Balancing Globalisation and Localisation

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1 Introduction

The environment in which we ask for a balance between globalisation and localisation is our preparation for a knowledge society, with lifelong learning as a key priority.

In the future, the acquisition of knowledge, skills, and competence will be a continuous process of development, from kindergarten to post-retirement, from ‘cradle to grave’. Nothing less will be sufficient to keep up with social and economic development. Any nation state needs competent citizens, employees, entrepreneurs, and governments to live, work, and compete in the global economy. No person, company, or country is exempt. This is a ‘knowledge’ society. The name we give to this constant process of knowledge, skill, and competence development is lifelong learning.¹

In 1972, UNESCO introduced the concept of lifelong learning as a global perspective focusing on the needs and the rights of individuals to lifelong learning, promoting an integrated approach between formal and informal contexts, emphasising the need for adequate funding for both, covering all from the youngest to the oldest, and searching for democratisation of access to learning. In 1973, the OECD published a report on Recurrent education: A strategy for lifelong learning focusing on the needs of a global economy and competitiveness.²

The concept of lifelong learning was in the 1970s developed mainly in reference to the crisis of education systems.³ It reappeared in the 1990s in the context of economic crisis and increasing unemployment, with relevant literature showing a shift from a ‘teaching perspective’ to a ‘learning perspective’ focusing on the learner and the learner-centered environment.⁴

This step remains difficult down to present day. The intention of this paper is to highlight some contradictions in current discussions on balancing globalisation and localisation, and to show how some globalisation effects hinder the necessary switch towards a consequent learner-perspective. The learner-perspective is exemplified by the egocentric learning environment of knowledge workers.

Globalisation, a buzzword of the 1990s, was to herald the creation of both worldwide markets and trans-national enterprises. Some think that the era of globalisation based on Western values, in particular the United States’ assumptions that everyone wants to live as they do.⁵

Today, it appears somehow naïve to have imagined the Asia-Pacific Region as a homogenous market and block of countries, institutions, and practices. To argue that all Asian economic systems, including the Chinese one, have or are likely to converge seems simplistic. There

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May have been common economic, social, and political problems across the region as devaluations led to bankruptcies and downsizing but it is vital to underline that the specifics have greatly varied from economy to economy. Recent research has shown that globalisation will be likely to have, in the short- and medium-term at least, a partially effective if uneven impact on the Asia-Pacific Region’s economy, labour markets, employment, unemployment, and industrial relations.6

However, culture, as the end-product of a society, generally refers to the total patterns of values, ideas, beliefs, customs, practices, techniques, institutions, objects, and artefacts, which make a society distinctive. On the other hand, culture also serves as a framework for shaping and guiding the thoughts, the actions, and practices as well as the creativity of its members. It is transmitted, learned, and shared. People are culturally conditioned. Therefore, a person’s total value system is like a ‘generalised plan’ or a ‘cognitive blueprint’, the subset of which, when activated, leads to action.7

Obviously, the learner perspective is the perspective of an individual and, therefore, necessarily a local perspective. This paper exemplifies the local perspective by values and behavioural patterns of the Thai people.8

2 How globalisation effects on localisation

While recent research still discusses how likely, uneven, and ‘soft’ and transition within national economies caused by enlarged markets and multi-national corporations might be9, there is another aspect nobody could foresee when the globalisation discussion began – the Internet. After the invention of World Wide Web and browser, initially it was seen merely as a new medium besides print, radio, and television, although with great opportunities for asynchronous communication and easy access to information.

We just begin to understand what the Internet means in terms of the availability of a single global infrastructure on which businesses, organisations, and individuals are now able to overcome the constraints of previous generations of information and communication technology.10 That is, on the other hand, what the Internet makes probably the major means on which globalisation effects become visible, in setting both the goals of lifelong learning and the barriers to reach them.

The goals of lifelong learning are to enable local individuals to deal with global effects, in order to keep or make any national workforce globally competitive. These goals are the same for any society and can be outlined by keywords like knowledge-based economy, the understanding of knowledge itself, and the rising issue of knowledge workers’ productivity.

8 Suntaree Komin’s study is based on two national samples in 1978 and 1981. That it is still valid to apply results from the fact that a value is enduring. Values do change throughout life. It is not completely stable, which allows individual and social change to take place. However, they do not change overnight. It is sufficiently stable to provide continuity of human personality and society characteristics (Komin (1991), p. 19).
9 Cf. Warner (2001)
The barriers, however, are local and result from the interaction between any nation state’s specific societal values and behavioural patterns and those solutions offered as being globally valid. These can be outlined by keywords like e-learning, borderless distance education, and the strong belief in technology\(^\text{11}\).

### 2.1 Goal-setting effects

A knowledge-based economy relies primarily on the use of ideas rather than physical abilities and on the application of technology rather than the transformation of raw materials or the exploitation of cheap labour. Knowledge is being developed and applied in new ways. Product cycles are shorter and the need for innovation greater.\(^\text{12}\)

However, first it needs a clarification what we speak about when we speak about knowledge. While we progressed from the industrial age through the information age towards the knowledge age, we have been led to believe that information contains meaning, rather than just standing for, provoking, or evoking meaning in others. Thailand, for example, currently is bombarded by information about something called ‘knowledge management’. Too many articles available on this subject tacitly promote the notion that knowledge and information are effectively interchangeable. We are being told that we can ‘database’ and ‘capture’ knowledge, that information, in effect, contains meaning. But does it? Information is simply the vehicle by which we attempt to provoke, or evoke, a human response. Information on its own is quite static and lifeless. It simply exists, on multimedia computer screens, in text books, magazines, movies, TV, CDs, reports, letters, e-mails, faxes, and so on, all waiting to be interpreted, all waiting to have meaning attached by human beings.\(^\text{13}\)

Information is static, independent of the individual, explicit, easy to duplicate and broadcast, and has no intrinsic meaning. In contrast, knowledge is dynamic, dependent on individuals, tacit, analogue, must be re-created, and its meaning has to be personally assigned. Knowledge is, after all, what we know, and what we know cannot be commodified. If we, perhaps, did not have the word ‘knowledge’ and were constrained to say ‘what I know’, the notion of ‘knowledge capture’ would be seen for what it is – nonsense. Information becomes knowledge at the moment of human interpretation, and not an instant before.\(^\text{14}\)

That puts the individual as the carrier of knowledge into the center, very much in the view of the necessary switch to a learning-perspective mentioned above. With this new focus, the global knowledge economy is transforming the demands of the labour market in economies throughout the world. The future competitiveness of any economy will largely depend on the availability of knowledge workers.

To understand why focusing knowledge workers appears to be a successful way to develop solutions for a better competitiveness of any national workforce, going back in history to Frederic Winslow Taylor and his idea of Scientific Management provides useful insights.


\(^{13}\) Miller, F.J.: I=0 (Information has no intrinsic meaning). Online at: http://www.sveiby.com/articles/Miller99.htm (03.03.2004)

\(^{14}\) Ibid.
Taylor and his contemporaries were the first to apply knowledge to work processes. Before, for several hundred years, people applied knowledge only to improve tools, rather than to the overall productivity of a work process. Taylor did his studies and experiments mainly at steel companies with manual workers. Based on that, in 1911 he defined three key principles. First, the individual judgement of the worker needs to be replaced by science. Second, workers need to be scientifically selected and developed. Third, instead of leaving the solution of a problem in the hands of each individual, management has intimately to co-operate with the workers according to scientific laws that have been developed. Key element, however, is the division of work into a doing level (worker) and the management level (supervisor or manager). The worker is assumed not to be able to apply the science to his job himself, he is supposed simply to do what the manager instructs, without any form of thinking or personal modifications. The worker has to be properly chosen to suit to the type of work, and then individual capabilities or knowledge do not matter.¹⁵

For long criticised a lot because some ideas definitely were too simple, but overall, Scientific Management was and is very successful. Its intensive application led to a productivity growth of approximately 3.5% year by year; that makes a factor of 50 in a hundred years.¹⁶ Therefore, it cannot wonder that all major management theories of the last century (e.g., Kaizen, TPM, BPR, etc.) are all deeply linked to Scientific Management, just adding components of Quality Management. Scientific Management applies extremely well to reoccurring and primarily manual tasks where it is still valid to apply it. That is, by the way, what the currently very popular studies for the certificate of a Master of Business Administration deal with.

The trouble begins with knowledge work where Taylor’s central assumption of the unimportance of individual capabilities fails to meet the reality. A knowledge worker is anyone who works for a living at the tasks of developing knowledge to share it with others or to apply it in decisions. A term first used by Peter Drucker in his 1959 book, Landmarks of Tomorrow, the knowledge worker includes those in the information and communication technology (ICT) fields, such as programmers, systems analysts, technical writers, academic professionals, researchers, and so forth. The term is also frequently used to include people outside of information technology, such as lawyers, teachers, scientists, and students of all kinds, and it, of course, as well includes indigenous knowledge.

The knowledge of any firm or organisation is primarily owned by individuals and is well spread. That means, it is longer sufficient to choose workers who fit to this kind of work. Instead, it has to be individuals with the right kind of knowledge. The issue is important and fast growing. If IDC’s forecast from 1999 is right, today more than 40 % of the workforce of an average U.S. Fortune 500 company consists of knowledge workers. In consequence, it does not make sense any more trying to apply Taylor’s Scientific Management or its newer implementations to this new kind of work called knowledge work. What is the alternative? Prusak correctly states, “You cannot manage knowledge like you cannot manage love, patriotism, or your children. But you can set up an environment where knowledge evolves.”¹⁷

Equipping people to deal with these demands requires a new model of lifelong learning. Knowledge workers are judged by their outcome in terms of newly developed knowledge. Therefore, they judge any education and training by its outcome on new knowledge developed by the learner. Very much in parallel to the belief that information contains meaning, we have been led to believe that teaching contains learning, rather than just standing for provoking, or evoking, learning in others.

The goal is to set up a lifelong learning framework from a radically individual learner’s perspective rather than to do anything what is instead demanded by the needs and constraints of educational and training institutions, beyond teaching offering flexible and high-level support of individual learning on an as-needed basis. While encompassing formal learning (schools, training institutions, universities), non-formal learning (on-the-job and household training), it must take into account that about 80% of human learning are informal learning (skills learned from family members or people in the community).

2.2 Barrier-setting effects

Twigg reminds us to the Pony Express in old Wild West days. Faced with the invention of the telegraph, the Pony Express initially responded by buying faster horses. When that failed, the organisation tried to hire better riders. It did not realise that the world had changed, and the Pony Express went out of business.

Some think we are long on the right way. Colleges and universities globally offer millions of online courses, and, in the process, are apparently modifying century-old methods of teaching and learning. Everybody can see that the higher education community has moved well beyond the time-and-place-specific campus paradigm when IT was merely used to wire the campus. Most institutions involved in online learning today offer the benefits of 24/7 accesses to courses and degree programmes. Because they do not need to visit a campus in person, many students appreciate the flexibility offered by online programmes. Obviously, a lot has changed.

Concurrently, a lot has not changed. The vast majority of online courses are organised in exactly the same manner as their campus counterparts are: They are developed by individual faculty members with some support by information technology staff, and offered within a term or semester framework.

Most follow traditional academic practices (“Here is your syllabus, go and read or research, come back, discuss, or take your test.”). Most are evaluated to meet traditional student-satisfaction models. All this cannot surprise since most online courses are offered by traditional institutions of higher education, which produce results ‘as good as’ what they had before – aiming to reach the same (assumed as high) quality as before.

This is often referred to as the ‘no significant difference’ phenomenon. Twigg mentions that Thomas L. Russell’s compendium of more than 355 comparative research studies suggests that students in technology-based (typically, distance learning) courses learn as well as their

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18 Several studies, especially on corporate learning, differ between 70% and 90% of all learning being informal learning. One reason for these differences is that informal learning has many definitions, the ratio of informal learning varies with context. Most of us learned to ride a bicycle informally but Algebra formally.


20 Ibid.
on-campus, face-to-face counterparts. These studies have partially been used by distance educators to defend the quality of their courses and programs against the once-predominant view that learning takes place only in a physical classroom.

Despite any evidence that distance learning does widely not even reach the same quality, as classroom learning, ‘as good as’ is not enough facing the challenges of globalisation, information societies, and knowledge-based economies.

Current e-learning applications are claimed to be the future of education with propagandists coming from very different perspectives. Some ideas discussed in public about e-learning have an industrial background, willing to predict a great future for e-learning industries, which still present overdrawn revenue expectations born during the dot.com hype. These predictions are largely driven by ICT industries that want to sell their solutions and their understanding of education, telecommunications that want to get traffic on their lines, and publishing industries that fight against increasing digitalisation, all together united in a ‘write once, run everywhere’ approach.

Other e-learning propagandists have a governmental savings approach, only to willing to overtake the recommendations of international organisations without any critical distance. Exemplifying the hopes in many countries around the globe struggling with overcome educational systems, Chutimaskul and Chirasirimongkol wrote about the drivers of e-Education in Thailand that due to the lack of instructors and undesirable salary, the Ministry of University Affairs (MOL) announced the e-Education policy to support the virtual classroom.

For some people working in ivory towers it remains shocking even to think about education as a business. In 2000 however, the World Trade Organization (WTO) integrated education services in its program. In July 2002, the Organisation for Economic Cooperation and Development (OECD) announced the creation of an independent Directorate for Education, noting that education is a priority for OECD member countries and the OECD playing an increasing role in this field. These are signs of the enormous business potential behind the needs of any society to, simply said, fulfil the needs of individuals rather than those of traditional educational institutions. However, even the most ivory tower-like institution are very willing to join the cause of Internet-based distance education by developing ‘virtual outlets’.

Today, we should understand it better, after many lessons learned. The virtual version of inefficient education remains inefficient education. Accordingly, the UNESCO International Institute for Educational Planning concludes that e-learning is not the answer to many of the


22 For example, on Asia e-Learning Network, Advanced Learning Infrastructure Consortium (meeting at June 5th, 2002), Atsutoshi Oshima presented revenue forecasts from IDC reports 2000 (presentation on: Japanese e-Learning Market and the role of ALIC, PowerPoint presentation, slide 4). Dr. Nirachara Tongdhamachart, Education Technology and Human Resource Development Section of NECTEC, reports the same data as Oshima and, even older, some IDC data from 1998 (presentation on: e-Learning: New Age for Thai Education, PowerPoint presentation, slide 76). Both presentations are available online at http://www.ethailand.or.th/e-learning/ (23.02.04).

23 See also Daniel (2001).


25 Online at http://www.oecd.org/department/0,2688,4n_2649_33723_1_1_1_1_1,00.html (01.03.04).
most pressing educational problems faced particularly by poorer developing nations. Other strategies, such as open universities, can provide greater access and more cost-effective delivery of education.  

Recent research has shown that present applications of technology-driven e-learning aim the automation of teaching rather than supporting individuals in learning. It shows a paradox – wherever e-learning is written on a package, e-teaching is the content. In order to acquire new markets, ICT industries did for years now a good job in convincing us that technology is the answer. Distance education, once a challenged second-class solution to serve rural areas or underprivileged students with at least some education – better than nothing –, suddenly became the best possible solution for the future of learning. These applications do not solve any problems in education because humans, simply, do not learn that way.

Human beings are natural learners, learning within their individual environment, and from their individual perspective, from the first day of their life to the day of death. The difference between young and adult learners is merely the amount of available experiences they can rely on. Particularly for adult learners, these experiences are the basis of any further learning, in both informal learning and formal education, and therefore are the starting point if effectiveness and efficiency of learning are addressed.

One can hardly call it a globalisation effect when advanced economies try to sell outdated products to less developed economies since that has a century-old tradition. However, a strong believe in information and communication technologies, supported with the enormous marketing power of the industries involved, make most developing countries acting as ‘statists’ in their own educational development.

In Thailand, for example, it is now very easy to log onto the Web site of a university in order to enrol as an e-learner and obtain a degree, without having to travel great distances in order to do so. Asking for the consequences of these technological advances for learners, Bates names as foreseeable advantages of e-learning that international professors or experts will develop excellent training materials in order to overcome the obstacles of distance and absence of contact with students, and use innovative teaching methods in order to maintain students’ interest. Furthermore, Bates assumes that the competition that is thus generated with the traditional teaching methods used in many national or local institutions could only be of benefit to all students.

However, this global approach in particular creates a huge barrier when it meets the local framework of Thai societal values and behavioural patterns, in terms of both education and knowledge.

Based on two national samples in Thailand 1978 and 1981, Suntaree Kom in puts Thai intellectual values against those in the United States. The U.S. Americans show a high value for seeking knowledge and intellectual pursue with intrinsic interest as a goal value in itself, higher than their concerns for national security, religious belief, friendship, or inner happy-

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29 Ibid., p. 9.
ness. The Thai place a lower value for wisdom or knowledge, lower than those social, religious, and relation-oriented values, with students showing a higher concern for knowledge values than other groups. When considering the knowledge-related instrumental value of being educated, which secures a significantly higher priority in the Thai people’s cognition, it signifies that the Thai are interested in knowledge more in terms of its form and functional value of enhancing the educated person’s advancement in career, rather than in terms of acquiring knowledge for knowledge sake.\(^\text{30}\)

However, having higher formal knowledge does not automatically guarantee high position and nor does it structure the formal order of Thai society. Climbing up the social and career ladder is still\(^\text{31}\) very much dominated by seniority, connections, and the power base that a person is able to generate.\(^\text{32}\)

Several publications on the assumed value of e-learning highlight the possibility of intensive discussion with experts and students beyond national borders. It is said that such discussions support individual learning by informal learning within the appropriate community of practice, although it is not said that international experts usually will have other things to do than to discuss basics with students from all over the world.

Even if it would work however, this does not support Thai learning behaviour. Any lecturer in Thailand knows about the apparent lack of enthusiasm of Thai researchers and, of course, Thai students in pursuing intellectual discussions. As Komin explains, the Thai perceive seeking knowledge as a very personal thing, and discussion or conversation is an interpersonal act. The absence of intellectual discussion is more the result of avoiding the chance to crash at one another’s ego rather than as evidence of no intrinsic quest for knowledge. Impersonal attitude toward serious intellectual discussion is very much a Western mentality, quite alien and unfitted in the Thai cultural context, where relationship secures a much more significant priority in the Thai cognition than the object of knowledge, which is a personal matter.\(^\text{33}\)

Knowledge for knowledge sake does not receive high value in the cognition of the Thai in general. Education has been perceived more as a means of climbing up the social ladder, in terms of higher prestige and higher salary pay, than as an end value in itself. This functional value of being labelled educated is very clear, and indicates that the Thai people value, and give importance, to form more than content or substances. Komin stresses the point that even empty or faked labels are highly valued as indicators of prestige and honours, something to be possessed, with, or without the suitable worth – the content.\(^\text{34}\)

Even when the outcome of Internet-based degrees in terms of learning is challenged by many researchers today\(^\text{35}\), and even when learning about Western models, methodologies, and rules does not come along with any ability to apply them within the own societal context, they are very welcome to the Thai. For long, having a university degree has ensured an entry to respectable jobs. Even occupational training degrees like those from vocational colleges, which


\(^{31}\) Although Komin stresses this in 1991 and without newer research studies on this issue available, the author supposes this fact valid up to the present day, based on personal observation and experiences.


\(^{33}\) Ibid., p. 128.

\(^{34}\) Ibid., pp. 186-187.

\(^{35}\) Cf. Werner (2003), pp. 79ff.
are more application and job oriented, are not as prestigious as university degrees. Still today, a foreign university degree or even a foreign diploma of some kind is still better than a Thai university degree.

In short, the opportunity of advancement is greater with higher formal education, and greater still with a foreign degree. Such an emphasis of ‘form over content’ is also indicated by the fact that the value item of being ‘intellectual’ (i.e., having wide interest and knowledge especially in intellectual matters, enjoying analytical, penetrating discussions in small groups) was dropped out from the early value pool, due to its relatively low rating of desirableness.\footnote{Ibid., pp. 125-126.}

This paper does not intend to value the Thai values on intellect or education in any way since different cultures do things different. This paper can only highlight some aspects of the Thai system of societal values and behavioural patterns, which are part of a complex whole.\footnote{Even when the author intends to give a complete picture on the understanding of learning and education in Thailand, it is strongly recommended to read the Thai value study by Suntaree Komin.}

However, it is obvious that these values do not support the shift to a learner focus by itself, as it would be necessary for a competitive economy in terms of the availability of state-of-the-art knowledge workers. Any generalised focus on more impersonal e-learning will result in the contrary effect by strengthening ‘form over content’.

In addition, this is supported by other Thai values and behavioural patterns that make people assume that anybody in a higher position or rank obviously must have more knowledge. With ‘Pu Yai’, superiors or authority-power figures will usually have the power to make decisions. Subordinates believe in the certainty of the knowledge, wisdom, or experience of the ‘Pu Yai’, and that this is what qualifies them to make decisions beyond the realm of the subordinates. In contrast to ‘Western’ firms, the decision-making system in Thailand widely delegates upwards\footnote{Holmes, H. / Tangtongtavy, S.: Working with the Thais. White Lotus Co. Ltd., Bangkok, 1995.}, this avoids confrontation with superiors or colleagues where to be involved in a decision-making process might engage subordinates with unwanted responsibilities and increased uncertainty\footnote{Rohitratana, K.: The role of Thai values in managing information systems: a case study of implementing an MRP system. In C. Avgerou (Ed.), Proceedings of the Fifth International Working Conference of IFIP WG 9.4—Implementation and Evaluation of Information Systems in Developing Countries (pp. 188–201). London School of Economics and Political Science and Asian Institute of Technology. London/Bangkok, 1998.}.

Considering the examples above on how globalisation affects localisation, it seems that some of the negative effects result from particularly those efforts, which aim to avoid them. Even in international and respectably active organisations the shift to the learner-perspective is not yet completely done, at least in respect to the fact that each learner has a cognitive blueprint by his own societal and cultural environment.

3 Balancing globalisation and localisation

An unknown speaker in a Thai TV channel recently said that the only chance for Thailand to compete successfully in the global economy is to be Thailand. Simply to copy foreign models and approaches is no option.
It is often said that different cultures do things different. In reading publications around the best practices towards a knowledge society and lifelong learning, this aspect is hardly mentioned. Even discussions on how to integrate indigenous knowledge seem more to be a place for politicians to highlight the value of, in case of Thailand for example, ‘Thai wisdom’, not taking into account that Thailand is a culturally very diverse society with more than only one culture. It might, for instance, be necessary to develop different learning environments for Isaan and for the predominantly Islamic southern provinces.

Thai society as a whole is highly integrative. The ‘soft’ approach characteristics of the Thai – in keeping one another’s ego intact and by providing pleasant and smooth interpersonal interactions – helps to reduce tensions and provides a comfortable ground for adjustment processes to occur smoothly and successfully. It makes the migrants feel at ease and disarms their potential defensive mechanism, who in turn are charmed into the Thai way of interacting, behaving, and thinking, and ultimately assimilated into the Thai identity as evidenced in the case of the Chinese-Thai. Through positive interactions, changes voluntarily occur on the part of the migrants, who gradually discard certain stereotypic manner and behaviour of the migrant parents and adopt the often-contrasting Thai soft-spoken polite manner, and so on. This internal subjective assimilation at the cognitive-affective level provides the solid base for successful assimilation.41

On the other hand, especially this aspect supports the approach of focusing on informal learning when looking for promising ways. Before Thailand adopted the Western education model in the 19th century, for centuries all education was informal, within families, communities, and particularly monasteries. Informal learning seems to fit very much to the complex relationship and value system of the Thai.

Focusing on informal learning also finds support by historic Western epistemology and ancient educational models, for instance in the novice-mentor relationship model introduced by Socrates more than twenty-five centuries ago.

Knowledge workers need permanently to immerse into new fields and issues, fast, without attending courses for years, and a most intensive form of learning. This is provided by informal learning as it occurs when a novice grows into an existing community of practice in the field of interest, thereby reaching expertise, for instance as opposed to current Master degree courses that are very loosely connected to the everyday work environment of any student, if any.

Obviously, knowledge workers already exist within the Thai economy as anywhere in the world else, even if they are not publicly recognised as such. Knowledge workers are judged by their outcome on newly developed knowledge to be shared with others or applied in own decisions. Therefore, knowledge workers have a radically egocentric view on education and will judge any approach by their individual outcome on knowledge, skills, or experiences gained.

It seems reasonable to suppose the development of community of practice-oriented learning structures that address the most critical field on the way to the knowledge-base economy – the knowledge workers.

4 Core capacities needed for all individuals

With the Internet, the need to be able to memorise information loses importance against the ability to find, analyse, and synthesise information, to become information literate. This does not fit any longer to the idea to do a vocational or academic education once in a lifetime, viewing the education as finished with the certificate or degree received. In contrast, ‘lifelong learning’ describes the continuum of basic and further, academic and vocational, instructor-led and self-directed education, with the ‘knowledge worker’ in mind as the new learner type, temporary or on the long run, driven by own skills (e.g. curiosity or social standing) or environmental challenges (e.g. at the workplace).

Therefore, basic education that aims to enable all individuals to get involved into a constantly changing society needs to focus on those skills that are necessary and valuable for acting successfully within any community of practice. Basic education needs to be comprehensive rather than professional because societies change too fast as if one could learn their final realities. It needs not only to gain knowledge but also permanently to re-gain this knowledge and reflect it with the experiences made in its application. This, of course, needs entirety, openness, courage to error, and courage to visionary thinking. These competencies are much less cared than necessary.

One of the reasons for this delay is the inadequate dealing with the economics of knowledge. Due to its ubiquitous availability, information becomes increasingly raw material. This means that the next step of improvement, gaining knowledge from information, becomes most important for the future. That needs different key qualifications, with individuals being able to more than a simple addition of skills and knowledge. It needs strategic qualification to bring those skills and knowledge to fruition. It needs professional, individual, and social competencies to act in combination.

What Glotz in 1999 stated for the German society, seems to be the general question for all societies.\(^{42}\) We can long discuss how to define such key qualifications. Usually, terms such as creativity, abstract and theoretical thinking, independence, planning and analytical thinking, strong commitment to teamwork, flexibility, problem solving etc. will come up in such discussions.

Indisputably, the issue of a broad societal discussion on the these key qualifications becomes increasingly urgent. The question is what to cover in basic education, what belongs to further education, and how to connect both.

As Glotz correctly states, our day-to-day reality is full of inconsequence. While most job classifieds look for single fighters, the most important factor of production in any knowledge society is the ability to collaborate. Relevant basic skills are, for instance, complexity management, reasoning and rhetoric, negotiation and mediation, and communication and media. These basic skills play no major role within most current education systems.\(^{43}\)

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\(^{43}\) Glotz (1999), p. 90.
5 Development of appropriate learning systems

Knowledge workers do a special kind of work that is the most remarkable sign of change on the way to the knowledge-based economy. They work in literally all industries and are necessary elements for any business in keeping pace with permanent change and development.

They need a framework where knowledge can grow to keep pace with permanent change and development themselves. This framework will be judged from an individual, and that as well means local, point of view of the learner. It needs to enable an individual to permanently learn and add new knowledge to the individual’s skills, experiences, and knowledge, highly flexible in terms of content, direction, interests, time, and access. It furthermore needs to enable the individual to get and give back, experiences made with the new knowledge applied.

It is not possible to design any curriculum in advance since such curriculum design needs to know what the individual should learn. Any education based on common curricula therefore has to focus on those basic skills that later will enable the knowledge worker to gain knowledge from information.

When a top-down approach by further development of existing educational structures is impossible due to the obvious uncertainties of content and individual ways of learning, it needs a bottom-up approach to find long-lasting solutions. That means to begin to work with knowledge workers, to integrate how existing communities of practice work, and to develop programmes and approaches stepwise based on pilot projects, aiming to discover how local knowledge workers can work with highest productivity possible.

Since each knowledge worker is an individual and, therefore, is coined by his social and cultural environment, this is a local task. Although the knowledge worker’s productivity is a problem case for any economy, it makes no sense to wait for international solutions for this problem that has to be solved regarding to local, e.g. social and cultural, specifics.

In a first step, knowledge workers within a society need to be identified and their communities of practice, where most informal professional learning occurs, need to be analysed, probably best done by an interdisciplinary research team covering business fields, social and cross-cultural psychology, sociology, information and communication technology.

So finding out the natural way things already go, this natural way might serve as a meta plan to develop more formal solutions. This will deeply integrate the organisations where knowledge workers work, identify the gap between current and target state of basic skills needed to do knowledge work most productively, and, most importantly, integrate the target group of learners by asking them for their needs.

Likely, the result will be very similar to that what international organisation claim for long, with short-time academic studies, modular vocational training organised in learning modules, and in a dual system while students gain practical experience by working. It might additionally take into account that employed students, e.g. Master and some PhD students, are already expert within a field and can best offer other students of all levels that close proximity by growing into an existing community of practice that most supports informal learning.

However, since this way to find a solution begins with the cognitive blueprint of those who shall benefit from the solutions, most likely this will cause solutions that work. Going this way is even more important for societies with values and behavioural patterns different from those societies the most solutions are published for – North-American and European societies.
Given the societal value and behavioural pattern background of the Thai, for instance, it is obvious that effective learning, and thereby effective adaptation of changing needs, is very much a question of personal interactions.

The results of such pilot projects, that, by the way, will very much challenge academic ivory tower and governmental administration mentality, will give the necessary hints how to reform the underlying educational levels in order to support growth and lifelong learning of knowledge workers.

This does likely not mean that teachers become mentors, as it is often claimed. Firstly, teachers and mentors have very different backgrounds, with mentors bringing in a lot of experience how things go, and teachers bringing in the theoretical background. Teaching will well have its place, for instance when a knowledge worker needs to step into a completely unknown field. Teaching will support to gain understanding of basic principles, methods, and rules of such new field and it might well be demanded until the knowledge worker is able to ask and answer the right questions himself.

To make the point clear, this is not an approach limited to Thailand. Even in Western societies it was not a hundred years ago that education turned to rote learning and focused on teaching. This has a major foundation in the work of Burrhus Skinner in the 1930s. He concluded that by controlling the environment of mice in a laboratory he could ‘educate’ (train) them to behave consistently, that means they did repeatedly the same job motivated by some corn and electroshocks. From his research and later works of others based on it, theories were developed to train humans, assuming all knowledge is a product of learning through environmental conditioning, by reinforcement and reward.

It is furthermore likely, that such findings coming from focusing the learner-perspective will not only help to end overcome behaviourism in education. As a logical next step, it will change the view on quality insurance in education. Since knowledge is not measurable, currently we focus on anything what we can measure, making ‘multiple choice’ one of the preferred testing methods. When the quality of education is judged by the outcome of learning, with learning being the individual step forward, there is no mathematical measurement. Then, it appears ridiculous to try applying manufacturing-oriented Quality Management on learning. In times of one globally available information infrastructure, quality assurance might go a much less administrative way by, simply, publishing all results and works of students on the Internet in order to gain critics and to extend existing networks.

An important source for such pilot projects might be those nationals that work in other countries. In the past very much seen as ‘brain drain’, today we begin to understand that there is no loss of intellectual capacity rather than a win of internationality. That is what Newsweek recently called ‘brain gain’.

It is often said that the Internet offers access to and discussion with, international experts, scientists, and top-managers. Obviously, it will be such experts most helpful who understand the individual learners environment since the origin from the same or a similar environment. That is using ‘old boys networks’ that all work since the old boys have similar roots and interests, and that, by the way, work in Thailand as well as in Germany and Switzerland.

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Budget, resources, and time are limited goods. As more any society invests in outdated educational models that aim to automate teaching and thereby hinder the necessary step towards a learner-perspective, such as current e-learning programs, virtual universities, or educational TV, as less is available to develop solutions for sustainable improvement.

Any promising way to enable a workforce to compete globally needs to begin with the individual and its situation, and that means to take the local environment and the cognitive blueprints into account. Anything else will fail or increase the problem.

However, it will need a lot of courage from top-level decision makers in any nation state to back this way since it means to resist the ubiquitous marketing of ICT, telecommunication, education, and publishing industries, keeping a critical distance in order to develop solutions that fit to the own society. Unfortunately, it appears to be much easier to believe what that many sources unanimously say.

The prise for this courage is interesting. It is nothing less than successfully competing as a knowledge society.
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