Knowledge and Wisdom: Unseen Opportunities for Good Citizenship

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Abstract

The almost universally-accepted model of development proposed by the world Bank and the role of knowledge in its achievement is compared with other models, notably that proposed by the United Nations Development Programme. It is argued that different assumptions, axiomatic in nature, lead to different models. The failure of the dominant model is demonstrated, and alternative aims are proposed for education towards a better world.

Introduction

Growth and development are in fashion. Everything is being done, or sought to be done, in their names. But what is growth, and what is development? It is necessary to understand their true meanings before we can enlist the support of education towards their achievement, whether through a knowledge economy or otherwise.

This paper is an attempt to investigate the true meanings of 'growth', 'development' and 'knowledge economy', and thereby examine the contradictions that arise in the pursuit of growth and development as commonly understood, and to suggest possible ways of overcoming them.

Growth and Development

According to the World Bank classification, there are two primary criteria for the measurement of 'Development': High per capita income and the degree of industrialisation. Growth, then, is the movement towards 'development'. Even though there are many definitions of development, the above definition, or variations of it, seems to be at the back of the minds of most policymakers.

The dominant alternative definition comes from the United Nations Development Programme (UNDP): 'We define human development as expanding the choices for all people in society.' (UNDP, 1994). It should be noted that unlike the World Bank definition, this does not necessarily mean increasing consumption.

There are serious inconsistencies between these two definitions, and also within them, and these are at the core of the development debate. For the UNDP, economic development is but one factor that enables or assists in overall development, and is not an end in itself. For the World Bank (and its sister institutions, the International Monitory Fund and the World Trade Organisation), it is the only thing that counts [IBRD/WB, 2008], and virtually any price is worth paying for its achievement.

Knowledge Economy

We will postpone the consideration of the history of 'development' for a moment until we look at the meaning of the other key phrase in the theme of this special issue: Knowledge Economy. It could mean one of two things, economising on knowledge (making best use of the knowledge you possess) or alternatively, 'knowledge based economy'. The word knowledge itself had a spectrum of meanings, and connotes different things to different people.

Here too the World Bank has produced a criterion for its measurement, called the Knowledge Assessment Methodology (KAM) [Chen and Dahlman, 2005]. It concludes that:

> '(This paper) asserts that investments in education and training, innovation and technological adoption, the information infrastructure, and a conducive economic incentive and institutional regime are necessary for sustained creation, adoption, adaptation and use of knowledge in domestic economic production, which will consequently result in higher value added goods and services. This would tend to increase the probability of economic success, and hence economic development, in the current highly competitive and globalized world economy.'

It is clear that knowledge is valued only as a tool in the pursuit of wealth and for nothing else, certainly not for its contribution to the liberation of the human mind. In this context, we will need to examine whether 'knowledge' acquired in the fashion envisaged does really contribute even to this limited objective.

Assumptions

There are many assumptions in the models of growth, development and knowledge that lie beneath the dominant World Bank philosophy that have been proved wrong many times, for every occasion that has

resulted in success. These are really axiomatic in nature, and it would be foolish to try to either prove them right or wrong through purely logical reasoning. What we can do is merely to examine them and their consequences in detail, and then try to formulate alternative, better fitting, models.

Two of the main axioms on *which* the whole edifice is erected are the universality of selfishness and the absence of an upper bound to consumption.

These ideas have evolved during times of extreme poverty, when consumption was at an insignificant level. This was the situation at the beginning of the industrial revolution. It is not realistic to carry on as if they are true under present conditions, where global consumption of resources is at an unsustainable level, even though large communities still live in absolute poverty.

An education geared towards exploiting knowledge for economic gain; insensitive to other criteria will no longer serve even that goal, for other constrains will soon negate the gains thus achieved. However, it takes time for these ideas to filter through to policy makers, long immersed in the 'conventional wisdom' of never ending growth. That is why education for 'growth and development' still encompasses two main themes: ICT (Information and Communication Technology) and marketing as espoused by the World Bank (Chen and Dahlman, 2005).

No doubt, ICT is important for access to existing knowledge and for knowledge dissemination. But this emphasis on virtually second hand knowledge ignores two important aspects of knowledge for human development: aesthetic education and the development of the ability to simultaneously think and do.

Aesthetic Education

By the criteria described in the Knowledge Assessment Methodology (KAM) of the World Bank, aesthetic education has zero value for, according to Don Coodkin (Coodkin, 2003):

> 'The beauty of art is that it is *entirely* useless. Its purpose is not to make us smarter, better looking or more powerful. It doesn't strive to make our lives more comfortable, convenient or congenial.'

He goes on to quote James Joyce on 'proper' and 'improper' art. In *The artist as a young man*, James Joyce puts the following words into the mouth of his partly autobiographical character Stephen (Joyce, 1916):

> 'The feelings excited by improper art are kinetic, desire or loathing. Desire urges us to possess, to go to something; loathing urges us to abandon, to go from something. The arts which excite them, pornographical or didactic, are therefore improper arts. The aesthetic emotion (I used the general term) is therefore static. The mind is arrested and raised above desire and loathing.'

This may indeed be interpreted to say that proper art has a negative value according to the KAM as defined by Chen and Dahlman (Chen and Dahlman, 2005). But then, others will argue that raising the mind above desire, loathing (and ignorance) is the highest form of human development.

Thinking Ability

The other important aspect of education that is ignored by the slogan 'Education towards Knowledge Economy, Growth & Development' is thinking ability. Richard Feynman, Nobel Laureate in Physics, relates some of his experiences of teaching Physics in Brazil (Feynman, 1985).

He found that the students could answer very complicated questions, without understanding a word of what is being said. This is what comes from an overly strict didactic education, as in Sri Lanka, especially using a foreign language:

> 'Then I went to an entrance exam for students coming into the engineering school. It was an oral exam, and I was allowed to listen to it. One of the students was absolutely super: He answered everything nifty! The examiners asked him what diamagnetism was, and he answered it perfectly. Then they asked,
> "When light comes at an angle through a sheet of material with a certain thickness, and a certain index N, what happens to the light?"
> "It comes out parallel to itself, Sir—displaced."
> "And how much is it displaced?"
> "I don't know, Sir, but I can figure it out."
> So he figured it out. He was very good. But I had, by this time, my suspicions. After the exam I went up to this bright young man, and explained to him that I was from the United States, and that I wanted to ask him some questions that would not affect the result of his examination in any way. The first question I ask is,
> "Can you give me some example of a diamagnetic substance?"
> "No."
> Then I asked,
> "If this book was made of glass, and I was looking at something on the table through it, what would happen to the image if I tilted the glass?"
> "It would be deflected, Sir, by twice the angle that you've turned the book."
> I said,
> "You haven't got it mixed up with a mirror, have you?"
> "No, Sir!"
> He had just told me in the examination that the light would be displaced, parallel to itself, and therefore the image would move over to one side, but would not be turned by any angle. He had even figured out how much it would be displaced, but he didn't realize that a piece

of glass is a material with an index, and that his calculation had applied to my question.'

There are many more examples, but this would suffice. Then there is also the episode where he was asked to give a talk at the Brazilian Association for the Advancement of Science. With great effort, he prepared (and delivered) his speech in Portuguese, the local language. To his utter disbelief, he found all the local scientists speaking in English, and they were not much better than the students!

There is no gainsaying the importance of English as a means of accessing knowledge, but to advocate education, including primary education, through the English medium as a means of advancing a 'knowledge economy' is absurd. That would further enhance the type of 'learning' that is already widespread in Sri Lanka (and Brazil, and indeed in most post-colonial societies). Such 'learning' would certainly not promote thinking and independent investigation, but is only a further step in the direction of dependence and underdevelopment with the promotion and dissemination of second hand knowledge.

Even in the 'central' or 'mother' societies such as in Europe, didactic education has been faulted for its stifling effect. Albert Einstein, in his introduction to Paul Goodman's booklet on' compulsory miseducation' had this to say about his own schooling in Germany (Goodman, 1964):

> 'One had to cram all this stuff into one's mind, whether one liked it or not. This coercion had such a deterring effect that, after I had passed the final examination, I found the consideration of any scientific problems distasteful to me for an entire year.... It is in fact nothing short of a miracle that the modern methods of instruction have not yet entirely strangled the holy curiosity of inquiry; for this delicate little plant, aside from stimulation, stands mainly in need of freedom; without this it goes to wreck and ruin without fail. It is a very grave mistake to think that the enjoyment of seeing and searching can be promoted by means of coercion and a sense of duty. To the contrary, I believe that it would be possible to rob even a healthy beast of prey of its voraciousness, if it were possible, with the aid of a whip, to force the beast to devour continuously, even when not hungry — especially if the food, handed out under such coercion, were to be selected accordingly.'

Goodman's own comments are worth reading, as they are equally applicable to our situation in 2010 as they were to the United States in 1964.

Data, Information, Knowledge and Wisdom

This brings us to the Data, Information, Knowledge and Wisdom hierarchy. The relationship among data, information and knowledge is familiar to those working in information and computer science fields, where raw data is considered to be without meaning. When inserted into a relational data base only does it acquire a meaning. Knowledge is at a higher level, and requires intelligence to transform information into knowledge. In fact it is difficult to determine whether what was referred to in the previous paragraph qualifies to be called knowledge, or whether it is merely information, needing intelligence (natural or artificial) to transform it to knowledge.

T.S. Eliot, writing at the middle of the last century (Eliot, 1934), lamented:

> 'Where is the Life we have lost in living?
> Where is the wisdom we have lost in knowledge?
> Where is the knowledge we have lost in information?'

A decade later he wrote (Eliot, 1945):

> 'The vast accumulations of knowledge — or at least of information — deposited by the nineteenth century have been responsible for an equally vast ignorance.'

Perhaps these were influenced by the traumatic events of 1945 resulting from the application of 'information and/or knowledge' without wisdom, in the form of the atomic bombs.

Good Citizenship (or becoming civilised)

We have seen how expansion of information without knowledge and of knowledge without wisdom is not producing an advancement of the human condition. This makes it essential that we look for alternatives. Proper aesthetic education has been presented as one that reduces desires and antagonisms. We also need to look for alternatives that lead to a reduction of ignorance.

Maxwell has proposed 'a revolution in the nature of academic inquiry as a whole, so that it takes up its proper task of helping humanity learn how to become wiser by increasingly cooperatively rational means.'(Maxwell, 2000).

In the same vein, Goodman too suggests (Goodman, 1964) that 'The emphasis ought to be on the moral virtues of science itself, both austere and liberating; on its humane beauty; on the selectivity and circumspect reasonableness of sciences like ecology and psychosomatic medicine.'

In the field of education, there have been successful experiments in Critical Self Directed Learning (CSDL). Self directed learning, by itself, is totally different from the traditional teaching that Einstein was quoted earlier as disapproving, but its concepts are fairly well understood and do not need to be elaborated here. The more

important adjective is 'critical'. In this context, critical means to examine both the content and the methodology of education to ensure that it is beneficial not only to the learner but also to the others. As with proper aesthetic education, CSDL will take away the antagonism, both against one's peers and society in general, and against nature itself that is part of conventional forms of 'education'. Substituting the concept of co-existing with nature in place of subjugating it will turn most of modern natural science upside down. In general, cooperation has to take the place of competition.

Some have argued that this is not possible, that human beings are intrinsically selfish, mistakenly carrying over the ideas of the selfish gene (Dawkins, 1976 and 2006) who in his introduction to the 30th anniversary edition of his book states:

> 'Given the dangers of that style of error, I can readily see how the title could be misunderstood, and this is one reason why I should perhaps have gone for *The Immortal Gene*. *The Altruistic Vehicle* would have been another possibility.'

ISCOLE

In this section, I propose to briefly describe an experiment that a few of us, dissatisfied with the role we have been playing as teachers, embarked upon a couple of years back. We set up, with our own financial resources, a very informal organisation tentatively called ISCOLE (Institute for Self-directed Critical Open Learning and Empowerment). We called it a learners' cooperative:

> A learners' cooperative is an entirely new concept. Each member uses the Institute, including interactions with other members, to create a learning situation for one-self and for the others. At the outset, resolved to learn how such an institution can perform a useful function, in relation to the objectives set out. All of us have a lot to learn from each other.

As with CSDL discussed in the previous section, here too the most misunderstood word is 'critical'. We have tried to explain it in the following words:

> 'In the complex world of today, 'critical' takes on many more interpretations. Most of us are caught up in a 'Catch 22' type situation – whatever we do turns out to be wrong! 'Critical' here would mean the ability to figure out what is advantageous to one-self and also to others. It includes a worldview that, while being aware and conscious of the machinations of the world, enables you to stand aloof from them and recognise that which leads to the common good of all.'

We now have about seven or eight young members (aged 4 to 14 years) who attend normal regular schools and four older members (over the age of 60 years) who meet once a week, on Sunday afternoons. We have managed to organise an art exhibition consisting of the work of the younger members (at the beginning, we had no idea that art was to be a part of the learning process). The works of art were mounted and framed by the members themselves, and this too was a worthwhile learning process.

We realise that we have a long way to go before we can present a working model of this experiment to the outside world.

Conclusions

The commonly-accepted meanings of the words Knowledge Economy, Growth and Development are challenged, and new meanings are assigned to these.

Two aspects of knowledge that are mostly neglected in the current discourse are highlighted as being of great significance: aesthetic education and the ability to think. It is argued that a 'proper' aesthetic education will 'raise the mind above desire and loathing' and the development of an ability think, especially an ability to think 'critically', will result in total human development, and an improvement in the overall human condition, not a mere increase in economic productivity as measured by the GDP (Gross Domestic Product). Finally, an on-going and incomplete experiment on the lines suggested is described.

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