

Finding out rapidly: a soft systems approach to training needs analysis in Thailand

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Background and context

This paper is written from the perspective of a researcher and problem-solver approaching a rich economic, cultural, and methodological context — one in which change is happening rapidly and in which there is little time to prepare and plan for responses to it. The paper describes a project in Training Needs Analysis (TNA) in Thailand. I will open by briefly describing the background to the project and the thinking which informed the TNA intervention itself. Throughout, I use the first person because I wish to convey this as a human, personal intervention and not as a remote academic discussion. This approach becomes particularly relevant in describing the learning involved in the exercise presented in the final part of the paper.

Economic and cultural background

Historically and culturally Thailand (formerly the Kingdom of Siam) has been independent and unique as a sovereign Buddhist state for several centuries, unlike other kingdoms in South Asia that fell victim to the imperial and colonial European powers from the sixteenth century.

Although Thailand has not enjoyed consistent political stability in recent years, economic growth seemed to be assured and in the last decade opinion has focused more on the international confidence produced by strong economic performance. For instance, articles (e.g. on derivatives and investment policies) have been published in specialist financial journals indicating Thailand's association with the ranks of the 'Asian Tigers' and a keystone of the 'Asian economic miracle'.

However, since August 1997 other news has predominated. The headlines themselves are instructive: 'Danger Ahead', 'Just a Technicality', 'Few Takers at Asia's Great Firesale', 'Hard Times Roll', 'Rudderless', 'Bailout Blues', 'Austerity Overdose' (from *Far Eastern Economic Review* 1997–98). From a dynamic, growth-driven economy Thailand has succumbed to the regional recession, with growth down to three per cent and interest rates pegged at 15–20 per cent. From being a country with a sound balance of payments surplus, Thailand must now borrow money in order to stay afloat.

This is a major element of the context in which the project described in this article was undertaken. Thailand's economic position requires international aid in the form of projects. The education sector is regarded by Thai and multilateral agencies as being of specific importance in this regard. What was not known was the local capacity to manage such projects. My position as a researcher was that of an interested and reasonably informed outsider seeking to undertake an analysis task, which had been highlighted as necessary for the further adoption of internationally funded projects in the Thai education sector.

Methodological background

Two elements combined to form the major content in terms of methodology:

- The popular understanding of Training Needs Analysis (TNA)
- The projectisation process in development

Understanding TNA

If the analysis of training needs is a complex area, training in the development context could be said to have an 'image problem'. Training has been an integral part of technical assistance policies for many years, with numerous attempts to adapt and adopt training policies and practices which are relevant to developing and transitional economies. In their study of training adoption, Jacob and McLaughlin (1996) indicate that it can have positive impacts upon 'the individual, the work group and their organisation' but the process of evaluating technical training impact is still in its infancy. Chambers (1997: 72) describes the largely failed Training and Visit (T&V) systems instituted by the World Bank as 'a mechanistic management blueprint for the transfer of technology'. TNA can be seen as being similarly mechanistic as we shall see shortly.

Training has many sponsors, most notably the World Bank, whose policy paper on vocational education and training has been implemented

throughout Sub-Saharan Africa. Bennell (1996) indicates that such initiatives are not proving to be as 'demand led' as donors might wish and the up-take of vocational educational training in Africa is disappointing.

The overall picture is one of well-intended donor-driven policies on training, but a less than enthusiastic response from the potential recipients of training and mixed results of previous initiatives. The terms 'top-down' and 'mechanistic' might apply to much of the training provision.

But what of TNA itself? Boydell (1983) has been influential in establishing TNA as a vital aspect of systematic organisational strategy, and others provided insights into defining areas of performance deficiency within organisations where training can occur. Recent literature has attempted to provide a definitive guide to the procedures for TNA and some authors have argued that the focus of TNA needs to be expanded from a narrow emphasis on the effectiveness of personnel, to a wider analysis of a range of levels within organisations. Denning and Verschelden (1993) have indicated the potential for the use of 'softer' tools in TNA and others have indicated that developmental issues has impacts upon the form and content of training. TNA is a developing field of involvement and there is no single approach to it. The literature indicates considerable awareness of the complexity of the task of any needs analysis. In an attempt to gain an overview I looked at the British government agency for information systems, the CCTA guide to quality management. This provides the following overall guidance. The TNA should take into account:

- business and IS (information systems) strategies;
- current and future customer needs.

The scope of the TNA includes:

- identifying existing training and education, including core competencies and methods;
- comparisons of findings against customer and business needs;
- identifying the gap in skills, training and development;
- producing a plan to meet these needs.

When identifying existing training, the TNA should evaluate the effectiveness of training in terms of:

- meeting present and future business and customer needs;
- delivering the required quality in products and services
- improvements in business practice
- improvements in customer satisfaction
- return on investment. (CCTA 1992:22)

Many of these features are common to other TNA approaches and I interpret the CCTA approach to TNA to include:

- a top-down approach — the language used by the CCTA does not sound like the type of approach undertaken in consultation and partnership with employees;
- a managerialist tone (e.g. ‘core competencies and methods’, ‘return on investment’);
- a lack of explicit emphasis on mutual learning processes and learning objectives and outcomes;
- a ‘one-stop-training’ feel (a sense that the training is ‘complete’ at some point — little evidence of feedback);
- a lack of emphasis on trainee ownership of the outcomes of training;
- a business-centred rather than trainee-centred approach.

Other have focused their training initiative on learning rather than on training (e.g Craig 1994), while Denning and Verschelden (1993) indicate the need to consider a wide range of issues in undertaking TNA. However, I considered that generalised approaches such as that outlined by the CCTA would present a range of problems if adopted in the Thai context — which is complex, sophisticated, and quite unlike that which one might find in a UK business environment. Although I accepted the essential need to link TNA to both local core competencies and organisational vision, I was more concerned with understanding and learning from the actual context in the TNA process. The CCTA guidelines did not enable me to select an approach for the TNA, and so I referred to the wider literature on projects in developing countries to seek potential guidelines there.

The projectisation process

Projects are now a major element of development work and have become the focus for almost all development intervention. Projects are the major vehicle for providing training in the development context. Generally, training is provided under the remit of a project and therefore it is expected that it will be highly focused on the needs of that project itself. The projectisation process has partly been an attempt to control expenditure on development to narrow, well-defined goals and purposes. Taylor (1995) illustrates the change in development procedure and draws out some major lessons for trainers, sponsors, and client organisations in project contexts. In contrast to the stark CCTA guidelines, he indicates the need for flexibility in training provision. In summary his main points (op. cit.: 491) are:

- operational and learning objectives can be too tightly prescribed. There are many different means to arrive at the operational objectives.
- creativity should not be strangled out of the training process by the application of unnecessary pressure.
- time should be allowed for unanticipated learning.
- rather than feeling that everyone on a training programme should come away with the same outcome, it must be recognised that people will learn and contribute according to their own talents and interests.
- understanding the context and the relationships among trainers is vital.
- achieving links and trust is as important as the assimilation of subject material.
- training cannot overcome long-standing structural difficulties.

These recommendations for improving the chances of success in project training were taken as guidelines for the approach to TNA described here. Thus, my rubrics were:

- don't predetermine objectives;
- try to be open to assessing local capacities with which you are as yet unfamiliar;
- listen;
- continue to learn about the context;
- develop trust;
- don't develop training to address issues at a more structural level.

Although I had some prior experience of empathetic forms of research, these points indicate the mindset which I adopted for my TNA and which also informed my thinking as I decided upon methods and approach.

Terms of reference for the TNA

My task was to undertake a TNA in Thailand across the educational sector but with specific focus on projects and management. I had one week to carry out this work, though the British Council in-country had arranged my itinerary prior to arrival. I was to:

- document the context of the TNA and provide a brief overview of the Thai Education and Training Sector;
- identify and document training already delivered or planned in this sector; and
- document key weakness in educational project management (e.g. planning projects or dissemination).

Following this, I was to design an initial Educational Project Management course to address priority training needs, identify a training delivery team, and document the level and quantity of trainees. Finally, I was to draft a training schedule.

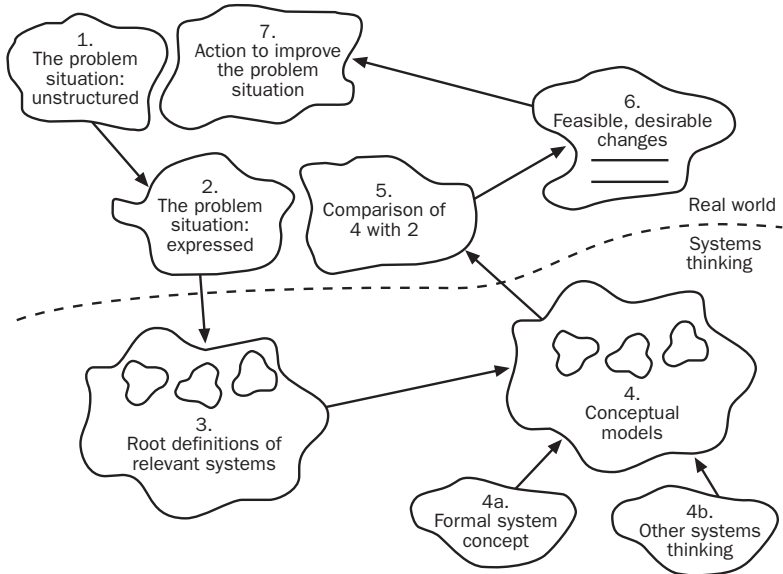
Prior to departure, I imagined that my main task would be to identify the major problems in project management at present and provide training in these areas. However, I was mindful that TNA can appear to pre-judge that there will be a training issue at the root of the problem. In the Thai case this might not be so, and I was wary because of Taylor's comments on the nature of project-based training. Whatever I came up with should be produced in partnership and collaboration with the Thais and address issues of key relevance to them; and not assume that any amount of training can, of itself, reverse long-term and structural development problems.

By the time I set off, I had decided that I had to find out rapidly what the situation was and that I needed to do this in an empathetic and participatory fashion, listening and not lecturing. However, I would need a framework in which to construct such a review. I was considering this and drafting outlines of potential means as I travelled.

Reflective practice on the ground

By the time I arrived, I had decided to adopt two approaches to the TNA. I wanted to be able to assess the current state of project planning, management, and delivery; and at the same time to describe areas of potential for directed project training (workshops and other training events). So, I would need a tool for *comparison* (of what is happening at present with what is needed in project work) and a tool of *analysis* and *agenda-setting* for training development. Given the need for participation and listening, neither tool could be too prescriptive, or expert-driven. I therefore decided to make use of the Kolb learning cycle for the comparison (Kolb 1984) and the soft systems methodology (SSM) for the analysis and agenda-setting (Chambers 1981; Checkland and Holwell 1998). I used Kolb as an ideal type or paradigm for what should be happening in any learning context. My use of SSM would be to develop potential action plans from the earlier use of Kolb. The seven major aspects of SSM as developed and taught by The Open University (Open University 1987) in the UK are shown in Figure 1. To my knowledge, no-one had previously applied these approaches together in undertaking a TNA in developing or transitional economies.

Figure 1 SSM approach to problem-solving



Source: Open University 1987, building on Checkland 1981:163

Over my one-week stay in Thailand, I intended to make use of the comparative and analytical methods in harness, allowing the comparison to develop and change over the week and trusting the analysis to keep pace. The inherent risk was that comparison could vary considerably in different areas of the education sector and that the resulting agenda-setting would be messy and inconsistent. This potential weakness was recognised at the outset but, as the alternative appeared to be to pre-judge the context and go in with a set of pre-selected training products, I continued with the original approach.

Comparison

The 'Kolb' learning cycle as adapted and interpreted in this paper comprises four stages — connection, decision, action, and reflection — that might be expected to underpin any specific learning process. In the Thai context, these stages were considered as follows:

- *Connection*: in what ways does the Sector at present learn from experience elsewhere in education and training (and outside the Sector), within and outside the region — in all aspects of project design and management?

- *Decision*: in what ways are decisions made about what types of project to do and what form of approach to take to these (questions of methodology and the process for the selection of methodology)?
- *Action*: how are projects actually undertaken and how are they learned from (questions of monitoring and evaluation — M&E). Are the successful? What sort are more or less so?
- *Reflection*: (the end of the cycle and the beginning of a new one). What active procedures for learning from the project experience are engaged in and how is this learning taken forward from one project to the next?

The four come together in what is described as a learning cycle (Figure 2).

The comparison stage of my overall TNA (not be confused with the comparison stage of the soft system approach) occurred at the same time as the analysis and agenda-setting that the soft system approach required. All information was derived from interviews. The brief comparative analysis resulted in the observations set out in Table 1, and these themes are also shown in Figure 3 as a ‘spray’ diagram.

At this comparison stage in the TNA, I was concerned to identify potential trainers already active in the field. There appeared to be two main providers of training in the education sector at present: both were quite narrowly focused — one in the higher education/science and engineering sector, the other in vocational training — and both produced highly generic training products not specifically focused on broad-based Thai issues.

Figure 2 A learning cycle

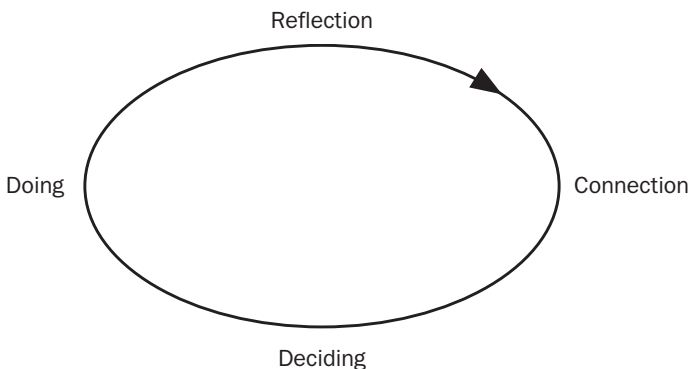
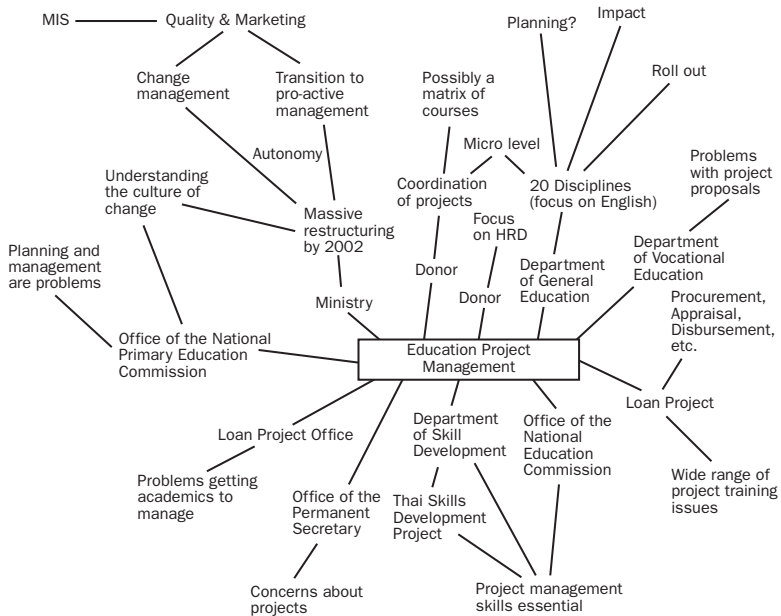


Figure 3 Spray diagram of themes



This made it possible to set out some reflections on the current state of project planning in the Thai education sector and place these in terms of a learning cycle. In a generalised sense we can consider the four elements as follows:

- *Connection*: apart from specific cases (e.g. ‘The Skills Development Project’) there appeared to be little existing connection and learning in-sector about project management experience.
- *Decision*: project methodology was not an expression used widely, and the decision to develop projects appeared to originate from outside ‘push’ not internal ‘pull’ initiatives.
- *Action*: questions relating to project result seemed a little previous. There was little information about how projects were managed and handled, but the widespread interest in techniques maybe told its own story.
- *Reflection*: (the end of the cycle and the beginning of a new one). There was little information which would indicate that learning was taken forward in a planned manner from one project to others.

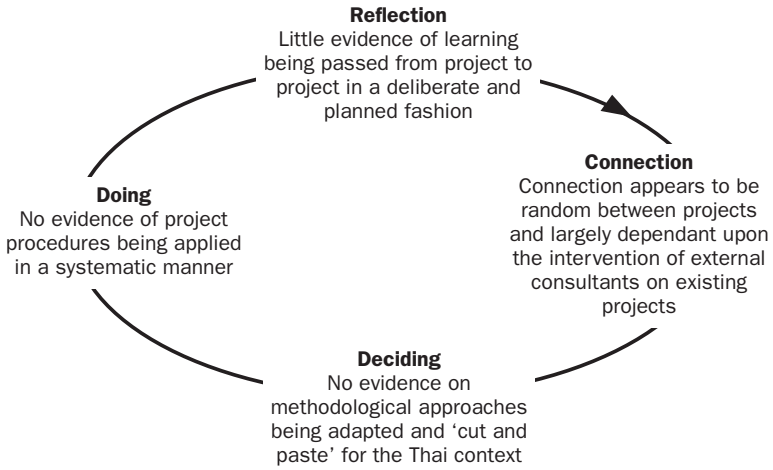
Table 1 Observations arising

Higher Education	Massive restructuring of the Higher Education (HE) Sector by 2002, a transition to more autonomous proactive management, improved HE marketing of skills within and outside region, collaborative programmes, all aspects of management but most especially culture change, issues of autonomy, Total Quality Management, transition from administration to proactive management.
Donors	Concerned with overall coordination of projects, focus on the micro level in the first instance, need for the output of the project to be well documented (leading to documented impact), could be room for a matrix of courses elements (different levels and combinations for different groups) need for focus on Human Resource Development.
Ministry of Education	Many projects running — issues of quality, impact, rolling out of the national programme, planning and management issues.
Ministry of Labour	Problems in assessing the relevance of supply and demand of training (TNA). Thai Skills Development Project indicated the value of project training (in all forms).
Office of National Education Commission	Need for project training, MIS training and a focus on local 'Thai' issues.
Specific Projects	Identification of severe problems with the recruitment and training of staff in the projects. Specific areas of concern include project management, procurement, disbursement, and appraisal.

My perception of the situation in a learning cycle sense is set out in diagrammatic form in Figure 4.

This comparison stage revealed a general lack of awareness and understanding of project approaches in the education sector. But I also gained the insight that a focus on providing project approaches, tools, and techniques was also not the central issue. Rather, there appeared to be a need to take a step back from any prescription and to think about the prior learning that needed to occur in order to allow Thai managers to decide what they needed. This dawning reflection was to grow, and informed the analysis which was facilitated by the use of my adapted version of SSM.

Figure 4 A second view of the learning cycle



Analysis: the root definition or mission for the project

During the week, I took part in over 30 interviews with those representing the education sector. The reflections on the outcome of these meetings focuses the remainder of this article upon systems to develop training potential and sound project delivery. From the comparison set out above, I developed the SSM analysis of the TNA. SSM usually comprises seven stages (as shown in Figure 1) which in turn are comprised of three major tools — these are the rich picture (RP) for assembling the conception of the problem context (gaining an understanding of the soft and hard or informal and formal, processes and structures of the context), a root definition (RD) of the change process which will deal with some selected task or issue evident in the RP, and a conceptual model (CM) of the change process (which can also be seen as an agenda for action). In the following description, the reader will realise that I have adapted SSM for the purposes of the TNA. In the previous Kolb-related comparison stage I believed that I was developing my own conception of the context, as primarily demonstrated in Figure 3. For my purposes this fulfilled the usual role of the RP. Having assembled my understanding of the context I set about developing, through meetings with the various stakeholders, an RD and a CM. These stages are described below.

For my purposes, the RD was required to set out the ‘transformation’ of the context (a transformation is usually included in a RD). I initially asked stakeholders and myself: What would you like to see changed in the project context in the education sector in Thailand?

However, as indicated above, I found that in practice this question presumed that the stakeholders already had a sound understanding of this context, and this was not an assumption which held up to close scrutiny. In stepping back, a new question was formulated: What do you need to understand about projects to be able to make useful decisions about further training requirements?

This second question — arising from the Kolb learning cycle review, implicit in Figure 3, and now forming the basis of a SSM ‘primary task’ — proved more answerable and more catalytic in taking thinking forward. As I developed it from the primary task with the stakeholders, the RD was intended to show that it is possible to set out a potential RD or ‘mission’ for a training initiative which would become the next phase of the project activity. Following much discussion, the tentative RD for the next phase was suggested as being:

A training initiative system to develop and share best practice in project management at the micro-level across sectors in education in Thailand. The system would be implemented initially by the British Council for a variety of clients in the Thai education sector increasing clarity, coordination, and accountability in projects funded by major donors.

This was discussed with and adjusted by Thai stakeholders and was subsequently accepted as a reasonable basis for further analysis and the development of a plan or agenda. The activity plan was to be the basis for a Phase 2 — arising from the TNA (Phase 1). It should be emphasised that the vision of the TNA at this stage was that Phase 2 would be expected to deliver a Project Management Workshop of some kind, but one focused on developing and sharing a picture of best practice — not on rolling out a prescribed training agenda.. In the next part of this article, this Phase 2 mission will be developed in terms of an action plan and a matrix of potential contents.

The conceptual model or action plan for Phase 2

By this stage of the TNA, the hardest work had been accomplished. The Kolb comparison had indicated areas of potential collaboration and the

spray diagram feeding a primary task into the root definition had provided a mutually accepted 'vision' for transforming the situation. It now remained to understand what would be a useful selection of learning objectives to choose and then the range of tools, techniques, approaches, and methods which would best meet the objectives. This is an important point. The CCTA approach to TNA appears very focused on training methods and content. The approach of this TNA was focused on learning objectives: What do Thai education project managers want to learn and why? A top down-approach to TNA can easily be based on pre-judgements and therefore the TNA can take on an implicit pre-assessment where key questions become 'what is available to be known?' or 'what should be known?'. Throughout, the attempt here was made to keep the TNA learner-focused.

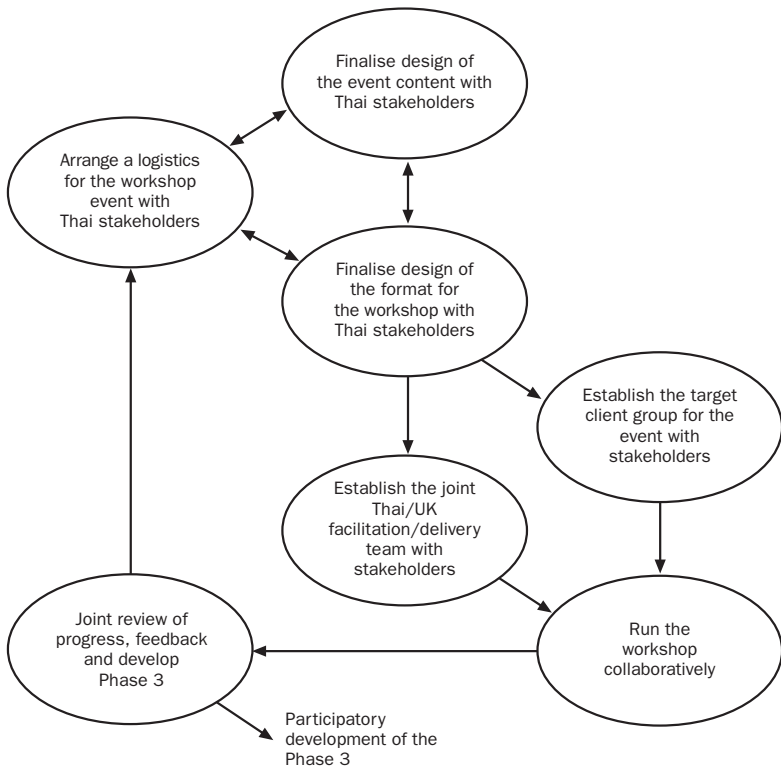
Since the initial drafting of the terms of reference for the TNA, my views had changed in terms of the expected delivery 'event' suggested for the next phase. Rather than a training course, a planning and brainstorming workshop might prove more appropriate.

There were two elements to the CM design. Element 1 refers to the development of the workshop or event which will comprise the next phase while Element 2 refers to the development of its content.

Design of the workshop or event

The design features or activities for the workshop, in line with the results of the analysis to date, are set out in Figure 5. A CM as interpreted and applied in this paper is expected to comprise a series of actions which come together to produce the transformation as originally set out in the RD. Such a CM can then be compared against the original rich picture (the spray diagram in this case) and discussed with stakeholders in order to arrive at a positive progression from the context as originally perceived. The contents of Figure 5 are unsurprising, but these were seen to conform to the transformation as agreed in with Thai professionals and set out in the RD earlier. Each element of the CM was further developed in collaboration into a set of sub-activities. Once again, the model arose from the discussions and conversations which I had during the week; as the model evolved I discussed the main items with local stakeholders. This CM provided the main series of actions which were required to develop the workshop. The next stage of the TNA was to set out the main form and content of the workshop itself.

Figure 5 Conceptual model of the 'event' plan



Content of the workshop or event

The TNA revealed a lot of enthusiasm for a brief initial workshop and so it was planned to be of five to seven days' duration focusing on the following five components — these five being the issues of main concern arising from the interviews undertaken during the TNA. (It was expected that the components would be worked on in the workshop in an iterative process with plenty of feedback between participants and facilitators.)

Component 1: assisted or joint brainstorming. The first component would focus on seeding ideas and sharing experiences about project methods and approaches that work and which are useful for various educational

project contexts (probably with inputs from project directors and managers from Thailand and from outside). The result of the assisted brainstorm should be to focus the minds of all present upon the main policy and strategy issues which result in areas of project control, development, design, analysis, etc. which are of most concern; and to provide a basis for the more detailed work which was to follow. This first session might be thought of as *conceptual*. The brainstorming would prepare the way for the second component.

Component 2: methods and approaches. One of the observations relating to the TNA has been the near absence of methods for project work. During the second component, a variety of methods could be discussed and described — for instance the Team Up approach to projects, Soft Systems Approach, Total Quality Management and Learning Organisation — again with brief presentations relevant to Thailand followed by a process to select those which are seen to be useful in this context. During the TNA, this form of approach was selected as being of most value to those centrally involved with translating policy- and strategic-level decisions relating to projects into the purpose and outputs of the projects themselves.

Component 3: tools and techniques. This represented the major content of the event and a less Thai-focused TNA might have produced an event based around this element on its own. Two days would be set aside to review and consider the value of a range of project tools, all of which will have been identified by the participants in the previous two days and some of which are already applied in Thailand. The tools and techniques might be expected to include such items as proposal writing, procurement technique, log frame, financial planning, monitoring and evaluation, appraisal, participatory analysis, Gant chart, PERT chart, Management Information Systems, etc. Participants could be shown how these techniques could be applied (where possible with participants describing their own experiences) and would be given insights into their further development. Actual and potential project managers and their teams might work in small groups on their understanding of the various techniques.

Component 4: critical appraisal of the week, terms of reference, and action plans for the next component. The fourth component could provide the participants and facilitators with the opportunity to develop terms of reference and action plans indicating ways forward for their

projects. Here, the team would review their progress over the event and set out the main lessons including:

- conceptual tools of value;
- methods and approaches of value;
- tools and techniques of value;
- major sites in need of further assistance;
- training needs.

Each small group in the training would be encouraged to settle on a single area to develop in the remainder of the event.

Component 5: in depth, small-group work on specific project elements: During this last component, the small groups would be expected to ‘work out’ some element of their project using some of the tools and techniques provided. During the afternoon it might be useful for each group to provide a brief presentation of their findings and it is hoped that senior policy-makers, Project Directors, and donor representatives would also attend the presentation stage. The small groups could then, if time allowed further develop their action plans and specify what further elements they might expect to receive from subsequent events. This would enable Thai decision-makers to determine their own areas of interest and specify the type of training which they considered most appropriate.

The items set out in the contents for the workshop were not expected to be in a definitive format. The ordering is in line with the interpretation of the outcome of the TNA in Thailand.

Reflections on the SSM/Kolb TNA

At the outset of the TNA, I set myself some rubrics for my approach (derived from Taylor 1995). In conclusion I will re-visit these rubrics and comment on my personal learning.

- Don’t predetermine objectives. In honesty, practice almost always means that the researcher will come with preconceptions and understandings, which may prove to be erroneous. During the week of the TNA, I moved consciously from a pre-conception that training was needed and that the objective was thus ‘provide training’, to the conception that understanding is needed. Hence the objective became ‘provide understanding of what international projects mean in effect’.

- Try to be open to assessing local capacities with which you are as yet unfamiliar. Other than a brief visit to Thailand in 1994, I was unfamiliar with the country and with the strengths, weaknesses, opportunities, and threats of the context in project terms. I found that my evolving understanding was further assisted by the use of SWOT (strength, weakness, opportunities, and threats) analysis and by daily review in consultation with my interviewees, I developed some useful insights into the context.
- Listen. This became my main job. Following a brief introduction, my task was to hear what Thai education sector professionals had to tell me about their experiences and problems. The main discipline here for me was to refrain from instantly assessing their experience in terms of my own prejudices and pre-conceptions.
- Continue to learn about the context. The TNA was planned as an evolving learning process. Both the Kolb cycle and SSM are learning devices — although I applied them in an adapted form here. Even at the end of the research period, I was still adjusting my thinking in line with the new insights with which the Thai professionals were providing me. A balancing act is required here in order consistently to match the continuing and developing complexity of the Thai context with the order and sequence of a complex but valuable training response.
- Develop trust. It is hard for me to comment objectively on this but my perception was that Thai officials were often disarmingly frank with me about their context.
- Don't develop training to address issues at a more structural level. As I set out in the introduction to this article, Thailand is at present undergoing a wide-ranging restructuring of its economy. This is disrupting all aspects of Thai life but the TNA could not hope to address or redress these issues. Throughout, the TNA was focused on developing an understanding of the main issues and tasks from the Thai perspective, and on providing an event that would to some extent allow decision-makers to react to the immediate training needs they were confronting. Only time will tell if this objective has been achieved.

Finally, as the TNA drew to a close, the root definition and conceptual model of the soft systems approach proved to be instant add-ins to the popular project planning approach called Logical Framework. The Logical Framework provides a hierarchy of projects from goal to purpose to outputs to activities. The root definition as I have adapted it here

conforms to the purpose of the project whereas the adapted conceptual model provides a view of the activities needed in it. The integration of Kolb, soft systems, and logical framework planning will be the focus for a future paper.

Possibly the final word of any project should be about its resulting activity and value. The TNA as described here has been reported, the Phase 2 agreed (a participatory workshop event) has been undertaken and been favourably evaluated, and at the time of writing Phase 3 (further development of Thai-centred training in project approaches) is in development.

Acknowledgement

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