



## STRATEGIC MANAGEMENT INTERVENTIONS FOR COPRODUCTION IN PUBLIC HIGHER EDUCATION

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### Abstract

Students of higher education institutions (HEI) should demonstrate sound academic preparedness and higher levels of motivation towards superior learning. Such contributions from students, if complemented by professors, culminate in coproduction of knowledge by students, peers and teachers together. Some of the HEIs sponsored by governments follow open admission policies. As a result, ill-prepared as well as insufficiently motivated student-cohorts from secondary schools reach such HEIs. Besides, insufficient aptitude and improper attitude among students contagiously develop throughout the educational pyramid, which create barriers in coproduction in government HEIs. This paper identifies the barriers originating from students in coproduction in order to address them inclusively. It proposes strategic management interventions to enable students amplify aptitude and reform attitude so that effective coproduction occurs in such government HEIs.

**Key words:** Coproduction; regular producer; beneficiary producer; merit goods; ‘Recruiting’ Higher Education Institutions.

### Introduction

Governments now place a major emphasis on faster development of the economy. Meanwhile, the concept regarding the basic foundation of the economy is being transformed. The economy of today assumes pillars built on the knowledge and skills of its human resources, commonly known as the ‘knowledge economy’. Higher education, which includes university as well as vocational higher education, contributes to the building of the knowledge economy. Public economists across the globe have discussed and debated widely the issues pertaining to the provision of higher education institutions by the government (Hjerpe, 1997). However, concerns are generally raised about the desirability of government sponsorship of higher education institutions on the grounds of axiology, quality, entitlement, competition, public expenditure as well as ‘welfare state’ concepts. When the governments focus on equal distribution of human capital formation across societies, they encourage their higher education institutions to follow lenient admission policies. Conversely, higher education institutions sponsored by the government can also stipulate entry restrictions with regards to admission of students. Singleton (2010) termed the former type of higher education institutions as ‘recruiting’ institutions and the latter as ‘selecting’ institutions. Students of socially underrepresented sections will enjoy equitable access to higher education while lenient admission policies are followed by higher education institutions. Consequentially, academically ill prepared and insufficiently motivated students also reach government sponsored ‘recruiting’ higher education institutions. These deficiencies can be ascribed to the lack of competition among students, who are aware of guaranteed admissions. This low preference exhibited by cohorts of students for coproduction of knowledge is called as ‘merit want’ or ‘merit goods’ (Musgrave, 1956). In fact, students should ideally demonstrate sound academic preparedness, higher levels of motivation and willingness to pursue ambitions to contribute dynamic inputs to the learning process so that students will be transformed to become equal partners in coproduction along with teachers.

A balanced interplay of dynamic inputs from students and compatible guidance and advice complemented by the professors yield superior learning outcomes including competent graduate attributes (Horne and Shirley, 2009). The process of gaining knowledge from professors as well as creating dynamic knowledge along with professors and peers by students enable students to acquire skills and competency to pursue independent learning and professional practices in future. This process reflects coproduction in education. Many authors have advocated the significance of coproduction in service sector including in education. They have also emphasised the importance of enhancing the contributions of students in the coproduction of knowledge (Shaeffer, 1994; Swanson, et al., 2001; Vargo et al., 2004; Bovaird, 2007; Eggins, 2008). According to Ostrom (1996), students should utilise the inputs and infrastructure provided by the governments to actively contribute to the coproduction process in order to enhance their capabilities. But students reaching ‘recruiting’ higher education institutions with deficiencies in aptitude and attitude do not put in dynamic inputs to the coproduction process. Academics in higher education institutions can sense the deficiencies of students in coproduction as they predominantly interact with the students. However, when they attempt to enrich the aptitude and refine the attitude of students, they face a series of challenges. Firstly, academics alone cannot completely eliminate the problems of ‘merit wants’ as the root causes of ‘merit wants’ are not confined to a particular classroom. Secondly, negative attitudes become deep rooted among students during the formative years of schooling. These attitudes are not easy to alter at the higher education level. Hence, policy makers in coordination with academic administrators can

develop inclusive strategic management interventions to enhance aptitude and enrich the attitude of beneficiaries so that students bring in dynamic inputs proactively. In fact, students should actively participate in the knowledge gaining process and demonstrate considerable level of creativity in the academic and cocurricular endeavours. Creation of knowledge by students provides a chance for peers and professors to reflect on the content of knowledge and the process of creation followed by the students. This article proposes a new framework to capture deficiencies in learning coproduction by students. The objective of this framework is to make students recognise that they are important creators of knowledge and their creativity yields them competent graduate attributes. They will not benefit just from accumulating absolute and abstract knowledge from professors. It advises academic administrators that application of strategic management interventions can help scaffold aptitude and attitude of students in order to enable students to be effective contributors in a coproduction process. Such an intervention can bring desired results in terms of life skill achievement for the students and human capital formation in the society, which will justify the huge public expenditure on higher education. Fiorito et al., (2004) reported that the government spending on education has been excessive based on a study in 13 European countries. The results indicated that education and health (merit goods) consume two third of the government expenditure.

### **Education in ‘Merit Goods’ Context and Models of Learning**

There are two general forms of provision of education generally found across the globe. Education sponsored by the government is known as public education and education offered by private parties is known as private education. Instances of education being provided by parents or a family have also been found at different times in history. There have been quite a good number of theories and frameworks of learning irrespective of various forms. Donovan *et al* (1999) stressed the importance of introducing a stable model of learning for providing guidance to solve the problems in student learning. A few learning theories and models are found in the studies of Donovan *et al* (1999); Carnell, et al., (2000); Dunn et al., (2000) & Felder et al., (2005). However, such frameworks and theories do not incorporate any room for addressing the intricacies of ‘merit goods’. Such theories are formulated independent of whether education is offered as merit goods, public goods or market goods. Further, there are still active discussions in the academic field and at policy level regarding treatment of higher education as either merit good or public good (Tilak, 2009). Cohen (2002) stressed the scope for further research in education. He recommended choosing any particular country to study how the government in that country operates as (i) producer, (ii) regulator, (iii) purchaser of final goods and services, and (iv) subsidiser with reference to merit goods. According to Tilak (2009), classical economists considered public education as public goods during the period of time ending in the 1960s. Beyond this point, with the prevalence of theory of ‘merit wants’ propounded by Musgrave (1956) and with the advent of the concept of Welfare State, neoclassical economists started to treat education as merit goods (Fiorito et al., 2004; Nowacki et al., 2004). Educational outcomes can be superior if knowledge is being coproduced irrespective of the fact that it is being offered as merit good or private good or market good.

#### **Merit goods (merit wants)**

A comparison of merit goods and public goods illuminates the basic attributes of merit wants. A study on how attributes of merit goods undermine the mission of education is one of the core concerns of the current article. Governments feel that certain goods and services (merit goods) like public education, health care, museum, public library, mandatory public inoculations etc. are meritorious for its citizens and offer them for free or subsidised prices (Cohen, 2002). The society values that everyone should have such goods and services irrespective of the level of wants of an individual. However, people will have distorted and deficient preferences for them and hence they will underutilise them (Fine, 1981; Blomquist et al., 2006; Case, 2008; Tilak, 2009; Kapstein et al., 2010).

#### **Public goods (public wants)**

Public goods are goods that exhibit one or both of the characteristics of nonexcludability and nonrivalry in consumption (Ng, 2004; Tilak, 2009). For example, public light cannot be excluded from one particular person if he is not ready or able to pay for it, if at all the public light has to be priced. Nonrivalry is about the feature inherent in the consumption of a good. Consumption of goods by one person doesn’t diminish the goods available for consumption for others. According to Ng (2004) & Tilak (2009) public goods and services should be consumed by all consumers in equal quantity.

#### **Public and merit goods with reference to ‘recruiting’ higher education institutions**

There are certain essential similarities between merit goods and public goods, which often lead people to draw a conclusion that merit goods and public goods are one and the same. Both are nonprivate goods, which benefit society at large and can be consumed collectively (Cohen, 2002; Tilak, 2009). According to Kapstein and Busby (2010), the government does not consider the ability of the individual beneficiary to pay while offering such goods and services. Drawing from the Welfare State concept, provision of educational institution for its citizenry is the responsibility of the government (Ng YK, 2004). Society benefits indirectly from education of its young citizens. Hence, the government sets up colleges and universities to discharge this responsibility. Such a public provision will meet the criterion of nonexcludability and nonrivalry of public goods (refer to definition of public goods). In public goods, demand from beneficiaries (society) exceeds the governments’ expectations and the governments need to look for avenues to allocate funds and resources to meet such demand. Issues arising out of allocation of resources are covered in Public Economics. Public wants draw governmental attention to allocate funds and resources targeting mainly societies underrepresented in higher education. However, students do not exhibit attitude and aptitude for the cause of education, which governments feel desirous for its young citizenry. By contrast, demand for merit goods from beneficiaries is defective compared to governments’ expectations. Hence, some strategic management interventions are required to elevate the demand. It

follows that once education is provisioned at a particular higher education institution, the knowledge building process should take place. Hence, the contributions in the coproduction of knowledge of students in 'recruiting' higher education institutions should also be enhanced.

As is depicted in the figure 1, the outer layer (i) in the diagram represents component of provision of educational services by the governments, which is a public good. The inner layer represents knowledge production component which is a merit good in a 'recruiting' higher education institution. Knowledge production component provides wider choices available to teachers and students depending upon the teaching and learning orientations. According to the observations of a few authors, teachers represent regular producers and students represent beneficiary producers of knowledge in a coproduction process (Parks, et al., 1981; McWilliam, et al., 2007). If the learning orientation encourages pedagogy to dominate, the producer-teacher will produce knowledge and consumer-student may absorb and reproduce such knowledge (iia). If the learning orientation encourages Student Centered Learning (SCL), the regular-producer and beneficiary-producer should ideally engage in creating knowledge (iib) together.

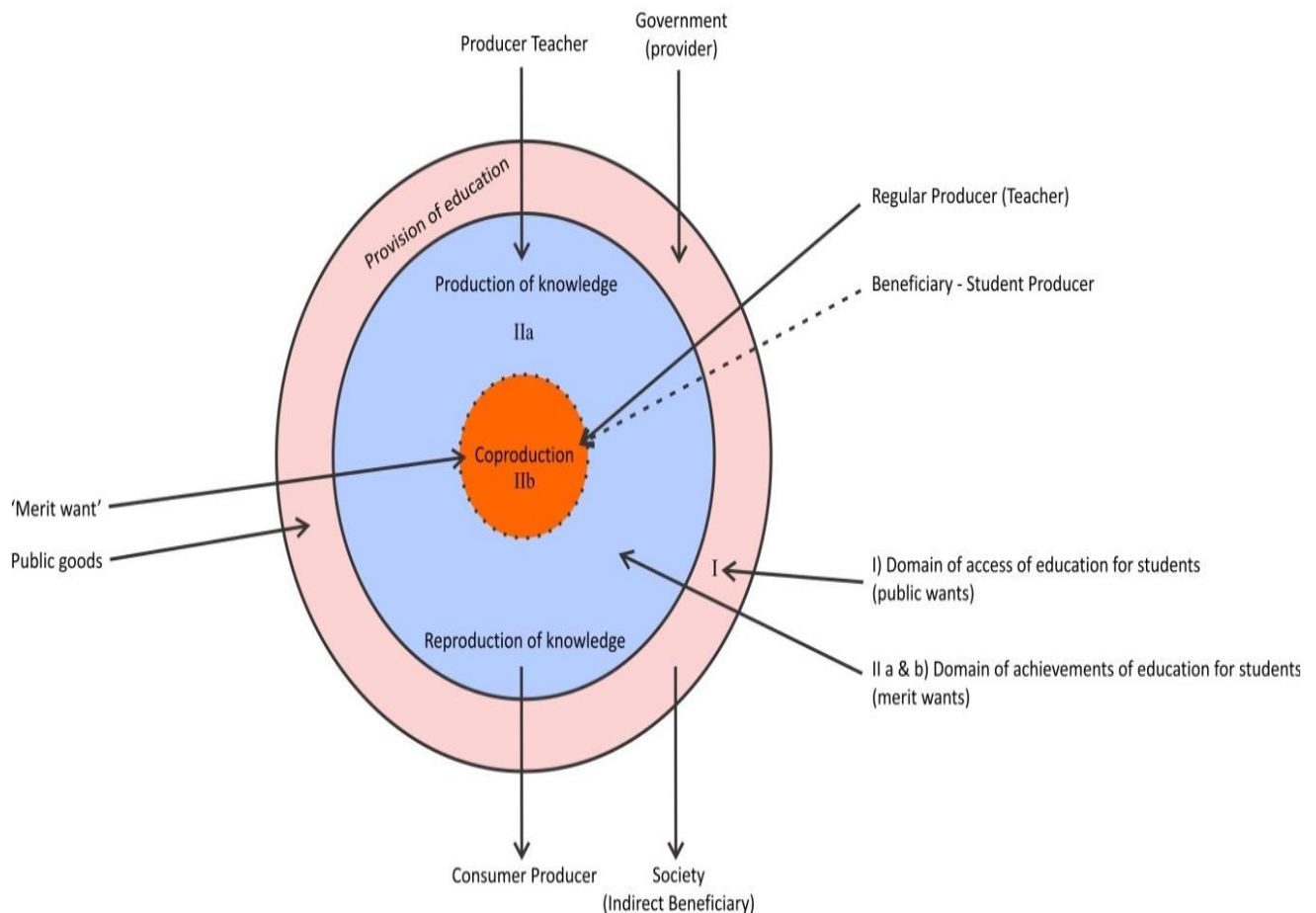


Figure 1: Duplex layer of education showing public and merit wants in 'recruiting' higher education institutions. Adapted from: (Parks, et al., 1981; Cemmell, 2002; Vargo et al., 2004; Becker, 2009).

Coproduction assumes active involvement of both the teachers and students, wherein students create knowledge and build capability. Properties of defective demand of 'merit want' primarily originate from students, which make element of coproduction fluid (as shown in dotted lines in II b) in the domain of academic achievement. Deficient demand constrains the inputs from students in the coproduction.

### Demand for Coproduction

Kotler et al., (2009) explained the demand in terms of readiness, willingness and ability of a target audience to reach desired behaviour. It follows that readiness and willingness are reflections of attitude while ability is exhibited in aptitude. Both aptitude and attitude are integral in the makeup of effective demand for coproduction. Coproduction ensures creativity of students, which leads to cognitive and emotional development of students. Developing creativity is widely acknowledged as a powerful medium to generate competent graduate attributes, which in turn help the mission of education. However, as far as addressing the challenges of coproduction of knowledge under the category of merit goods is concerned, there is paucity of sufficient literature. As per the available literature, it can be understood that 'merit good' component has dichotomous sociopsychological impact. Affirmatively speaking from a social point of view, governments are encouraged to allocate resources to satisfy public wants on things they view meritorious for its people. Conversely, 'merit goods' inversely affects contributions of dynamic inputs by the students in the coproduction process. That is, deficient components of demand such as defective wants and willingness (psychological impact) as well as deficient ability slow down the 'knowledge economy' building process of higher education institutions.

Therefore, stimulating student demand is required to trigger dynamic inputs from them. Given dynamic inputs from students complemented by an effective institutional supply of knowledge (inputs) in coproduction will reap best results.

Therefore, from the studies above, a need is evidenced for educational frameworks which identify the impact of ‘merit wants’ and prescribe solutions to stimulate ‘merit wants’ with reference to knowledge and capability building.

### Need for education frameworks in ‘merit goods’ context

Governments set up ‘selecting’ as well as ‘recruiting’ higher education institutions to provide higher education to its citizens (Singleton, 2010). Both the type of higher education institutions follows rigorous selection process with regards to appointment of teachers. However, with regards to admission of students, ‘selecting’ higher education institutions put entry restrictions. Lenient admission policies are followed in ‘recruiting’ higher education institutions, which have implications in the study of merit wants. First generation learners predominantly enter ‘recruiting’ higher education institutions and there can be inconsistency in their preferences and choices. These inconsistencies are caused by uncertain educational outcomes and imperfect information about the nature of benefits available to graduates. Weaver and others (2005) have emphasised the importance of coproduction in education with a special focus on participation and contribution of students in the learning process. They have come up with a ‘path model’ which estimates the impact of attributes and perceptions of students on class participation and learning. However, this model does not address the intricacies of students of ‘merit wants’. According to Kapstein and Busby (2010), ‘global civil society’ argues for the treatment of access to education as a ‘global merit good’. They have also identified the necessity of a new model for education to capture the deficiencies of merit goods lying on both the supply and demand side of the equation. It follows that the contributions of both teachers (supply) and students (demand) are important in coproduction. Coproduction will improve if students see themselves as being part of coproduction rather than having knowledge and capability produced for them by teachers. In ‘recruiting’ higher education institutions, knowledge is not effectively coproduced due to ‘merit want’ effect. In fact, students should actively participate in the knowledge gaining process and demonstrate considerable level of creativity in the academic and cocurricular endeavours.

### Coproduction Framework of ‘Merit Goods’

The framework 2 is a descriptive framework rather than a prescriptive framework, which depicts how the influence of merit goods impairs the coproduction of knowledge.

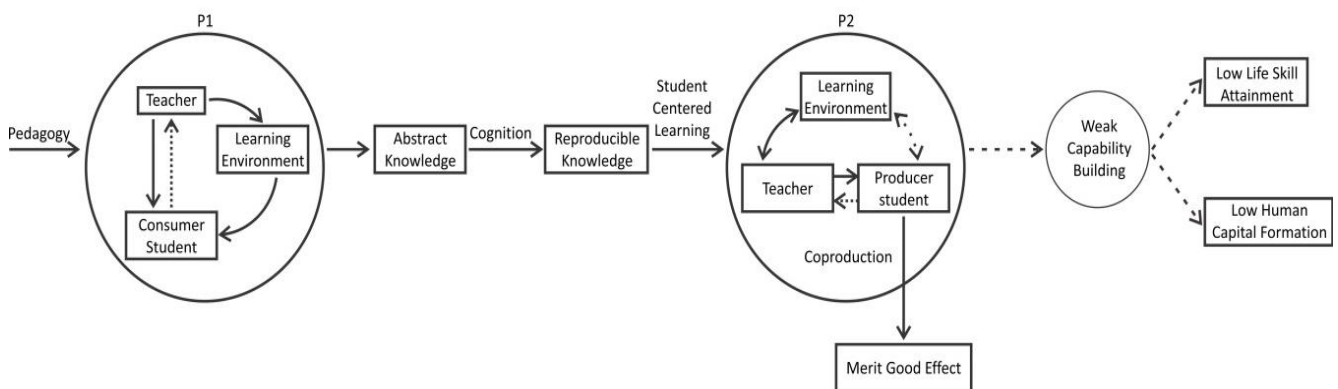


Figure 2: Coproduction framework in ‘merit goods’ context

Adapted from: (Browne et al., 1981; Ostrom, 1996; Smith, 2000; Fiorito et al., 2004; Vargo et al., 2004; Blomquist et al., 2006; Becker, 2009)

### Aptitude deficit and attitude deficiency in coproduction

The framework has two processes P1 and P2. In P1 in framework 2, the teacher is using pedagogical tools to impart knowledge. Students gain reusable knowledge and refine them through cognition. Such knowledge will act as base knowledge for them to contribute in the knowledge coproduction process of P2 in framework 2. With process P2, the focus shifts from pedagogy to Student Centered Learning (SCL). According to Teaching Excellence in Adult Literacy Centre (2012), SCL supports students to connect with prior knowledge, understand the topic and create knowledge. Here the teacher brings activities to the classrooms in order to stimulate participation and creativity of students. Conversely, the students should ideally be a contributor of critical and creative ideas. They should actively interact with learning environment and gain knowledge as well as develop traits and capability to hunt for new knowledge and skills. However, as is evident from dotted lines in P2, the interaction between students and learning environment as well as the interaction originating from student to teacher is passive due to the effect of ‘merit goods’. Free entry and thereby lack of a sense of competition residue inability (aptitude deficit) and inertia (attitude deficiency) among students. This is the pull factor, which disables contribution of the students towards coproduction. These pull factors are ascribed to ‘merit wants’. Hence, students are not able to reach the expectations of the academic administrators who advocate the concept of Student Centered Learning (SCL) and those academics who implement SCL in a government sponsored ‘recruiting’ higher education institution. Consequentially, the result is withered capability building among students and resultant vanishing of life skill achievement along with slowing down of human capital formation in the society. Hence ‘recruiting’ higher education institutions increase the access in higher education of students from underrepresented societies. But, the students do not gain and develop competent graduate attributes as much as happening in ‘selecting’ higher education institutions. Therefore it is desirable to get the above gap in coproduction filled via an appropriate framework.

### Review of various interventions in education

Strategic management intervention includes considering what must be done before strategic management interventions are formulated through assessing the success of interventions already been implemented in various domains.

**Intervention on instructors in the domain of merit goods:-** A study on strategic management interventions on District Primary Education Program (DPEP) in India funded by the World Bank yields insights on deviations of focus of strategic management interventions while they were administered in the domain of primary education. The aim of DPEP has been to improve the access, retention and achievement in the domain of primary education among socially and economically underprivileged children. DPEP was introduced in government primary schools wherein students were not selected but recruited, which helped to ensure access of students of underprivileged societies. Major thrust on making class room enjoyable via potentially participatory class activities could ensure retention of children in schools. However, in order to facilitate achievements by students, it followed ‘child centred learning’. Dhankar (2003), criticises the concept of child centred learning as it lacks clarity. According to him, DPEP provided workshops and made teachers active participants in the teaching and learning process. The interventions are on pedagogical tools, classroom activities and curriculum. Predetermined knowledge is passed down to the children. Less emphasis is given on the critical thinking ability of the students. Workshops for teachers are basically focusing on moulding the pedagogy to extract child centred learning. Such workshops are instructive than reflective in nature. Major stakeholders for intervention are teachers. However, ideas and experiences of DPEP could be extended to children of schools having possibility to enter ‘recruiting’ higher education institutions across the globe in the future. Deficiencies of attitude and deficits of aptitude are found among students of ‘recruiting’ higher education institutions. However, some workshops to enhance the competencies of children can be organised in schools on a national basis as emotional development happens well during the formative years of a child. Gradually developed from school years, these competencies are critical for the effective coproduction of knowledge and capability in higher education.

**Intervention on students for aptitude development:** There are strategic management interventions to improve cognitive competencies of students of postsecondary schools in many non-English speaking countries. General Foundation Program was introduced in Gulf Cooperation Council (GCC) countries, which is a unified central approach to uplift the cognitive foundation of students pursuing higher education in GCC countries (Al Shmeli, 2009). Students of vocational higher education in Colleges of Technology sponsored by the respective governments in countries of GCC such as Oman, UAE etc. benefit from such strategic management interventions. That is, General Foundation Program covers aptitude development in the domains of English language, Mathematics and IT skills. Such management interventions are helpful to scaffold academic preparedness of students while entering higher education. These colleges fall into the category of ‘recruiting’ higher education institutions and hence, the attributes of students characterise the elements of ‘merit goods’. However, this intervention addresses only one of the twin components of effective demand for coproduction in higher education. In fact, effective demand covers emotional as well as cognitive components. Further, here arise a few fundamental questions. Firstly, were these aptitude development programs implemented based on a scientific study of impact of ‘merit goods’ on attributes of students in ‘recruiting’ higher education institutions? Were there valid evidences to support the implementation of strategic management initiative of General Foundation Program? Are these or similar strategic management interventions administered in ‘recruiting’ higher education institutions across the globe? Which is the best level (school level or higher education level) to instil emotional orientation desirable for coproduction at the higher education level? These critical questions should lead policy makers towards comprehensive treatment of merit goods. Some form of inclusive interventions initiated from strategic management to address emotional (attitude) component too can accelerate the quality of educational outcome in such countries.

**Interventions on students for attitude formation:-**The development of emotional intelligence (attitude) is as much important as academic preparedness (aptitude). In fact, positive attitude can influence ability of students to attain formal educational outcomes. Many researchers have found that training on ‘emotional components’ of the brain will be much more effective than training on ‘cognitive components’ of the brain (Cherniss, 2001). Emotional component training such as training on team work, perception modifications, peer learning and approval, confidence building, ambitions etc. can modify behaviour through the formation of appropriate attitude. Emotional training should proceed well in advance of aptitude development training. Hence, Educational policy makers should initiate appropriate behaviour modification training during the formative years of children and ensure that such training are provided to students of all schools, who would possibly enter ‘recruiting’ higher education institutions.

### Strategic Management Interventions on Coproduction

Strategic Management is a continuous process of assessing external environment and internal strengths and weaknesses of a higher education institution, formulating and implementing strategies, and exerting strategic control to achieve the mission of an organisation (Parnell, 2009). It demands long term investment on tangible and intangible resources wherein key decisions originate from top management. Such decisions will have multiple impacts on the success journey of an institution.

The framework 2 assumes that education offered in ‘merit goods’ context is not coproduced effectively. In a normal case, students should have been cocreators. The causes of the defective coproduction originate from low motivated and ill prepared students. Hence, some strategic management interventions such as social marketing and short term aptitude development courses are required to stimulate contributions from students. Social marketing is a program wherein the principles and techniques of commercial marketing are applied to influence a target society in the long run (Fine, 1981; Kotler et al., 1989; Rangun et al., 1991; Andreasen, 1994; Serrat, 2010). It can be used to enhance the demand for merit goods. Goodwin, N. (2012, June) noted the success made in India since 1965 in creating enough demand for the concept of family planning (merit good) among couples through the application of social marketing. India’s Central Family Planning Board started the plan of applying social marketing with the support of the Indian Institute of Management,



Calcutta (Chandy et al., 1965). Social marketing can orient and train the students and reinforce the desired behaviour by delivering new ideas, changing values and attitudes starting from school years. Such orientations can also be incorporated through religious teachings in formative years of children if such societies are built on high theocratic values. Similarly, it can be applied to voluntarily modify behaviour of students towards coproduction for the benefit of developing competent graduate attributes. Communication tools of social marketing can be applied to promote, secure and maintain active contribution of beneficiaries including contribution of students for the purpose of making coproduction effective. For example, school wide campaigns on creativity and peer learning can create the mind set of children formed for coproduction, which will be useful in future as well. This can be done irrespective of the medium of instruction used in schools. The framework 3 shows that as a result of strategic management interventions, there is a strong capability building among students and reappearance of life skill achievement along with faster human capital formation in the society.

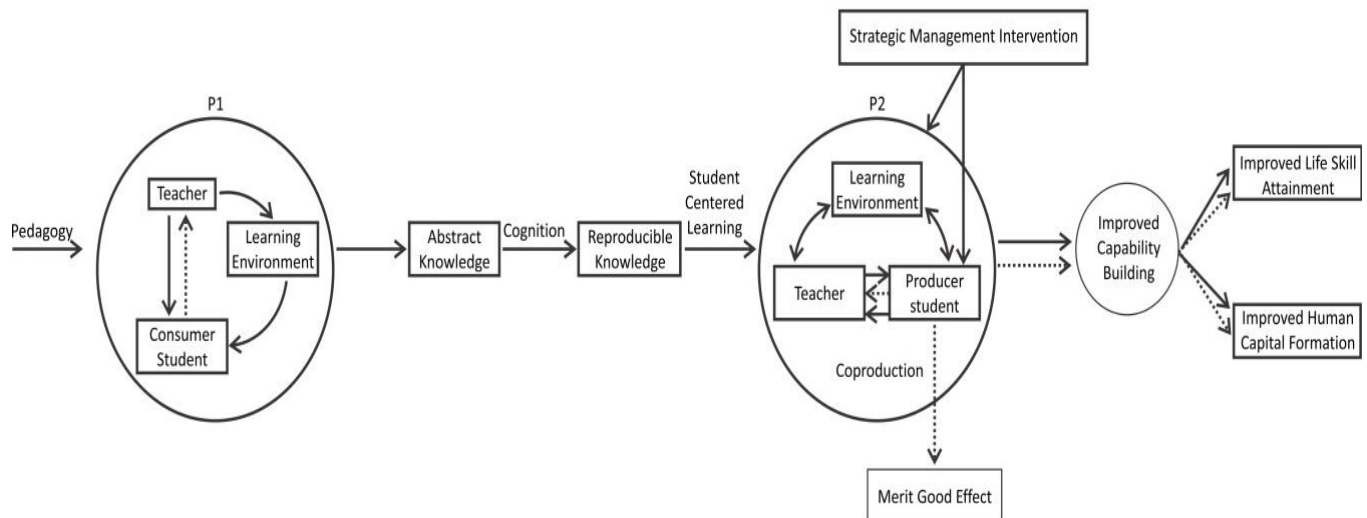


Figure 3: Framework with strategic management interventions on coproduction in 'merit goods'

Adapted from: (Browne et al., 1981; Ostrom, 1996; Smith, 2000; Dhankar, 2003; Fiorito et al., 2004; Vargo et al., 2004; Blomquist et al., 2006; Becker, 2009; Al Shmeli, 2009; Kapstein et al., 2010; Serrat, 2010)

Hence, it follows that governments increase the access of students from underrepresented societies by opening 'recruiting' higher education institutions and they can help students to gain and develop competent graduate attributes as much as happening in 'selecting' higher education institutions by appropriate strategic management interventions. Therefore, strategic management interventions enable the governments to attain the mission of education by nullifying the inverse impact of 'merit goods' on students. The above framework contends that strategic management interventions on the free choice of insufficiently motivated students are essential for the enrichment of coproduction. Effectively administered interventions can bring improvement in the cognitive as well as emotional domains of students which will enhance the learning capability (both emotional as well as cognitive) of students. As a result, the students will become academically self reliant and well prepared for coproduction.

## Findings

There is lack of conceptual consensus on the classification of higher education into merit and public goods. However, attempts of governments to attain the mission of education have twin layers:- firstly, the provision of higher education institutions and secondly, facilitating the process of academic achievement by students. As discussed in figure 1, the initiative of a government to provide educational access to students (either through 'selecting' or 'recruiting' higher education institutions) is a 'public goods' component as it meets the criterion of nonexcludability and nonrivalry. Further, efforts of students to achieve educational aims including the 'graduate attributes' in a 'recruiting' higher education institution is a 'merit want' component as it meets the criterion of merit goods.

There is a positive correlation between contribution of inputs by students in the coproduction process and the achievement of life skills by students. Their achievements lead to the formation of human capital in the society. Hence, academic achievement by students should be a domain of bilateral coproduction, where active interaction and contributions involving both teachers and students are highly desirable. However, as discussed in framework 2, demand for coproduction of knowledge by students suffers defectiveness when education is offered in a merit goods' context. In other words, 'merit want' inversely affects the contribution of students in coproduction.

## Proposed Strategic Management Interventions

Policy makers should design appropriate strategic management interventions in order to transform defective coproduction experience in classrooms into successful coproduction experience as illustrated in framework 3. While administering aptitude development courses of strategic management interventions, policy makers should ensure that effective tools of social marketing, which should target emotional components of students, are applied on a regular basis in schools. Such strategic management interventions can instil attitude and behaviour changes among students and act as powerful catalysts to generate dynamic inputs from students. Strategic management interventions can help convert deficient preferences towards coproduction into effective preferences. Strategic Management should take the initiative to;

- Identify government sponsored higher education institutions with minimum entry requirements in a particular country.
- Identify effective demand desirable for coproduction from students of 'recruiting' higher education institutions with the help of appropriate research tools.
- Identify intra-learner (cognitive and emotional) determinants of demand.
- Measure effective demand of coproduction that exists among students.
- Identify the gaps in actual demand and the demand desirable for coproduction.
- Decide on the levels of interventions: at the national level or at the higher education institution level.
- Design exclusive strategic management intervention programs to enhance the demand of beneficiaries by segmenting them on the basis of their attributes such as wants, willingness and ability.
- Offer aptitude enhancement course such as study skill development, prerequisite course, courses to improve proficiency in Algebra, language and Information technology etc. to scaffold ill prepared students to overcome the cognitive barriers for taking courses in higher education.
- Organise social marketing to educate the students about the value of their contribution in coproduction and bring in desired changes in their behaviour.
- Include a series of campaigns to reinforce the transformed behaviour and reduce dissonance.
- Appoint a program manager at the higher education institution level to organise the above programs.
- Appoint a national level coordinator to oversee strategic management interventions in schools and higher education institutions.

## Conclusion

Formation of positive attitude and development of proper aptitude by students themselves are essential for effective coproduction in higher education. However, deficiencies in aptitude and attitude impair coproduction. This phenomenon is not confined to a particular classroom; rather, they permeate globally wherever instances of 'recruiting' higher education institutions sponsored by the governments follow lenient admission policies. Lenient admission policies disable the sense of competition among students initially for getting admission and consequentially, they evolve to be incompetent for pursuing employment and excelling on the job. Hence, individual academics have limitations in offering comprehensive solutions. As the patterns of 'merit good' challenges are uniform than distinct, solutions should also have a common framework. As higher education institutions (including 'recruiting' higher education institutions) are comparatively more resourceful rather than individual academic, they can identify and address these problems by effective use of strategic management tools. All the three frameworks proposed will provide a scientific base for policy makers, administrators of higher education institutions, trainers and researchers to examine the role of aptitude and attitude components, in the coproduction of public higher education. The future research should explore ideas on the choice of the particular level for strategic management interventions. The research can be carried out to gather empirical evidences to identify any particular intrastudent emotional and cognitive components appropriate for intervention. Future research should cover cocurricular achievements of students as well. Further, there is enough scope for developing frameworks for all the merit goods to stimulate effectiveness.

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## References

- Al Shmeli, SH. (2009). Higher Education in the Sultanate of Oman: Planning in the context of globalisation, International Institute for Educational Planning, UNESCO. Retrieved from:  
[http://www.iiep.unesco.org/fileadmin/user\\_upload/Pol\\_Forum\\_09/Alshmeli\\_Oman.pdf](http://www.iiep.unesco.org/fileadmin/user_upload/Pol_Forum_09/Alshmeli_Oman.pdf)
- Andreasen, AR. (1994). Social Marketing: Its Definition and Domain. *Journal of Public Policy & Marketing*. 13 (1), 108-114.
- Becker, G.S. (2009). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education* (3rd ed.). Chicago: University of Chicago Press.
- Blomquist, S., & Micheletto, L. (2006). Optimal redistributive taxation when government's and agents' preferences differ. *Journal of Public Economics*. 90(6), 1215-1233.
- Bovaird, T. (2007). Beyond engagement and participation: User and community coproduction of public services. *Public Administration Review*. 67(5), 846-860.
- Browne, MN., & Keeley, SM. (1981). *Asking the Right Questions*. New Jersey: Prentice-Hall Englewood Cliffs.
- Carnell, E., Lodge, C., Wagner, P., Watkins, C., & Whalley, C. (2000). *Learning about Learning: Resources for Supporting Effective Learning*. London: Routledge.
- Case, KE. (2008). Musgrave's vision of the public sector: the complex relationship between individual, society and state in public good theory. *Journal of Economics and Finance*. 32(4), 348-355.
- Cemmel, J (2002). Public vs Private Higher Education: Public Good, Equity, Access: Is Higher Education a Public Good? First Global Forum on International Quality Assurance, Accreditation and the Recognition of Qualifications in Higher Education, Paris.
- Chandy, KT., Balakrishnan, TR., Kantawalla, JM., Mohan, K., Sen, NP., Gupta, SS., & Srivastva, S. (1965). Proposals for family planning promotion: a marketing plan. *Studies in Family Planning*. 1(1), 7-12

- Cherniss, C. (2001). Emotional intelligence and organisational effectiveness. In C. Cherniss & D. Goleman (Eds.), *Emotionally Intelligent Workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations* (eds. Pp. 3-12.). San Francisco: Jossey-Bass.
- Cohen S. 2002 . *Microeconomic Policy*. London: Routledge.
- Dhankar, R. (2003). The notion of quality in DPEP pedagogical interventions. *Contemporary Education Dialogue*. 1(1), 5-34.
- Donovan, MS., Bransford, JD., Pellegrino, JW eds. (1999). *How people learn: Bridging research and practice*. Washington : National Academy Press.
- Dunn, R. (2000). Capitalizing on college students' learning styles: Theory, practice, and research. In R. Dunn & SA. Griggs (eds), *Practical Approaches to Using Learning Styles in Higher Education*, (pp. 3-18). Westport, US: Bergin and Garvey.
- Dunn, RS., & Griggs, SA. (2000). *Practical Approaches to Using Learning Styles in Higher Education*. Westport, CN : Bergin and Garvey.
- Eggs, H. (2008). The changing academic profession: Implications for the Asia-Pacific region. Paper presented at the regional seminar on Competition, Collaboration and Change in the Academic Profession: Shaping Higher Education's Contribution to Knowledge and Research, Hangzhou, China.
- Felder, RM., & Brent, R. (2005). Understanding student differences. *Journal of Engineering Education*. 94(1), 57-72. doi: 10.1002/j.2168-9830.2005.tb00829.x.
- Fine, SH. (1981). *The Marketing of Ideas and Social Issues*. New York: Praeger .
- Fiorito, R., & Kollintzas, T. (2004). Public goods, merit goods, and the relation between private and government consumption. *European Economic Review*. 48(6), 1367-1398.
- Goodwin, N. (2012). Reclaim "Social": How technology and participation can improve social and behaviour change communications. In the special session on Missing Ingredients in Social Marketing: Participation and Empowerment, 1<sup>st</sup> International Social Marketing Conference, Department of Marketing, Griffith Business School , Griffith University, Brisbane.
- Hjerpe, R. (1997). Provision of Public and Merit Goods: Towards an Optimal Policy Mix? World Institute for Development Economics Research, United Nations University.
- Horne, M. and Shirley, T. (2009). *Co-production in public services: a new partnership with citizens*. London: Cabinet Office Strategy Unit.
- Kapstein, EB., & Busby, JW. (2010). Making markets for merit goods: the political economy of antiretrovirals. *Global Policy*. 1(1), 75-90.
- Kotler, P., & Roberto, E. (1989). *Social Marketing: Strategies for Changing Public Behaviour*. New York :The Free Press.
- Kotler, P., & Lee, N. (2009) . *Ending Poverty: What's Social Marketing Got to Do With It?* *Social Marketing Quarterly*. 15 (4), 134-140
- McWilliam, E., Lebler, D. & Taylor, PG. (2007, June 17–21). From passive consumers to active prod-users: students as co-teachers in a popular music program. 13<sup>th</sup> International Conference on Thinking, Norrköping, Sweden. Retrieved from [http://www.ep.liu.se/ecp\\_article/index.en.aspx?issue=021;vol=1;article=016](http://www.ep.liu.se/ecp_article/index.en.aspx?issue=021;vol=1;article=016).
- Musgrave, RA. (1956). A multiple theory of budget determination. *Public Finance Analysis*. 17(3), 333-343.
- Ng, YK. (2004). *Welfare Economics: Towards a more Complete Analysis*. New York: Palgrave Macmillan.
- Nowacki, M., & Eecke, WV. (2004). Using the Economic Concept of a " merit Good" to Justify the Teaching of Ethics Across the University Curriculum. School of Economics and Social Sciences, Singapore Management University.
- Ostrom, E. (1996). Crossing the great divide: coproduction, synergy, and development. *World Development*. 24(6), 1073-1087.
- Parks, RB., Baker, PC., Kiser, L., Oakerson, R., Ostrom, E., Ostrom, V., & Wilson, R. (1981). Consumers as coproducers of public services: some economic and institutional considerations. *Policy Studies Journal*. 9(7), 1001-1011.
- Parnell, JA. (2009). *Strategic Management: Theory and Practice* (3 eds). Mason, OH: Atomicdogpublishing.
- Rangun, VK. & Karim, S. (1991). *Teaching Note: Focusing the Concept of Social Marketing*. Cambridge, MA : Harvard Business School.
- Serrat, O. (2010). *The Future of Social Marketing*. In (Asian Development Bank), *Knowledge Solutions guide*. Manila: publisher.
- Shaeffer, S. (1994). *Participation for educational change: a synthesis of experience*. Paris. : International Institute for Educational Planning, UNESCO.
- Singleton, AD. (2010). *Educational Opportunity: The Geography of Access to Higher Education*. Farnham, Surrey, UK : Ashgate Publishing.
- Smith, C. (2000). *Review of the Future Funding of the BBC*. UK: Statement to House of Commons 21.
- Swanson, RA., & Holton, EF. (2001). *Foundations of human resource development*. San Francisco: Berrett-Koehler Publishers.
- Teaching Excellence in Adult Literacy (TEAL) Center. (2012). *Just Write! Guide*. US: Office of Vocational and Adult Education (OVAE), Department of Education.
- Tilak, JBG. (2009). Higher education: a public good or a commodity for trade? *Prospects*. 38(4), 449-466. Vargo, SL., & Lusch, RF. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*. 68 (1), 1-17.
- Weaver, RR., & Qi, J. (2005). Classroom organisation and participation: College students' perceptions. *Journal of Higher Education*. 76(5), 570-601.