will be aligned to and support the National "Go-the-Extra-Mile for Service" (GEMS) Movement" (from WSQ Curriculum, Training and Assessment Guide, Pilot Programme - 1 May 2006 to 31 July 2006).

The WSQ (for "Service Excellence Training") above reflects how training is to be seamlessly connected with the education system, labour market, and national agenda. But as the WSQ shows, training or adult learning is more explicit than the educational agenda or system as an economic policy instrument. Policy instruments like

education, manpower and economic planning have been honed over the years through a series of ideological and pragmatic manoeuvrings that resulted in "the historic political dominance of the government in partnership with global capital" (Tan 2012, p.67). In order to "gather all these bits" as Sally puts it, and maintain a coherence and alliance between all classes of people and the national directive, the ideological and material dimensions of training have to be managed accordingly. These dimensions would enable the state to maintain its dominance over the workforce, and continue on its course of economic and industrial development.

Training is grafted onto economic productivity, employability and promises of material well-being¹ under conditions of constant change and instability in the world. It can be argued that the nationalization of training and/or adult learning has lent itself to the state's extensive intrusion into the economic, social and human realms of its citizens.

But faced with new economic challenges and an evolving society calling for more government accountability as well as rising public demands for greater personal liberties, more Singaporeans are starting to question the status quo of the education, economic and political systems which adult learning is enmeshed within. All these challenges are reflected in the work of government officers like Sally whose job is to develop the adult learning system and implement policies for adult learning.

"Well, of course funding regimes have changed you know - the quantum (of funds) has changed and the different concentrations have also changed. Systematically, compliance has changed, quality assurance regimes have changed, some for the better and others for the worse depending, so yes there have been shifts. I wouldn't say the system has not developed at all or not progressed... Yes it has (progressed) but has it progressed for the better? I think that there are still clunky bits in the system but whether it can do more? And can we do more? I think it needs a concerted bringing together of the different parts of policy-making, to say where is the role of learning, so it could be Skillsfuture that does it but if it's Skillsfuture then is it just the purview of one agency, or just a certain number of institutions to drive it, and then is it the government talking about mind-set change and how else or how better could they influence the thought processes of people? What else is associated with learning? How does learning engage you as a person, and therefore leads to your better economic survival?" (Sally).

The adult learning system is far from a monolithic and unresponsive bureaucracy. The state actively monitors, develops and regulates it. The system requires not just material resources but also ideological ones to sustain its coherence, meaningfulness and effectiveness. Adult learning has to continue to feed into the political economic myth of "Third World to First" predicated on the governmental discourse of survival and a "substantial yet fragile success" (Tan 2012, p.70). As Sally put it, adult learning is both cause and justification for the economic success of Singapore, and survival of its workers. The economic reality for many Singapore workers is as follows:

"Pay cuts, retrenchments and pressures for workers to upgrade their skills have accompanied economic crises in an economy that may have developed too quickly. The highest income earners compete for internationally benchmarked salaries while the poorest households have experienced a fall in their incomes. Income inequality, as measured by the Gini coefficient for all households, has ballooned from 0.490 in 2000 to 0.522 in 2005

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¹ Scholars have shown that the linkages between learning or education and well-being are complex, difficult to identify and measure, under-researched, and therefore empirically indeterminable. See for example Richard Desjardins, 2008, "Researching the Links between Education and Well-being".

(Singapore Department of Statistic, 2006). In 2007, a Sunday Times feature titled "We Can Barely Stay Afloat, Say Low-Income Folk" described a 3.6% rate of inflation (the highest in 16 years), a rise of 20% in food prices, and "soaring" oil prices that had led to rising petrol and electricity prices. The monthly wages of cleaners and labourers, also reported in the feature, had since 1996 dropped from \$\$860 to \$\$600. The government now readily admits that there is poverty, but its political legitimacy is most threatened by a sense of relative deprivation in a society where meritocracy can easily degrade into inequality and elitism... Where the government continues to resist comprehensive welfare, the poor will need to be helped by innovative public assistance programmes as well as a greater reliance on the charity and voluntary sectors." (Tan 2012, p.85).

In lieu of "comprehensive welfare", Skillsfuture – a government initiative to "provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting points...drive Singapore's next phase of development towards an advanced economy and inclusive society" (www.skillsfuture.sg/AboutSkillsFuture), seeks to enable Singapore workers to embark on skills training, retraining and upgrading, and it encourages a mind-set of continuous striving and self-reliance.

The political legitimacy of the adult learning system depends on the valorisation of self-reliance: "It is defined around continuous employment and lifelong savings; self-reliance is about accumulating money from employment to pay for housing, healthcare, and education. Self-reliance is about not relying on the state or on society for these needs. Self-reliance is not only an image, nor mere discourse—it is deeply embedded within the practices of institutions such as the Central Provident Fund, the Housing and Development Board, the Ministry of Health, and the Ministry of Social and Family Development. It is not simply an encouragement or a call to action—employment throughout one's life course is crucial to funding housing, healthcare, and other ostensible public goods. In this way, self-reliance via employment is a precondition to social membership in contemporary Singapore. Put another way, falling short on performing self-reliance via full employment throughout one's life course puts one at risk of being left out of these important goods and therefore social membership." (Teo 2017, p.241). Adult learning is not only pegged to the promise of gaining and/or staying in employment but it affirms self-reliance and is in turn enforced by it as a shared belief and institutionalized practice.

Conclusion

While jobs remain the key focus of government effort, the strategies and approaches towards matching workers to available jobs, equipping workers with the required skills and knowledge for those jobs, and ensuring the standardized provisioning and quality of training for workers have been shifting.

Learning, and in particular adult learning and lifelong learning have become the centre of national efforts to address the challenges of jobs and workers training as Singapore undergoes deep economic re-structuring which threatens to radically transform work, jobs and lives.

It can be argued that the national effort and focus on adult learning is an attempt to shape or discipline the workforce into coping with the needs of the changing (global) economy. But to grasp how adult learning is administered or governed and to determine its impact requires not just an understanding of the economics and political economy of adult learning (Desjardins 2017). I show how the legitimizing forces of political histories and authorities structure adult learning, and how these forces materialize and reproduce themselves through the work and understanding of the government officer. I also show how adult educators negotiate the dominant human capital framework, which highlight the discursiveness of the adult learning system and tensions between

individual needs, employer/business motives and the national agenda. I have attempted to pull all these different things together with the concept of infrastructure that pays attention to the quotidian practices of the adult educator and government officer, which create the efficacies of adult learning.

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