Professor of Medicine – Dr. Prawase Wasi

Learning reform is at the heart of **education reform**.

Learning reform is essentially a shift from focusing on subject matters to **human beings** or **learners**. In other words, **a learner** – **centred approach** becomes imperative.

Adopting the learner – centred approach does not necessarily result in lessening teachers' roles or lessening their importance. On the contrary, they will play a more prominent role and also enjoy higher standing. Education will thus be given vigour and earn due recognition as a means to solving human, social and environmental problems.

Society at present is interconnected, highly complex and undergoing rapid changes. Human inability to face such complexity and fast movement and changes has led to an inevitable crisis. In other words, people are unable cope with difficulties arising from poverty, unemployment, stress, violence, drug addiction, HIV-AIDS, accident, conflict, crime, environmental degradation etc.; as a result stability and harmony in their way of life and society cannot be attained.

Education through rote learning or focussing on subject matters will not enable us to face and cope with these problems. The academic world in fact differs entirely from the real world. Focussing on subject matters divorces learning from the realities of life and complexities of society with its rapid movement and changes.

Learning should take place in a real situation.

We are inevitably caught in changing situations from which we learn, acquire sufficient knowledge, wise up, are able to manage and are capable of maintaining equilibrium in our way of life and society.

Learning with focus on learners or a learner – centred approach means learning in a real situation, which differs for individual learners. Teachers should therefore facilitate so as to enable their students to learn from experience, activities and work, leading to development of learners

in all aspects – physical, mental or emotional, social and intellectual. Spiritual development, which distinguishes human beings from animals, will also be attained. The present world crisis is due to the abandoning of spiritual development, leaving only material obsession. Modern education, focussing on real life, will enable us to gain spiritual development, resulting in the ultimate salvation of mankind.

Education provided in most parts of the world is divorced from real life. According to the Buddhist philosophy, however, life and education are identical. The same view is also held by other religions. Learning reform requires the alignment of education to life. A learner – centred approach therefore means focusing on learners' lives.

In adopting the above approach, teachers will have to refrain from simply transferring subject matter through recitation to their students. Love and attention need to be given to individual students, who will be provided with varied learning experiences that serve their needs. Teachers will learn on an interactive basis with their students in real situations. They will fully appreciate the potential of individual students, who will be encouraged to develop to the highest level possible. The students themselves may not be aware of this fact, which the teachers must realize. Those whose potential has been fully stimulated will be very happy and deeply attached to their teachers. Students in each class will have a variety of teachers i.e. parents, brothers and sisters, neighbours, community leaders, local wisemen, artists, holders of different occupations, and monks. By basing their teaching on real situations, the teachers will not find themselves isolated, but, on the contrary, assisted by a myriad of friends. They will undoubtedly enjoy this teaching – learning method and will become more competent. They will be completely changed in their perception and blessed with boundless friendship in their liberation. This style of teaching – learning method in fact reflects a highly delicate process of humanity, combining both democratic principles and moral values. Changes in the teachers' lives will therefore be geared towards supreme happiness and creativity.

A good learning process revolutionizes human beings as well as mankind.

Teachers, parents, students, administrators and all concerned are hence urged to be appreciative of learning reform as stipulated in the National Education Act, 1999. Since learning reform through learner – centred approach may be differently interpreted, the secretariats of the Sub-Committees on Learning Reform have deemed it appropriate to invite a number of specialists to contribute to the production of this document, duly reviewed by members of the Sub-Committees as well as several experts. Professor Dr Sumon Amornvivat kindly gave the final editing before the publication went to press. It is hoped that it will be availed of by teachers and others concerned as a learning reform manual, resulting in increased learning for all concerned. Should any improvement of this manual be required, the authors will be pleased to proceed with further refinement. Our ultimate aim is to present the greatest gift to the Thai people, that is to say, desirable learning. On behalf of the Sub-Committees on Learning Reform, I would like to express my thanks to all who have contributed to the production of this valuable document, which will form a legacy for Thai society.

> (Professor of Medicine, Dr. Prawase Wasi) Chairman of the Sub-Committees on Learning Reform May 6, 2000

Professor Sumon Amornvivat

Learning is an important part of life indicating a person's growth and development. Learning is at the heart of education. An educational institution is logically a place where the learning process is successfully organized.

Administrators, teachers, parents and communities are stage managers, who organize and direct all actions in the big theatre of life. But what can these four groups achieve, if due regard is not given to players, namely, the students who are most important. The drama in life can well have a captivating theme, with attractive props and pleasant music. If, however, the actors are not allowed to determine their own acting style; if all their steps and gestures are dictated to the point of intimidation, the performance will consequently lack lustre. The audience, that is to say, society will gain nothing. Everything will be wasted and all concerned will be losers, because the actors have not been stimulated to appreciate their roles and sequences of the drama in life.

Learning, according to Buddhist philosophy, is organization of a process of interaction between teachers and learners, providing an ambiance, environment and activities which create **knowledge.** At the same time, they are given training in all aspects – physical, verbal and mental, in facing situations and problem solving through logical and **analytical thinking.** To learners, a desirable learning process will therefore result in creation of knowledge, thought, capability and virtue. Love and understanding are essential foundations of learning. If all involved in education are endowed with these two requisites, education reform, or even revolution, nothing will any longer be difficult and intimidating.

Teaching is a profession, not an occupation, because it is a discipline which regards learners as being most important. Education, as a discipline, therefore includes subjects covering learners' development in all aspects and at all ages, with clearly defined theories and practices conductive to promoting and encouraging learning. Assessment and evaluation of learning efficiency are for the purpose of measuring learners' achievements. Hence teachers are not workers in any way. All negotiations and concessions are not for their own benefit, but for that of their students.

This publication will enable readers to appreciate the concepts and learning processes through a learner – centred approach. It emphasizes the importance of participation by all. It also presents examples of various stages of organizing successful learning processes. For those interested, enquiry can made to the Office of the National Education Commission (ONEC) for further clarification and examples of cases previously carried out with success.

May I invite all of you to become like rainbow colours, all blended to create a learning path, so that, together, we can rise from the untold suffering of Thai society at present.

(Professor Sumon Amornvivat) May 6, 2000

Dr. Rung Kaewdang

Thailand's future is entirely in the hands of to-day's generation of children and youth. It is fully appreciated that, in the present world, especially in a knowledge-based economy, competitiveness is attained through knowledge and ability of the people. Thailand therefore is in urgent need of learning reform to encourage and support the potential of youth to be able to think and do, have managerial skills, integrity as well as desirable values, and avidity for continuous search for knowledge.

Even though the National Education Act has already been in force, and the learning reform in accordance with the Education Guidelines in chapter 4 can be immediately implemented without awaiting for enactment of the organic laws as required in other chapters, a number of teachers, administrators and parents are still not clear about, or misinterpret, the concept of a learner – centred approach resulting in confusion at present.

The ONEC, as the central body responsible for national education policy, has consequently sought the co-operation of wisemen, specialists, national teachers, master teachers, administrators and scholars from various agencies concerned with teaching and learning, to clarify the concept of the **learner – centred approach**. This has been carried out with a view to having a common interpretation for all – individuals and departments alike, so that learning reform will be implemented in the same direction. It has also presented practical guidelines in the series of teachers' manuals entitled **Varied Teaching Methods of Master Teachers**. Furthermore, research has been conducted for the presentation of policy guidelines and models of **evaluation of learning through a learner – centred approach**, so that learning reform will be carried out on a holistic basis.

The ONEC has devoted untiring efforts to the knowledge – building project, in its conviction that this important task will lead to **the revolution of the learning culture** of the Thai people. It will enable our children to learn happily and eventually become the citizens of quality. A desirable educational foundation must be laid for Thailand's future

generations in order to strengthen our country. This challenge provides an opportunity not to be missed. All of us are therefore urged to join efforts in creating a legacy that will bring untold benefits to Thailand. I am indeed convinced of our ability to achieve this. Finally, may I express my thanks to all concerned for the excellent co-operation received, resulting in the issuance of this much welcomed publication.

(Dr. Rung Kaewdang) Secretary – General National Education Commission May 6, 2000

Dr. Suwat Ngerncham

Learners are most important. These key words, which are at the heart of educational reform as stipulated in the National Education Act, 1999, have inspired all parties responsible for educational provision to review their concepts, convictions and practices. They have been urged to appreciate their new roles, responsibilities and commitment in organization of learning in order to provide support, encouragement and opportunities for the development of learners, who will be endowed with all attributes expected of them by society.

The concepts, methodology and cases of learning reform presented of this document are in fact valuable sources of knowledge. All concerned, particularly teachers, administrators, parents and communities, will be given clarification on these the learning sources, beneficial to their work. These valuable sources also contribute to strengthening and further learning development of the relevant parties, who are in fact key mechanisms of education reform. They will thus be empowered to move the wheel of education reform forward, so that the targets will be attained.

The publication will truly bear fruit if all segments of society join efforts in carrying out the learning reform through the learner – centred approach to achieve the sustainable development of out society.

(Dr. Suwat Ngerncham) Director – General General Education Department May 6, 2000

DR. KASAMA VARAVARN NA AYUDHYA

At present, it is apparent that Thai education is definitely undergoing a complete change, at the heart of which is **learning reform.**

Unfortunately, a large number of people – educators, teachers, parents, students and the general public – still do not have a common interpretation of **learning reform** as well as **implementation method**, so that the objectives can be realized.

The publication **Learning Reform:** A **Learner** – **Centred Approach**, prepared by the Sub-Committees on Learning Reform, is therefore most valuable, as it synthesizes the **concepts and experiences**, paving the way for a common interpretation of principles of learning reform; steps leading to implementation; and the roles of all concerned to move forward together. It is also a treasure of varied models and methodologies providing examples and inspiration for those moving along this gratifying path.

Hence, if we all join efforts in studying analysing and reviewing the content of this publication for **subsequent implementation**, its value will be increased, as it will serve as:

A **compass** for checking whether the practices are in line with the principles put forward in this publication;

A **map** for a holistic search for the treasure within learners, teachers, parents, local wisdom and all activities, which constitute most valuable resources for providing learning experiences;

A **companion** providing confidence and encouragement for innovation based on examples selected from real life and actual experiences of teachers in all parts of the country; and

A **memorandum on learning** which never ends and awaits documentation of lessons learnt from our practices.

In such a case, Learning Reform: A Learner-Centred Approach will be a treasure of Thai society and will undoubtedly contribute to the elimination of suffering in the land in accordance with the aspiration of the Sub – Committees on Learning Reform.

(Dr. Kasama Varavarn Na Ayudhaya) Secretary – General National Primary Education Commission May 6, 2000

Dr. Amrung Chantavanich

Education reform is imperative for sustainable development of the country. Its successful implementation depends on the collective efforts of all concerned for the urgent implementation of many aspects at the same time. All of us are confident that if learning reform measures are effectively implemented, educational reform will undoubtedly yield beneficial outcomes resulting in improvement in the quality of education.

The ONEC is among the agencies with major responsibilities for educational development and reform on a continuous basis. **Learning Reform:** A Learner – Centred Approach is indeed a reflection of the ONEC's commitment to propagate the concepts and practices of the approach as stipulated in the National Education Act, 1999, that is to say, learners constitute the most important group of beneficiaries of educational provision. All parties concerned – parents, teachers and administrators of both public and private sectors – are therefore urged to collaborate in providing learners with learning opportunities for their complete and balanced development in all aspects – physical, mental, emotional, intellectual – so that they can live in harmony in society. The learners will also be endowed with knowledge, capability, a good attitude and appreciation of continuous lifelong self-development. Educational personnel and all concerned are therefore invited to scrutinize the

May I take this opportunity to congratulate the ONEC and authors of the publication, which will be most useful to educational personnel and all concerned in their collective efforts for educational reform which, in turn, will contribute to development of education and that of the country.

publication for the effective implementation for the benefit of learners.

(Dr. Amrung Chantavanich)
Director – General
Curriculum and Instruction Development Department
May 6, 2000

Chapter 1 Introduction

Section 43 of the Constitution of the Kingdom of Thailand, 1997 stipulates that all individuals shall have equal rights to receive education provided by the state for the duration of at least 12 years. Such education, given on a nationwide basis, shall be of quality and free of charge. Section 81 requires the state to organize and promote the private sector to provide **education to attain knowledge and morality**; issue law relating to national education; improve education so as to be attuned to economic and social change; create and strengthen knowledge and inculcate sound awareness of politics and a democratic system of government under a constitutional monarchy; promote research in various disciplines; accelerate the application of science and technology for national development; promote the teaching profession; and encourage the revival of local wisdom, art and culture of the nation.

The above constitutional provisions led to the drafting of the National Education Act, 1999, resulting in large-scale national educational reform.

The enactment of the said law has extensively mobilized teachers and all those responsible for managing the educational system, as education for the whole country will have to be completely changed. Education will henceforth be the process of enabling students to acquire knowledge as well as moral values. It will also be of the highest quality, so as to endow students with desirable attributes, namely, virtue, capability and happiness.

In all parts of the country, parents, teachers, administrators and those involved in managing the educational system have now organized forums for intensive discussions, with a view to identifying the right direction for education in the new century. Special emphasis is given to learning reform through a student – centred approach, considered as the banner or the heart of educational reform as required by the National Education Act. Different views of the approach have necessitated an agreement on a common interpretation.

Present situation

Being caught in a severe economic crisis, political turmoil, cultural and moral deterioration, and defeat in a highly competitive arena where quality and capability reign supreme, Thai people and Thai society have been jolted to follow closely the various changes with both positive and negative repercussions on the country. As long as most people are still poor and exhausted, deprived of the rights and opportunities for development of themselves, their families, and for earning a living, the call for ameliorating educational quality has risen to a crescendo, echoing a demand for an immediate reform.

The state has abided by its commitment to provide quality education to all through sizeable budgetary allocation for education. Administrators, teachers, parents and communities have manifested strong determination to improve the educational process in all aspects to serve the demands of life and society as well as to keep up with the progress of the world community. The curriculum and teaching – learning process, however, have not as yet reached the goals desired.

Poverty, ignorance, exploitation and corruption are still rampant everywhere;

The gap between the rich and the poor is ever widening;

True democracy is still unattained;

The blame is on education for each misfortune.

The quality of teaching and learning is far from satisfactory. The Thai people must be more knowledgeable and more capable. Schools must also be more efficient.

What are indicators of the urgent need of teaching – learning reform in the school system?

◆ Learners of all ages – from birth to graduation from universities – learn only subject matters and written texts. Restricted by time - tables and classroom walls, they have no opportunity of being instilled with desirable attributes – vision, farsightedness;

ambition for achievement, dedication to work, and knowledge and experience in life.

- ◆ The teaching learning method does not give due recognition to the process whereby learners are given opportunities for training in analytical thinking, self-expression and acquiring knowledge themselves. As a result, learners are deprived of an inquisitive mind and an avidity to seek answers; emphasis is on teaching through textbooks rather than guiding learners; besides, there is still a missing link between local wisdom and modern technology.
- ◆ Teachers still hold sway in the classroom. They are under the conviction that they are most knowledgeable, most correct and most powerful in the teaching – learning process, while learners at the receiving end simply have to attune themselves to the subject matters and the teachers' methods. Educational institutions are consequently not "places for learning" where students learn to learn, but, on the contrary, "places for teaching".
- ◆ The learning process brings about unhappiness, gloom and boredom. Parents, teachers and students adhere to the prescribed curriculum and subject matters. Examinations and the results obtained govern students' success. Hence all are under stress and not at all happy in education.
- ◆ Schools do not create an atmosphere and environment conducive to learning. They are domains without links with community life, and are remote from nature and learning sources which stimulate intellectual ambiance. Families and communities have no opportunity to participate in planning and organizing the learning process.
- ◆ The teaching learning process is still a routine and repetitious method of transferring knowledge. More time is devoted to rote learning than to practice, training how to think and character building. Learners are therefore used to following examples, obedience and sitting still. They lack training in scientific thinking and pride in national art and culture has not been inculcated.

◆ Over all the years, the school system provides **children**, **youth and adults with minimal opportunity** to be instilled with perseverance, dedication to work and honesty in body, words and mind. The inculcation of moral and aesthetic values is not to the extent of yielding benefit to learners.

We are hopeful, nonetheless, that "opportunity" can be found in such a "crisis" situation. At present, many teachers and educational institution administrators have been able to develop the teaching learning process through application of the learner – centred approach and have met with success. The learner – centred approach is nothing new, but has long been developed. Teachers all over the land have effectively applied such an approach and have accumulated valuable experience. No matter how situations are changed, these teachers and educational institution administrators still find success in further refining the approach through the spirit of the teachers, boundless love and kindness for their students and unwavering faith in their profession. With the present situation being conducive to learning reform through the learner-centred approach, which has been received with enthusiasm by the general public, the prospective success of the approach does not seem to be beyond reach. In the chapters that follow, examples of teachers leading the change are to be found.

Attempts have been made by all concerned in the world of education to improve the teaching – learning process on a continuous basis with a view to endowing learners with desirable attributes. These efforts, however, are mostly superficial remedies i.e. repair, improvement, patching up erosions and painting the surface. They are not sufficiently profound to reach the learners' heart and soul, thought and conscience. It can therefore be said that the National Education Act, 1999, has truly paved the way for the turning point of the reform of the teaching – learning process with the bright future of Thai society as our ultimate goal.

Rationale for learning reform

Members of the educational community; thinkers; educators; social, religious and cultural institutions; and all those involved in the management of the educational system share the same view that

reform of the learning culture of all Thai people is imperative, due to the following reasons and justifications:

1. Learning reform with a view to improving the quality of life of the Thai people

The forthcoming reform of learning culture will contribute to the development of the Thai people, who will be endowed with knowledge and morality; realize their own worth, that of others and all objects in the world; capable of self-control so as to follow the virtuous path; responsible for their obligations; reasonable; accept the views of others; abide by social rules; be diligent, honest and sacrifice to public interest; be able to benefit from the perfect equilibrium of both the left and right sides of the brain, in other words, be blessed with linguistic intelligence, mathematical intelligence, scientific analytical thinking, systematic thinking; able to use their intelligence cleverly and profoundly in their learning, so as to attain truth, intrinsic value and beauty of all objects in the world; healthy in body and mind; with a desirable IQ and a cheerful disposition; kind-hearted and helpful to others; with good human relations; able to cope with and solve problems; lead an independent life and at the same time able to live in harmony with other people.

2. Learning reform with a view to strengthening Thai society

When members of society have been made to realize the need and share a common concern for facing the situation and solving common problems, they will be ready to participate; interweave their points of view; join their efforts in dedicating themselves to work; avail themselves of proper and subtle management systems; and minimise conflicts. All are committed to strive for social progress, since all fully appreciate their own worth.

Thailand will never succeed in reform of political, bureaucratic and economic systems or any other reform, if learning reform, which is at the heart of educational reform, is not carried out.

3. Learning reform in harmony with learning culture in the age of globalization

The learning process provided must serve the requirements of the globalized world in which advancement in the field of electronics and optical fibers is happening at an unprecedented pace. Knowledge and academic disciplines travel rapidly. Information and academic data are constantly brought to light and are undergoing changes all the time. Learners of all ages can therefore avail themselves of learning sources around them – from **human teachers**, **machines**, and from nature and the environment.

Learners of the globalized age must be competent in the use of more than one language. In other words, they must be fluent in Thai and also have a good command of a foreign language(s) to facilitate communication with the international community. They must be able to competently use new technologies, e.g. a computer, the internet etc., which are gateways for access to the world outside. They must be able to analyse the information thus received for the benefit of themselves, their families, societies, and, ultimately, the nation.

4. Learning reform with a view to serving the needs of learners, teachers, parents and Thai society

Learning reform will allow all parties concerned to contribute to the successful enactment of the National Education Act, 1999. New opportunities will be provided for teachers, parents and communities to enjoy freedom in the up-bringing of their children; their education; formulation of the curriculum and establishment of an administrative system conducive to instilling learning culture in harmony with local situations. There will also be a decrease of restrictions, rules and regulations and directives, from the central authorities in order to attain a variety of practices. These include classroom and time-table arrangements flexible and conducive to learning; designing of lessons and lesson plans through collective effort and the mutual support of families, communities and educational institutions.

5. Learning reform as required by law

Learning reform has been regarded as being at the heart of the National Education Act, 1999. It has henceforth a legal mandate. Teachers and all concerned are therefore obliged to abide by the provisions stipulated, so that the objectives of the law will be reached. It is not, as in the past, an optional policy or plan which can be changed at whim.

With the above rationale, teachers and all those responsible for educational provision are obliged to review their functions to see whether their performance is of quality, going in the right direction, suitable and in harmony with Thai and global societies after the promulgation of the National Education Act, 1999. Such law in fact serves as a master law aimed at engendering changes in all aspects. The moment has now arrived for us all to join efforts in reforming the learning culture through our own free will and pride in our profession, so that the child – centred approach will be widely applied.

Chapter 2 The National Education Act, 1999, and Learning Reform

The National Education Act, 1999, which came into force as of August 20 of that year, has led to extensive educational reform, now widely recognized as a national agenda. Among the 9 chapters, chapter 4 on National Education Guidelines is devoted to learning reform, regarded as being at the heart of educational reform. Provisions in all chapters of the Act in fact aim at maximum benefits for learners.

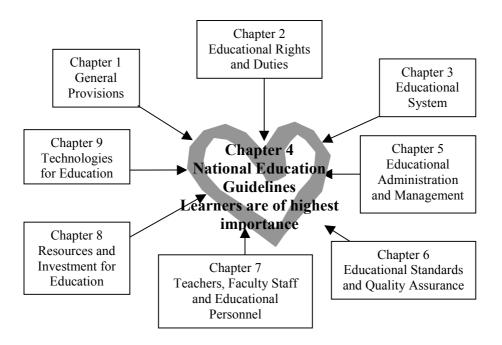


Chart 1 Provisions in all chapters of the National Education Act lead to adoption of the "learner – centred approach"

In the Act referred to above, provisions relating to learning appear in several chapters, e.g.:

- Chapter 1 General Provisions: Objectives and Principles The principle of lifelong education must be observed.
- **Chapter 2 Educational Rights and Duties** All individuals shall have equal rights and opportunities to receive basic education.
- **Chapter 3 Educational System** There shall be three types of education: formal, non-formal and informal.
- Chapter 4, which is at the heart of the Act, provides National Education Guidelines concerning principles, content and process of learning.
 - **Chapter 5 Educational Administration and Management**
 - **Chapter 6 Educational Standards and Quality Assurance**
- Chapter 7 Teachers, Faculty Staff and Educational Personnel
 - **Chapter 8 Resources and Investment in Education**
 - **Chapter 9 Technologies for Education**

Each chapter forms part of the whole and significantly contributes to provision of holistic and efficient education.

Application of the learner – centred approach is an important turning point in learning reform. Specific legal provisions are :

Chapter 1 General Provisions: Objectives and Principles

Specific references to learning in this chapter are:

Section 6: Desirable Characteristics of the Thai People, which should be developed in all aspects: physical and mental health; intellect; knowledge; morality; integrity; and a desirable way of life so as to be able to live in harmony with other people.

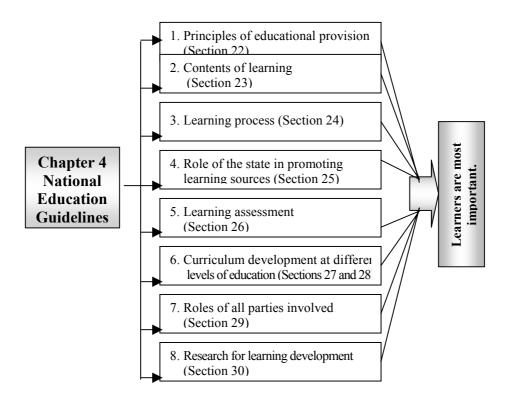
Section 7: Objectives of the Learning Process which shall aim at inculcating a sound awareness of politics; a democratic system of government under a constitutional monarchy; an ability to protect and promote their rights, responsibilities, freedom, respect of the rule of law, equality, and human dignity; pride in Thai identity; an ability to protect public and national interests; the promotion of religion, art national culture, sports, local wisdom, Thai wisdom and universal knowledge; inculcating an ability to preserve natural resources and the environment; an ability to earn a living; self-reliance; creativity; and acquiring a thirst for knowledge; and a capability for self-learning on a continuous basis.

Section 8 : Principles on which educational provision shall be based :

- (1) Lifelong education for all;
- (2) All segments of society participating in the provision of education; and
- (3) Continuous development of the bodies of knowledge and the learning processes.

Chapter 4 National Education Guidelines

This chapter is devoted to the principles, content and process of learning which opens wide. It provides guidelines on a participatory approach in creating a new teaching – learning vision both within and outside the school system. Provisions relating to the learner – centred approach are to be found in sections 22-30, which cover the following headings:



Section 22: Principles of Education All learners are capable of learning and self-development, and are regarded as being most important. The teaching – learning process shall aim at enabling the learners to develop themselves at their own pace and to the best of their potential.

Section 23 : Content of Learning Emphases shall be given to knowledge, morality, the learning process and integration of the following, depending on the appropriateness of each level of education :

- Knowledge about oneself and the relationship between oneself and society; knowledge about the historical development of Thai society and matters relating to politics and a democratic system of government;

- Scientific and technological knowledge and skills; knowledge, understanding and experience in management, conservation and utilization of natural resources and the environment:
- Knowledge about religion, art, culture sports, Thai wisdom and the application of wisdom;
- Knowledge and skills in mathematics and languages; and
- Knowledge and skills in pursuing one's career and the capacity for leading a happy life.

Section 24 : Learning Process Educational institutions and agencies concerned shall :

- (1) provide substance and arrange activities in line with the learners' interests and aptitudes, bearing in mind individual differences;
- (2) provide training in thinking processes, management, how to face various situations and application of knowledge for obviating and solving problems;
- (3) organize activities for learners to draw from authentic experiences; drill in practical work for complete mastery; enable learners to think critically and acquire good reading habits and a continuous thirst for knowledge;
- (4) achieve, in all subjects, a balanced integration of subject matter, integrity, values and desirable attributes;
- (5) enable instructors to create the ambiance, environment, instructional media and facilities for learners to learn and benefit from research as part of the learning process. In so doing, both learners and teachers may learn together from different types of teaching learning media and various sources of knowledge; and

- (6) parents, guardians and communities participate in the provision of learning which can take place at all times and in all places.
- Section 25: Role of the State in Promoting Learning Sources The state shall promote the running and establishment, in sufficient number and with efficient functioning, all types of lifelong learning sources.

Section 26: Learning Assessment Educational institutions shall assess learners' performance through observation of their development; personal conduct; learning behaviour; participation in activities; and results of the tests accompanying the teaching – learning process commensurate with different levels and types of education. These results will also be taken into consideration in providing opportunities for further education, for which a variety of methods will be used.

Section 27 and 28: Curriculum Development for Each Educational Level The Basic Education Commission shall prescribe core curricula for basic education, while basic education institutions shall prepare substance relating to needs of the community and society, local wisdom and attributes of desirable members of the family, community, society and the nation.

The substance of the curricula, both academic and professional, shall aim at human development with a desirable balance regarding knowledge, critical thinking, capability, virtue and social responsibility.

Section 29: Roles of Parties Involved Educational institutions, in co-operation with individuals, families, communities, community organizations, private persons, private organizations, professional bodies, religious institutions, enterprises and other social institutions, shall contribute to the strengthening of the communities as well as identifying ways of exchanging development experiences among communities

Section 30: Research for Learning Development Educational institutions shall develop effective learning processes. In

so doing, they shall also encourage instructors to carry out research, enabling learners to learn appropriately at different levels of education.

The National Education Act, 1999, provides clear guidelines regarding the direction of learning reform. In spite of the difficulties, the reform is nevertheless a great task aspiring to a desirable outcome. In this regard, all segments of society – policy – makers, parents, teachers, learners administrators, communities etc. – must share a common view and take part in the reform, aimed at enabling the Thai people to attain desirable attributes, namely, virtue, competence and happiness.

Desirable Characteristics as Stipulated in the National Education Act

Specialists on learning, educators, thinkers, teachers, administrators, learners and all concerned with educational provision have given their views on the desirable characteristics of learners and the learning process, as stipulated in the National Education Act, 1999, which can be thus summarized:

Desirable Characteristics of Learners

Learners should be endowed with virtue, competence and happiness.

A **virtuous person** leads a life of desirable quality. He is endowed with purity of mind; a conscience; ethics; and valuable attributes both in mind and behaviour, e.g.:

- Self-discipline;
- Generosity;
- Rationality;
- Responsibility; honesty; diligence; ability to work hard; frugality;
- A democratic outlook; respect for the views and rights of others;
- Self-sacrifice;
- Care and concern for the environment; and
- An ability to live in harmony with others.

A competent person has high capability in life. He is endowed with talent in one or several competencies or special intelligences, e.g. scientific skill and process, mathematical competency. He also has:

- Creativity;
- Competencies in language, art, music and sport;
- Leadership;
- Self-knowledge; self-control.

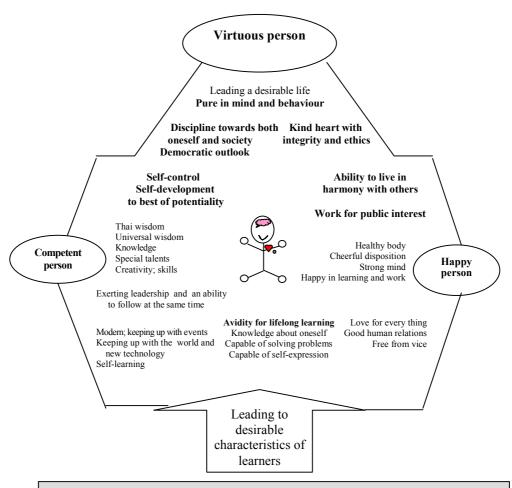
He is modern in his outlook; able to keep up with events, with the world and technological progress. He maintains his Thai identity; is capable of self-development to the highest potential; and able to bring benefits to himself, society and the nation.

A **happy person** is healthy both in body and mind; of cheerful disposition; has strong physical health, strength of mind, good human relations, love for all things in the world and has complete freedom in life. He is without vice and is able to live within his means and according to his status.

Desirable Characteristics of the Learning Process

Learning is an intellectual process of personal development on a continuous lifelong basis. It can take place at all times and in all places. It is a process which brings happiness. It integrates subject matters, depending on the appropriateness of each level of education, so that the learners will learn about themselves and their relationship with society. The content is in line with learners' interests and up-to-date. Emphasis is given to the thinking process and to practical work, enabling learners to have authentic experiences. The benefits thus obtained can be extensive. It offers alternatives through availability of a variety of learning sources. It is an interesting process whereby learners and teachers learn together. Learners, teachers and all parties concerned join efforts in creating an ambiance, conducive to learning, with learners' interests as the ultimate objective, so as to attain virtue, competence and happiness.

Desirable characteristics of the learning process, as stipulated in the National Education Act, can be summarized in Chart 2 as follows:



Desirable characteristics of learning process

- Process of developing intelligence leading to continuous lifelong development of learners
- Happy learning focussing on learners' benefits
- Integration of different contents, in line with learners' interests and up-to-date
- Process of thinking, actual practice, implementation will yield benefits
- Collaborative learning process with learners, teachers and all concerned contributing to creating an atmosphere conducive to learning

Chart 2: Desirable characteristics of learners and the learning process

If the organization of the learning process is holistic or integrated as already mentioned, the Thai people will undoubtedly be endowed with three qualities, namely, virtue, competence and happiness. These qualities are mutually supportive and are not in any order of priority. If they are regarded as forming an organic whole, there is no need to argue about the prominence of one quality over the others.

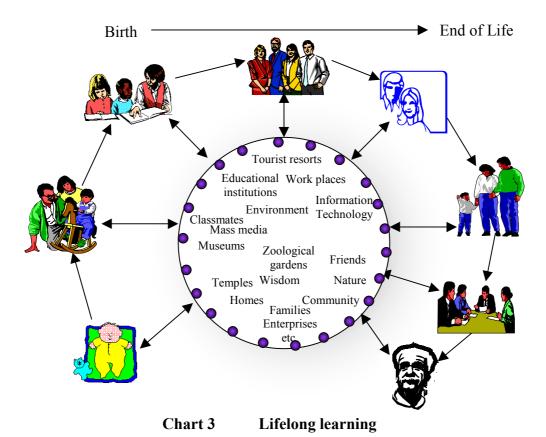
The ultimate aim of learning reform is a quality improvement of the Thai people for sustainable development of the country. Support for stimulating the lifelong learning process is imperative. Learners must be given an opportunity to think, do, check and verify results for application in real life. They become self-reliant as they are able to seek knowledge themselves and use the knowledge gained creatively for the public benefit.

Although learning reform through the learner-centred approach has been stipulated by law, there are several issues for which common interpretations are needed, so that they can be appropriately implemented, in line with the spirit of the National Education Act. These will be duly elaborated on in the next chapter.

Chapter 3 Concept, Meaning and Guidelines for Organizing Learning Process through Learner – Centred Approach

Our surrounding world undergoes constant changes. Hence our life depends on learning which enables us to adjust ourselves to the changing situations. Learning is therefore part of life which takes place at all times and in all places. It is a continuous lifelong process, going on from birth to the end of our life, beginning with learning from families, communities, learning centres, schools, religious institutions and other learning sources far and wide, encompassing all happenings in Thai and global societies.

Lifelong Learning



Learning begins from the time of conception in a mother's womb. Medical and psychological evidence have proven that, right from the time of conception, human beings are capable of learning about many things, be they language, music and moral values. Parents can therefore encourage their unborn children to learn through listening to music; recorded tapes of natural sounds, e.g. those of water trickling, birds singing, cocks crowing; numerical counting; and talking and touching. The brains of those who receive appropriate stimulation while still unborn will be effectively developed.

Learning of the 0-6 age group This period in life is regarded as providing a golden opportunity for learning, as the brain grows rapidly, especially during the first three years. A child's brain undergoes changes in nerve cell fibres, synapses, brain chemicals as well as gyri and sulci. All these changes affect the child's intellect and intelligence. Proper stimulation will lead to development of brain cells and that of attitudes towards learning, the foundations of which will be well paved. As a result, learning skills will be effectively developed on a lifelong basis.

Children in this age group like movement, touching, and playing with their hands and feet. They therefore like games and physical exercise; clay moulding, weeding, planting etc. They can play and, at the same time, be engaged in work which does not demand too much physical exertion. To them, playing is part of their learning experience.

The 0-6 age group goes through a period of reflection, imagination, touching, avidity for learning, communicating and playing with others. It is an initial period which determines the future effectiveness of the foundation of life.

The most important learning source for the 0-6 age group is the family, comprising parents and members of the family. Hence preparatory education for parents in their roles as their children's first teachers is equally important as early childhood education itself.

Learning of the 6-24 age group takes place in educational institutions, from primary and secondary to tertiary levels. The

objective of learning in this period is the holistic development of learners in four aspects, namely :

Physical development Training must be given so as to develop both small and big muscles as well as overall good health.

- **Intellectual development** Brain growth will be developed, to facilitate mastery of analytical thinking processes and to develop imagination and reasoning.
- Emotional and mental development Children and youth must be trained to acquire emotional intelligence and be able to control their emotions. They should have faith in their religion and devoutly observe religious principles. Learners should also be trained in all aspects physical, verbal and spiritual.

Development of social capacity Children and youth must learn to observe social rules and norms and to live in harmony with other people.

Children and youth in this age group are capable of thinking in abstract terms, and can use reasoning to distinguish between what is good and what is bad. They should therefore be given opportunities to learn, come in touch with and have experience in languages, mathematics, social skills and science.

Those in the 6-24 age group go through a period of growing up. If they are in the school system, they can continue their study right through graduation at the tertiary level. They should therefore be given opportunities for a balanced development relating to health and hygiene, intellect, emotion, social adjustment, mentality and aesthetics, so as to be able to live happily in adulthood.

Educational institutions provide learning sources to learners. Steps should therefore be taken to expand learning from other sources i.e. from families, communities, places of interest, nature and the environment, peers, community leaders, local wisemen etc. Hence educational provision must be varied. All segments of society will have larger roles and more importance in their joint efforts for the development of children and youth.

Learning during the working life of the 25-60 age group Apart from education available in educational institutions, adults of working age can learn informally through the use of instructional media, mostly from their occupations, work places, colleagues, touring, mass media, information technologies, environment and nature. Adults learn from experience and problem solving, they therefore need continuous development of intellect, capability and integrity.

Learning in old age (over 60 years old) Elderly people can learn a great deal from activities suitable to their age e.g. art, music, sports for the elderly, handicrafts and social work. They are highly respected in Thai society; capable of searching for knowledge and provide intellectual support to local communities. They can also carry out voluntary work in community organizations, clubs and associations. Such work makes their lives meaningful as well as bringing benefits to society.

Learners, communities and people constitute the most important powers of the nation. Since learning can take place on a lifelong basis, an integration of the concept of "value of human beings" and that of "lifelong learning potentiality" will result in a change in our perspective regarding educational provision in our country.

The concept of organizing of learning process through the learner-centred approach. Such a concept is not entirely new. It has been widely adopted in Thai society over the ages.

Learning according to Buddhist teaching gives prominence to "human beings". The learning process is therefore a process of "human development" both individually and as groups of people for peaceful co-existence. Since "human beings" are at the centre of learning, training by logic, is the development of all aspects of the quality of being "human".

Learning according to the Thai tradition has taken place in the past through individual tuition. In a family, boys would be taught literacy and instilled with diligence by their parents, while girls would be initiated to home-making and womanly virtues. In adulthood, men

would be ordained by Buddhist monks and reside in monasteries, where they would also receive occupational training. Women, for their part, would be instilled with desirable female attributes and also receive training in various occupations. Learning, according to the Thai tradition, can be summarized as a process of:

- 1. Cultivation and absorption of desirable characteristics;
- 2. Instilling and transmission of valuable cultural and traditional practices;
- 3. Absorbing knowledge;
- 4. Inculcation of desirable manners in all aspects physical, verbal and spiritual in accord with moral principles;
- 5. Practical training through demonstration and drilling; and
- 6. Training for absorption of right views so that children would be blessed with pure minds and thoughts.

Apart from the use of household and occupational equipment, children could learn from nature and then environment, folklore, toys, games, poetry, proverbs and riddles.

Learning for Thai children and youth is related to and in touch with the surrounding world. It is an integration of knowledge, practical application and morality. Educators are therefore recommended to carry out further research, the results of which can be adjusted to serve exigencies of the present time.

In organizing the learning process through the learner – centred approach, the following factors should be borne in mind :

1. The highest potential of the human brain for learning

The human brain comprises approximately 100,000 million cells. It is indeed a miraculous structure. By nature, it is ready for learning right at birth. Human beings are avid learners of everything and can absorb anything. They are eager to learn about themselves, nature and all around them.

Human beings learn through the brain and the nervous system, which receives knowledge by the coming in contact with the sense organs, namely, eyes, ears, nose, tongue, body and mind. In the learning process, teachers must be keenly interested and enable learners to develop a good co-ordination of **Head, Heart, Hand** and **Health.**

2. Multiplicity of intelligence

People differ in capability and competence and have their own particular pattern of development. Different environments have distinct effects on development and strengthening of capability.

Howard Gardner has studied the multiplicity of human intelligence, which he has divided into the following 10 categories:

- 1. Linguistic Intelligence;
- 2. Musical Intelligence;
- 3. Logical Mathematical Intelligence;
- 4. Bodily Kinesthetic Intelligence;
- 5. Spatial Intelligence;
- 6. Interpersonal Intelligence;
- 7. Intrapersonal Intelligence;
- 8. Naturalist Intelligence;
- 9. Existentialist Intelligence; and

10. Spiritual Intelligence.

A learning process should therefore include a variety of activities, enabling individual learners to develop themselves to the best of their potential and capability, as each can be blessed with more than one kind of intelligence.

3. Learning from first – hand experience

ONEC has studied the underlying concepts of different learning theories and has come forth with the following guidelines for organizing the learning process:

- 3.1 In organizing teaching learning activities, consideration should be given to individual differences, so that learners are allowed to develop to the best of their potential in various aspects knowledge, mental, emotion and different skills.
- 3.2 Transmission of subject matters should be decreased. Learners and teachers should join efforts in using scientific methods to acquire knowledge. Opportunities should be given to learners to learn from actual situations useful and related to real life. They should also learn truths about themselves and facts concerning the environment from a variety of learning sources.
- 3.3 Learners should be motivated to learn effectively from first-hand experience. The teachers' roles are hence confined to preparatory work, stimulation, provision of advice and guidance on activities to be undertaken, and, finally, evaluation.

The meaning of the learning process through the learner – centred approach

The process involves identification of objectives, contents, activities, learning sources, instructional media and evaluation aimed at development of the "persons" and the enrichment of their "lives". Learners should therefore be allowed learning experiences to their highest potential and in line with their aptitude, interests and needs.

In organizing learning activities, regard should be given to individual differences. They should enable learners to come in touch and interact with all around them, be they other people, nature and technology etc. They should be allowed to investigate, experiment and exchange views with others until lesson contents are crystallised. They should also be familiar with critical thinking, able to use their own imagination and express themselves clearly and logically.

The teachers' roles are confined to motivation and providing support in all activities until the learners can, on their own, find answers and solutions to problems. Team work should be encouraged. Activities aimed at inculcation of integrity, discipline and responsibility for work should be organized. Learners should be trained in self-evaluation and self-improvement, acceptance of others and good citizenship at national and global levels.

Learning can take place anywhere, at any time and at all levels – within learners themselves and within and outside the classroom with the participation of all concerned.

At learners' level The process allows learners to participate in the identification of objectives, activities and learning methods. They are able to think, do and learn themselves as well as take part in evaluation of learning development in accord with their potential, needs, interests and aptitudes.

At classroom level The process enables **learners** to:

- ◆ Think, do, act and construct their own knowledge about matters relating to their lives from a variety of learning sources;
- ◆ Participate in the identification of objectives, activities and learning methods as well as learn happily with others; and
 - Participate in evaluation of learning development.

Teachers

◆ are responsible for initial planning relating to both contents and methods for learners; provide an ambiance conducive to learning; and suggest guidelines for seeking appropriate knowledge to individual learners.

At the classroom level, apart from teachers and learners who participate in organizing the learning process, those making significant contributions are school administrators and personnel providing support for teaching, making instructional media available, and creating an appropriate ambiance and environment for learners.

Outside the classroom The process allows parents and communities to participate in the *planning* of teaching and learning, taking into account learners *potential* and *needs*. Learners are able to learn from a variety of *learning sources* in harmony with their lives in families, communities and local areas. It also allows *participation* of learners *at all stages* of the learning process.

At the classroom level, apart from participants at the two levels referred to above, policy-makers, administrators, parents, communities and other supporting parties also make significant contributions.

In sum, organizing the learning process through the learner – centred approach should :

- Aim at the highest benefits for learner;
- Allow learners to develop themselves to the best of their potential;
- Allow learners to acquire skills in seeking knowledge from a variety of sources;
- Enable learners to apply learning methods to real life; and
- Allow all concerned to participate in the learners' development at all stages.

Essential factors contributing to the learning process

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- 1. The learning process will be facilitated, if learners are given opportunities to think for themselves, do and create, with teachers providing an ambiance conducive to learning making instructional media available and joining their students in crystallising subject matter.
- 2. Consideration is given by teachers to individual differences regarding intellect, emotion, social capacity, physical and mental fitness. Learners should also be provided with opportunities to learn through varied methods applied on a continuous basis.
- 3. Balanced subject matter will suit learners' ages, aptitudes and interests as well as social expectations. Learning outcomes arising from both content and process will enable learners to acquire knowledge, an ability to think for themselves, competence, virtue and happiness in learning.
- 4. Varied and sufficient learning sources are available to learners in their search for knowledge in accordance with their aptitude and interests.
- 5. Interaction between learners and teachers and among learners themselves is based on friendship and eagerness to lend a helping hand with care and concern. All join efforts in organizing the learning process, which includes exchanges of knowledge, interweaving of thoughts and problem solving.
- 6. Students have faith in their teachers, subject matter as well as the process conducive to learning. They are eager and love to learn, while teachers, on their part, must also have confidence in their students' ability to learn through a variety of methods.
- 7. The content and learning process are related to situations and the environment of learners, who can benefit through application of the outcomes to their real life.
- 8. The learning process is linked with other networks e.g. communities, families and other bodies, so as to attain good

relationships and co-operation, enabling learners to learn and achieve maximum benefits.

With a view to facilitating educational institutions and teachers to organize the learning process as stipulated in section 24 of the National Education Act, this publication includes examples, in summarized form, of organizing the learning process through the learner–centred approach. It is not mandatory that all stages of the process, which are proposed simply as alternatives, be religiously followed. Teachers can choose the stages most appropriate to their situations. It is believed that teachers will be able to provide further refinement for the different stages of the process themselves.

Examples of various stages of the learning process

- 1. Need identification
 - Identification of learners' needs/interests
 - Identification of knowledge already acquired
- 2. Preparatory work
 - Teachers make preparations regarding learning content and other elements conducive to learning
 - Making plans for teaching and learning
- 3. Organization of learning activities e.g.
 - Induction to lessons
 - Organizing learning activities
 - Analysis and discussion on outcomes/bodies of knowledge gained from learning activities
 - Analysis of and discussion on the learning process
- 4. Evaluation
- 5. Conclusion and subsequent application
- **1. Need identification** As a first step, teachers should study the inclinations and interests of learners through questioning, observation and questionnaires in order to generate/stimulate interest and concern, and assess the knowledge already acquired by individual

learners. They should also avail themselves of the stipulations in section 22 of the National Education Act, which provide guidelines for learning reform.

Example

At Wat Nong Moo School, Phayuha Khiri District, Nakhorn Sawan Province, Khru* Manas Burapa identifies the needs/interests of his students, who, together with their friends will decide on the topics of study. The teacher, in this regard, makes no interference whatever. For instance, during the rainy season with prevalence of such diseases as the common cold, Hong Kong foot, conjunctivitis and haemorrhagic fever, Khru Manas will allow his students to decide on the disease to be studied, for which a vote will be taken. As a contribution to solving a prevalent community problem, the students have expressed their wish to do a project on haemorrhagic fever with a view to eliminating the disease from their village.

2. Preparatory Work

Teachers will have to study the content, objectives, parameters and rationales of the curriculum, so that planning for the learning process will be on an integrated and continuous basis. Substances of related subjects should be interlinked and, if possible, integrated. Learning activities should relate to real life and as many authentic experiences as possible should be provided. In this regard, teachers must allow their students to participate in determining learning activities in line with their interests and aptitude. Students can therefore learn independently according to their individual competence and preferences. Since teachers are no longer transmitters of knowledge, preparation will have to be made for learning sources in terms of instructional media, fact sheets, instructions, materials and equipment; self-learning centres with data available for learners to study and search at their wish. A survey of

^{*} Khru, a Thai word, means a "teacher", held in reverence in Thai society

various learning sources, such as, public libraries, museums, art galleries, zoos, public parks, botanical gardens, science and technology parks, sport and recreation centres etc. should also be made.

Example

Having studied the entire curriculum as well as learning objectives, **Khru Vimolsri Suwannarat** of Baan Koh Mee School Hatyai District, Songkhla province, makes a plan for organizing the learning process by allowing her students to carry out a small-scale research project of their choice. The teacher and her students have decided on a topic closely related to their lives, e.g. the best hours for rubber tapping for maximum quantity of latex; use of extracts from tinospora cordifolia and king of the bitter to prevent worms in salted fish; production of mosquito repellant from palm blossoms etc. The teacher's role is confined to the provision of advice and recommendations on planning, seeking knowledge and identification of and solution to problems with her students.

3. Organization of learning activities

3.1 Induction to lessons At this stage, teachers should raise questions relevant to situations or carry out activities which arouse the students' curiosity. They should offer nothing but friendship and assistance in all matters. Their familiarity with individual students will enable them to benefit from the latter's aptitude, interests and learning pace in stimulating the potential of each student, who should be encouraged to participate eagerly and willingly.

Example

For induction to lessons, there is a variety of approaches, all of which have the common objective of making learners relaxed and not under undue stress right from the beginning; all the better if learners become interested and derive pleasure from learning. In this regard, **Khru Chatree Samrarn** of Kuruchon

Pattana School, Yala Province, has emphasized the necessity of allowing learners to decide on the lessons themselves (of course, in line with the teachers' discreet planning), so as to enable learners to learn in accordance with their preferences, and independent of the teachers' choices. An illustration of a simple induction is found in Khru Chatree's following words:

"......On entering Grade 1 homeroom, I will say: 'Hello, children. Shall we go for a trip outside today?' Of course, there'll be a chorus of agreement, with suggestions as to places of their interest. I will then gradually persuade the kids to observe the flowers and trees in front of the school, because I am certain that I can find many good things outside to teach them. Yes, unknowingly, the children will comply with my persuasion....."

Khru Vilaiwan Khamman of Baan Huay Kok School 1, Mukdahan Province, for her part, uses songs, dances and games for induction to lessons, teaching and conclusion stages.

3.2 Organization of learning activities At this stage, teachers play an important role through promotion of the learners' development at their own pace and to the best of their potential. The former should concentrate on organizing activities and creating an ambiance related to real life through the use of a variety of instructional media, suitable to learners' capability and interests. Special attention should be paid to encouraging the use of all parts of the brains of the learners, who are given opportunities to suggest activities, have authentic experience at all stages and crystallise concepts regarding the bodies of knowledge themselves. Intra and inter group interactions are also possible, so that, collectively, the students will be familiar with methods of acquiring knowledge.

The teaching – learning activities are not to be confined to the four walls of the classrooms all the time, as the ambiance might bring unnecessary stress to the students. They should, on the contrary, be allowed maximum exposure to the surrounding world which embraces them: the fields, open sky, forests, pebbles, earth, sand, flowers and other natural riches. Children need room for movement

which gives them enjoyment and concurrently provides them with an opportunity for gaining knowledge.

Example

Khru Charatsri Kewsuwan of Muang Chiang Rai Kindergarten, Chiang Rai Province, is a teacher of English. Based on the surrounding world, she first teaches her students using a natural method and subsequently expands their horizons in line with their interests and potential.

At Baan Sanmaked School, Wiang Pa Pao District, Chiang Rai Province, every afternoon, **Khru Saowanee Chaimongkol** organizes group activities for Grades 5-6 students, who search for information on the topic of interest already agreed upon. They then share the data gained with their friends.

3.3 Analysis and discussion on outcomes/bodies of knowledge gained from learning activities

Teachers and learners will discuss together the outcomes of learning activities as well as exchange relevant experiences, with emphasis on allowing the learners to acquire knowledge themselves. Based on their observations, the teachers will provide additional information for clarification and solidification purposes with a view to motivating their students to seek further knowledge.

Example

Khru Saowanee urges her students to identify problems around them, particularly to seek the root causes of the destroyed forest surrounding the school. Both the teacher and students take part in a group activity by asking community members relevant questions. The teacher, her students and the community members concerned will then discuss the problems together. The students thus learn through an authentic experience and from the analysis of problems and synthesis of knowledge gained from the learning activity, as illustrated by the students' own telling words as follows "Uprooting a bamboo shoot is, in a way, destroying part of

nature. To dig out even one shoot, instead of allowing it to grow to a clump, is in fact destroying the whole clump of bamboo shoots....."

4. Evaluation

The success of the learning process through the learner - centred approach is predominantly determined by learning Teachers are invited to pay attention to provisions in section 26 of the National Education Act regarding substance and points of emphasis; assessment of learners' learning development; personal conduct; observation of learning behaviour; participation in learning activities and tests for further development as well as for identification of their potential, strengths and weaknesses. The assessment will also verify whether the learning process has achieved the goals set for the learners' development. The learning outcomes will also reflect teachers' efficiency. Hence, the measurement and assessment of the learning process through the learner - centred approach will necessarily have to be all embracing and cover all aspects of the process and output, namely, knowledge, emotion, and skills in self-expression in all respects. The evaluation, both formative and summative, which is based on a real situation, should have the following stages:

- 4.1 Identification of assessment objectives and goals;
- 4.2 Identification of aspects, criteria, methodology and objects of assessment e.g.
 - ◆ Assessment of development regarding art and music, mathematics, language, science, physical development, personality development etc.
 - ◆ Aspects of assessment e.g. knowledge, skills, emotion, characteristics etc.
- 4.3 Identification of assessors e.g. students themselves, peers, homeroom teachers, parents, community members or parties concerned etc.
- 4.4 Judicious application of a variety of assessment techniques and instruments appropriate for evaluation objectives and criteria e.g. tests,

- interviews, behavioural records, questionnaires, memoranda from parties concerned, portfolios etc.
- 4.5 Fixing of assessment time and place e.g. evaluation while an activity or group work/project is in progress, one day of the week, during a special event/ assignment etc.
- 4.6 Analysis of outcomes and management of assessment data
 - ◆ Various components of the process
 - **◆** Portfolios
 - ◆ Data records
- 4.7 Synthesis of assessment results for rectifying learning deficiencies, amelioration of teaching and learning activities and further development of learners' capability. In case of summative assessment by assessing against the criteria set, for the purpose of transition to a higher grade, results of formative assessment must also be taken into consideration.

Example

The teachers can use a variety of assessment methodology. There is, however, a proviso that the students' participation in setting assessment indicators and criteria will make the assessment meaningful to the students, and will also facilitate self-evaluation. Let us look at the case of **Khru Chatree Samrarn**, who has made an agreement with his students regarding the following standards to be reached for their reading practice:

- ◆ Fluency, correctness and clarity in pronunciation;
- Correctness and clarity in pronunciation of r and l;
- ◆ Correctness and clarity in pronunciation of compound consonants with r, l and w;
- ◆ Correct pauses at the end of phrases/sentences.

The students are allowed to choose their own learning media and assessment instruments with the teacher giving advice regarding reading standards to be attained. Khru Chatree will write down stories as told by the children, who will read them out aloud for assessment of their reading ability against the agreed criteria. Children in other groups, however will choose textbooks of the Curriculum and Instruction Development Department for their assessment. Such a case is an example of evaluation in a real situation and does not give the students a sense of incapability or discouragement to learn Thai language.

Khru Supaporn Manketvit of Baan Thung Siew School (Navarat), Chiang Mai Province, made the following comment regarding evaluation: "When a child starts to speak, no matter whether he makes a mistake or not, we have to, first of all, praise him and give him such encouraging words as 'Very good. If you continue like this, you'll be better and better'. I never say he's wrong, but will ask 'What has happened to this part? Is there something missing?' The boy concerned will then find additional information. We call this 'Fill in the gap process'. If a student has something to present to his friends, I'll make arrangements for a forum for the presentation. Should there be some improvement to be made, I'll make suggestion on how to do it. This is what I call 'creative evaluation'."

5. Conclusion and subsequent application

This represents the crystallisation stage of the individual learning process. That is to say, each learner will view all things as being holistic and interlinked. An insight will be developed. He will then appreciate his own capabilities, strengths and weaknesses. Such realization will be possible after his experience in learning activities and after being given opportunities for self-expression through the process referred to above. Benefits are to be gained from the conclusions drawn from lessons supplemented by teachers' suggestions, exchanges of learning methods, self-expression, presentation of achievements, exhibitions, role playing, application of findings for learners' self-improvement e.g. personality adjustment, ability to get on with others, understanding of and sympathy with others in difficult

situations, respect for the rights of other people as well as creative innovations beneficial to society, the community and daily life.

Chapter 4 Learning Reform : Achievements and Experiences of Different Parties Involved

Governmental Organizations

Intensive efforts have been made by government agencies responsible for policy formulation as well as those in charge of operations with a view to ensuring the success of the learning reform. Salient achievements of the different agencies are presented below.

1. Office of the National Education Commission (ONEC)

In 1997, ONEC initiated learning reform activities based on 5 fundamental concepts regarding the learning process as follows:

- ♦ Learning achievement is the ultimate objective of teaching and learning.
- ♦ Learning takes place at all times, in all places and on a continuous lifelong basis.
- ♦ Faith is the best starting point for learning.
- ♦ Effective learning takes place through direct exposure and actual practice.
- ♦ Learning will result in a happy equilibrium of knowledge, ability to think independently, capability and virtue.

Based on the above fundamental principles, specialists in this field have synthesized learning concepts and theories, developed both in Thailand and in other countries. They have consequently come up with substance and processes embodied in the 5 learning theories, presented to the agencies and individuals concerned for implementation.

The 5 learning theories are :

- 1. Happy Learning;
- 2. Participatory Learning;
- 3. Thinking Process Development Learning;
- 4. Aesthetic and Character Development Learning : Art, Music, Sport; and
- 5. Moral Values and Character Development Learning: physical, verbal and mental training.

In encouraging implementation of the above theories, the real motive is to present organization of the teaching-learning process through the learner–centred approach. Indicators, synthesized from the 5 learning theories, regarding activities of learners and teachers have been developed and are herewith presented:

Indicators regarding learners' activities

- 1. Learners have a direct relationship with nature and the environment from which they draw authentic experience.
- 2. Learners have intensive practice until they realize their own aptitude and working methods.
- 3. Learners carry out activities in which knowledge and experience of members of the group are exchanged.
- 4. Learners have practice in analytical thinking in several ways in which imagination and creativity play an important role. They are also capable of clear and logical self-expression.
- 5. Learners receive encouragement and support in finding answers to questions and problem solving. Mutual assistance is also attained.
- 6. Learners have practice in research, data collecting and constructing knowledge themselves.

- 7. Learners are able to select activities in line with their capabilities, aptitude and interests, which are carried out with contentment.
- 8. Learners train themselves for attainment of self-discipline and work responsibility.
- 9. Learners receive training in evaluation for selfimprovement and acceptance of others as well as the interest and enthusiasm to seek knowledge on a continuous basis

Indicators regarding teachers' activities

- 1. Teachers make preparations relating to both content and methods of teaching.
- 2. Teachers provide an environment which motivate learners to learn. Learners also receive support and strengthening of their efforts to learn.
- 3. Teachers pay individual attention to learners who all receive nothing but kindness and generosity.
- 4. Teachers arrange for activities and situations conducive to encouraging learners to express themselves and think creatively.
- 5. Teachers encourage learners to think independently, undertake activities and constantly improve themselves.
- 6. Teachers encourage group activities in which knowledge and experience are exchanged. They also observe their students' strengths and provide remedial measures for their weaknesses.
- 7. Teachers avail themselves of instructional media for training in independent thinking, problem solving and the attainment of knowledge.
- 8. Teachers avail themselves of a variety of learning sources and relate learning to real life.

- 9. Teachers provide training regarding manners and discipline in line with traditional Thai culture.
- 10. Teachers note and evaluate learners' development on a continuous basis.

From the above indicators, it can be concluded that the learning and teaching behaviour of both parties are interlinked. Many of the activities can take place before, during and after the teaching-learning process.

These indicators for the learner - centred approach have been widely disseminated to operating agencies and units. Appropriate adjustments and embellishments have been made to meet their individual requirements.

2. Office of the National Primary Education Commission (ONPEC)

The Office is a major operating department responsible for the provision of basic education from early childhood to primary and lower secondary levels. It has under its jurisdiction the largest number of schools and takes care of the highest number of students in the country. It has provided guidelines for learning reform through the learner – centred approach, enabling learners to attain virtue, competence and happiness, based on five aspects of the learning process as follows:

- Happy learning;
- Learning through an holistic approach;
- Learning through analytical thinking and actual practice;
- Learning with others; and
- Learning about one's own learning process.

Further details regarding different aspects of the above process can be seen below :

1. Happy learning: pleasure is derived from learning by all

The underlying principles of the Theory of Happy Learning have been adopted by ONPEC. Teaching and learning activities should be organized in a relaxed atmosphere, which allows students to enjoy freedom and accept differences among individuals. The learning methods are varied, and encourage the students to experience success and attain self-development to their highest potential. The lessons must be related to their surrounding world, and be meaningful and useful. Learning activities must be varied and facilitated by interesting instructional media. Emphasis of the evaluation is on the potential of individual learners. The teacher–learner interaction reflects gentleness, friendship, kindness, warmth, mutual understanding and acceptance as well as encouragement and assistance.

2. Learning through an holistic approach: integration of content and the learning process

The learning content, which is harmoniously interrelated and interlinked, covers matters pertaining to the local area, environment, local and universal affairs and changes and trends in the world community. Such an approach will enable learners to gain a more profound and thorough understanding of the knowledge acquired, which will later be useful to them in their lives and to the solution of social problems.

3. Learning through thinking and action: learning through the brain and with the two hands

Thinking is a brain faculty transforming information, knowledge and experience already acquired into new bodies of knowledge and appropriate approaches for different situations. Learning will be complete only when thinking is followed by actual practice. Such an approach is possible through direct experience from learning sources, media, events and the surrounding world as well as through observation, reflection, action and the crystallization of knowledge, based on the conclusion of results obtained.

4. Learning with others: collective learning, collective knowledge

This learning process is based on interaction and depends on a mutual transfer and exchange of knowledge and cultural, emotional and social requisites. It allows exchanges of information and reflection from which rich and varied learning emanates. Such an approach will lead to mutual assistance, thus inculcating desirable moral values in students. Collective work also improves both social and work skills.

5. Learning about one's own learning process: with careful consideration and review of all aspects of one's own learning

This process allows learners to appreciate their own learning capabilities and aptitude; how learning takes place each time, through what methods as well as the different stages of learning from the beginning to the end. It provides learners with opportunities and situations enabling them to study and reflect, evaluate their own strengths and weaknesses, and improve their learning processes, so that an appropriate approach will be adopted in future.

In carrying out the reform, ONPEC points out the exigencies to begin with confidence in the learner's potential, to adopt the learner – centred approach and to relate to real life.

The learning process reform has been proposed at three levels as follows:

1. Learning management level

The above five aspects of the learning process have been recommended, together with six requisites of learning reform, namely:

- Intimate knowledge about individual learners;
- Integration;

- Programme;
- Link with local situations;
- Collective learning; and
- Evaluation with the help of portfolios.

2. School level

Guidelines have been proposed for school functioning, e.g.:

- Participation in preparation of a school charter;
- Arrangement of the ambiance conducive to learning reform;
- Participation of communities/parents;
- Dissemination of teaching methods through the "Kalyanamitr Nites" (friendship-based demonstration approach); and
- Classroom research.

3. At the level of agencies concerned e.g. provincial/district administration organizations

Support has been provided to learning reform by the initiation of the so-called "spearhead schools", "spearhead teachers" and various measures for learning process reform at provincial levels. These measures include amendments of rules and regulations not conducive to learning reform, the awareness of which has been widely disseminated.

3. General Education Department (GED)

The GED has given priority to school management conducive to the adoption of the learning process through "whole school" approach which can be summarized in the following chart.

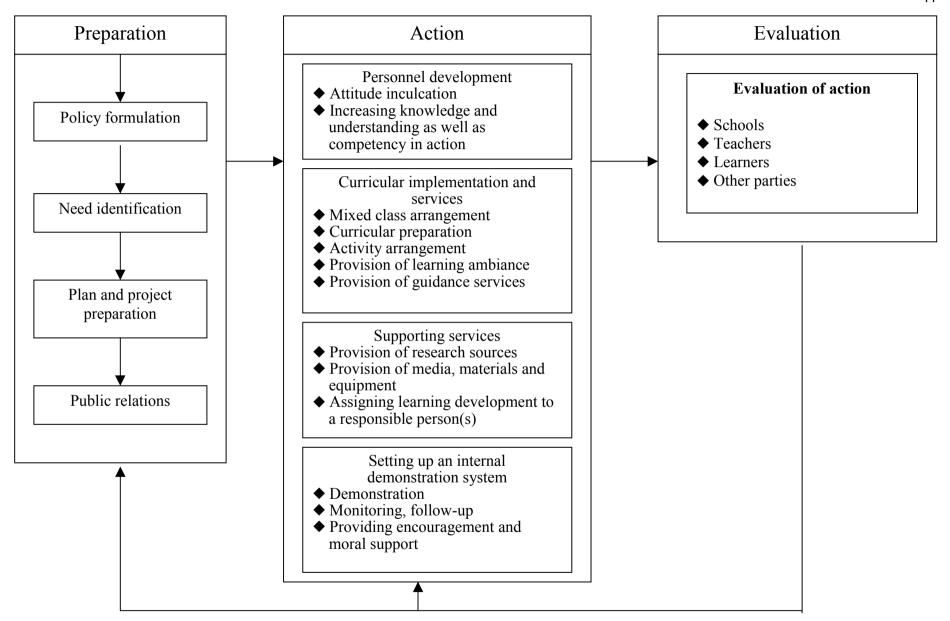


Chart 4 Schools' working procedure in organizing the learning the process through the learner–centred approach

1. Preparation

- 1.1 Self-preparation
- 1.2 Preparation/
 Idenfification of Learning
 Sources
- 1.3 Preparation of teaching plans
 - Preparation of activities
 - Preparation of instructional media, materials, equipment etc.
 - Preparation of measurement and evaluation

2. Action

Organization of activities enabling learners to:

- 2.1 Construct and discover knowledge themselves (c)
- 2.2 Interact with a variety of learning sources (I)
- 2.3 Have physical participation suitable to their ages and interests (Physical Participation)
- 2.4 Learn different processes (P)
- 2.5 Apply the knowledge gained (A)

3. Evaluation

Measurement and authentic evaluation based on :

- 3.1 A variety of methods
- 3.2 Practical Work
- 3.3 Portfolios

C = Construct

I = Interaction

P = Physical Participation

P = Process Learning

A = Application

Chart 5 Teachers' working procedure in organizing the learning process through the learner – centred approach

In 1996, the GED began to disseminate information on organizing learning process through the learner – centred approach. Steps have been taken, since then, to modify it, based on the CIPPA Model. Teachers under GED's jurisdiction have widely benefitted from it in their teaching.

4. Vocational Education Department

In order to enable teachers, who are in fact the key people in the successful implementation of the concept of the learner – centred approach, GED has also proposed guidelines for teachers, based on the modified CIPPA Model of Assoc. Prof.Tisana Khemmani, as shown in the chart below.

The Department is one of the agencies responsible for the provision of basic education at Vocational Education Certificate level. It allows students a learning process and occupational skill training, so that they will acquire knowledge and proficiency in occupational skills through actual experience. They are thus able to develop their learning and enhance their critical thinking, managerial skills, and ability to live in society with integrity, ethical values and dignity. The Department's main line of action is the development of teaching methods so that the above objectives can be realized.

Major Responsibilities	Strategies Applied	
Organization of the teaching-learning process and occupational training: 1. Enabling learners to learn in line with their needs and aptitude and in a real situation.	 ◆ Development of teachers' teaching techniques ◆ Development of vocational teachers ◆ Establishment of centres for learning and the teaching of occupational skills. 	
2. Allowing flexibility in both form and content; serving the needs of society, community, local area and learners.	◆ Setting up of a teaching – learning system with the co-operation of enterprises e.g. dual system.	
3. Inculcating in learners integrity, ethical values and desirable characteristics.	◆ Organizing activities allowing learners to have real practice in order to attain the following attributes serving as behavioural indicators:	
	 ♦ Good human relationships ♦ Discipline ♦ Responsibility ♦ Honesty ♦ Unity ♦ Creativity ♦ Security ♦ Good Thai manners ♦ Gratitude ♦ Self-reliance ♦ Patience and self - restraint 	

5. Department of Education, Bangkok Metropolitan Administration (BMA)

The Department is responsible for the administration of its schools in the Bangkok Metropolitan area. Since 1996, in co-operation with the Faculty of Education, Srinakharinwirot University, it has been implementing the Project on Strengthening Potentiality of Municipal School Students in the Bangkok Area. In so doing, BMA and the Faculty have joined efforts in proposing concepts aimed at

developing learners' potential so as to attain virtue, capability and happiness through the following process:

- 5.1 *Teachers' paradigm shift* Through training, teachers are initialed to the following requisites of the teaching learning process based on the learner centred approach:
- 1. Conviction in learners' ability to learn and develop, based on the principles of progressivism.
 - 2. Teachers have a holistic view of their students.
- 3. Learners' development is undertaken on a holistic basis by teachers, who, with love and understanding, view their students as having the potential and capability to learn.
 - 4. Learners undertake learning activities themselves.
- 5. Teachers must believe that knowledge can be constructed and constantly changes.
- 6. In teaching, teachers will place more emphasis on process than on content and must instill capability to learn in students.
- 7. The structure of learning activities should be flexible and could be organized in many ways. Equal importance should be given to both I.Q. and E.Q. development in learning for which a holistic approach is adopted. Such learning should be flexible enough so as to be adjustable in a variety of ways and suitable to the culture of learning in each local area or in each community.

5.2 Teachers should appreciate the importance of the brain in learning

Emphasis should be made to teachers that "Learning is the Treasure Within". They should appreciate human potential regarding multiple intelligence. Mind mapping should be availed of in adjustment for systematic thinking, in analyzing the curriculum and contents, which should be integrated for the purpose of designing learning activities.

5.3 *Teaching – learning activities*

Eleven types of activities are organized, seven of which are aimed at promoting learners' potential in acquiring different intelligences in 1-7:

- 1. Interpersonal Intelligence;
- 2. Scientific Spatial Intelligence;
- 3. Logical Mathematical Intelligence;

- 4. Linguistic Intelligence;
- 5. Musical Intelligence;
- 6. Artistic Intelligence;
- 7. Bodily Kinesthetic Intelligence;
- 8. Activities aimed at promoting learners' potentiality regarding school ambiance;
- 9. Activities of friends-of-children centre, psychological counseling and environment in school;
- 10. Activities of academic centres, serving as learners' self-learning sources; and
- 11. Measurement and test activities aimed at promoting learners' potential.

5.4 *Organization of learning*

- 1. Arrangement of an environment conducive to learning; encouragement of learning outside normal classroom e.g. activities no. 9 and no. 11.
- 2. Strengthening learning characteristics of four different types of learners, namely:

2.1 Imaginative Learners

These learners learn through observation integrated with their own imagination. New information will be processed and transformed. A holistic approach is adopted in perception of the surrounding world which has different interpretation for different people. Teachers will ask questions beginning with "why" in order to stimulate learning, conducive to creating a meaningful experience for learners.

2.2 Analytical Learners

Analytical learning combines observation with critical thinking, resulting in the discovery of facts and crystallising of concepts and understanding. Teachers will ask questions beginning with "what" to stimulate learning, leading to a profound understanding of knowledge gained.

2.3 Common Sense Learners

These learners use common sense in their reflection. Experiment and practice are carried out by learners themselves, who are keenly interested in the process. Teachers will ask questions beginning with "how" to stimulate learning and provide learners with opportunities to experiment as well as to have authentic experiences. The teacher's role is in fact confined to giving advice and assistance

2.4 Dynamic Learners

The learners prefer actual experience. They will carry out activities in which they have a keen interest and which they discover themselves. Teachers will ask questions beginning with "if" to stimulate self - learning and peer teaching.

6. Bureau of Local Education Administration

The Bureau, attached to the Local Administration Department, Ministry of Interior, is responsible for education provided by municipalities, Pattaya City, and provincial and sub-district administration organizations. Learning reform through the wholeschool approach has been encouraged with necessary training courses organized for the benefit of teachers in municipal areas in all parts of the country. Municipalities and Pattaya City with schools under their jurisdiction have been instructed to prepare long - term learning reform plans, either by themselves or in co-operation with educational institutes with the requisite expertise to ensure the success of the reform. Wat Kuhasawan Municipal School of Muang Phitsanulok Municipality, is an example of the schools which have carried out learning reform, beginning with the adjustment of teachers' concepts. A total of 14 training courses for teachers has been organized. For the reform, priority is given to team work, participatory learning processes and the attainment of life skills as well as learning from authentic experience. Importance has been given to adjustment of the school environment, so that it becomes almost like the students' second home.

Non – Governmental Organizations

1. Thai Education Foundation

Co-operation among the Ministry of Education, Ministry of Agriculture and Co-operatives, Ministry of Public Health, higher education institutions and international agencies e.g. UNICEF, UNDP,

FAO, World Education, John Snow Inc. and Thai Education Foundation has led to a large number of innovative projects. A clear example of the project relating to learning process development is that on Ecosystems in Rice Fields and Vegetable Beds, implemented in 1997. The project contributes to the development of the learning process through the learner-centred approach, learning from discovery by learners themselves and from classroom research. Emphasis is given to allowing learners to construct knowledge and acquire skills in observation, gathering and collecting data from the ecosystem, data analysis and synthesis, decision making, team work and participation of the community. Learners have acquired knowledge and understanding of the different elements as well as their relationship in the ecosystem. They have also acquired skills in management and rice and to grow such crops, they have acquired skills in Mathematics, Science, Art, Thai Language, English Language and subjects related to life experience.

The project is developed through the whole-school approach with the aim of attaining systemic and efficient multiplication of the effects in the entire school. Such orientation of teachers, administrators and community representatives, so that they fully understand the curriculum, project targets and support system is provided on a continuous basis. There are at present 43 schools participating in the project located in the provinces of Chiang Rai, Nakhon Sawan, Uthai Thani, Kanchanaburi and Ubon Ratchathani. Indeed, the project has received strong support from schools, communities, local organizations, ONPEC and FAO.

2. Suksapattana Foundation

The Foundation is an NGO with a mission to develop the qualities of the Thai people. In its Lighthouse Project, the learning process based on constructionism is advocated. Such an approach has been disseminated to educational institutions under jurisdiction of the Non-formal Education Department, ONPEC, Vajiravudh College, universities and villagers in various communities.

Learning theory based on constructionism has been developed by Professor Seymour Papert from that based on constructivism put forth by Jean Piaget. The main principle of constructionism is that learning enabling learners to maximize their ability to think, is possible when they have a chance to participate in

constructing something meaningful to them, to their preference and interest. Nobody can dictate or determine as to what is meaningful to another person. Hence, having a choice as to what to learn is an important requisite contributing to an ambiance and environment conducive to learning. Given an opportunity to decide on the extent of knowledge to be constructed a learner will willingly participate and carry out the activities required. The more he is able to relate to the activities, the more he will be able to link new knowledge with information already gained, which is the process called by Piaget "Assimilation of Knowledge". Furthermore, should the learner be able interlink various aspects of the knowledge thus acquired with keen interest, the learning experience will be profound, meaningful and long lasting.

The learning process based on constructionism requires a change in the teachers' role; that is to say, instead of mainly "instructing", they will assume the new role of "pathfinders" and at the same time that of "tutors". To be able to assume the new role of pathfounders, it is absolutely necessary that teachers are also learners who learn all the time.

The Suksapattana Foundation has disseminated information on the learning process based on constructionism to schools and educational institutions in different experimental areas. It has made available to these schools new technologies, e.g. Microworlds and Robot Design conputer programmes, and other instruments e.g. electronic newspaper etc. Learning processes benefitting from nature and environment have also been availed of.

3. Institute for the Promotion of Art and Culture for Development (MAYA Institute)

The Institute's model for learning development, called "Happy Kids" programme, provides guidelines for the organization of learning applicable to all levels of education – from early childhood to secondary levels. The programme is based on the concept that children learn happily because of **good lessons**, **proficient teachers** and sufficient resources.

MAYA Institute is an NGO which recognizes the importance of the three desirable characteristics of a learner, namely, virtue, capability and happiness, which are ultimate objectives of learning reform. Interpretation of "virtue" and "capability" must

....relate to truths and limitations in life. The magnitude of his capability and virtue entirely depends on the level of his development, previous experience and facts in the surrounding world.....Prominence should be given to "happiness", and yet "virtue" and "capability" are the qualities to be instilled at the same time without undue emphasis.....to the extent that the children or learners become distressed. Teachers undeniably play a major role. The practical guidelines for such a process are:

- **1. Good lessons,** designed by teachers themselves or in cooperation with external specialists; they will have the following characteristics:
- **1.1 Appropriate content** i.e. a provide knowledge based on information and data beneficial to problem solving on a short-term and long-term basis. The content must relate to the learner's real life; in other words, based on realities. They must be upto-date and relate to local situations.
- **1.2 Appropriate methodoligies** i.e. application of the learner–centred approach; information provided by groups; problem–solving, that is to say, with the aim of allowing learners to gain knowledge themselves.

2. Proficient teachers

- **2.1** Teachers are competent in preparing learning units or Experiential Activities Plans (EAPs). The teachers must understand the relationship among various teaching methods (demonstration, self-learning, collective learning); learning structure (grouping of different models and teachers' roles); and learning materials (real objects, visual objects, publications, games, local resources etc.). Steps for learning units or EAPs are as follows:
- ◆ Warming up: stage of preparing learners to gain confidence and enjoyment in learning regarded as a challenge.
- ◆ Initiation to problems e.g. teachers ask questions which stimulate learners to think and rouse their curiosity to find answers.
- ◆ *Reflection on individual solutions* e.g. allow learners to learn how to think and how to seek answers themselves.
- ◆ Group mobilization for finding solutions e.g. allow learners to learn in group through exchanges of information, to

practise in debates and discussions, to accept different view points and to find conclusions in the group.

- igspace Self expression e.g. allow learners to have experience in decision making, providing comments and presenting information and their own points of view or those of the group.
- ◆ Interpretation and application e.g. the knowledge and experience gained by learners will be crystallized and applied to real life.

2.2 Competency in organizational activities

Teachers understand learning methods and avail themselves of a variety of learning techniques in harmony with sequences of teaching methods, structure and materials at all stages of the teaching – learning process based on learning units/EAPs. Besides, teachers will encourage students to design and prepare plans of their experience, both individual and collective, e.g. role playing , theatrical performance, case studies etc.

2.3 Excellence in communication Teachers will communicate with learners enabling them to follow the four stages, namely, introduction, substances, conclusion and application.

The flow of communication between a teacher and a learner can be seen in the following chart:

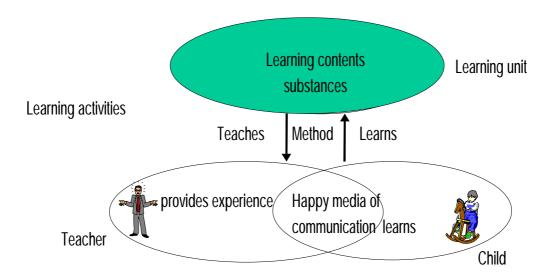


Chart 6 Flow of communication between learners and teachers

Educational Institutions

There are at present several educational institutions which have made efforts to carry out the reform of learning processes, namely:

1. Wat Nimmanoradee, Phasi Charoen District, Bangkok

The school provides teaching and learning under the Project on Strengthening the Potential of Students in the Bangkok Area, a co-operative project between the Bangkok Metropolitan Administration and the Faculty of Education, Srinakharinwirot University. Regarding the learner – centred approach adopted, the programme for the students includes:

- Learning in regular classes; and
- Learning in learning promotion centres e.g. Children's Friends Centres and Learning Resoruce Centres where they spend two hours a week at corners of their interests; and one hour a week at Children's Friends Centres for learning for the appropriate development of the emotions, mind, behaviour and communication skills.

Teachers' teaching behaviour in regular classes as well as evaluation methods are undergoing changes. There are limitations in the running of learning promotion centres due to a lack of space and a necessary budget. Through such an approach, the students enjoy going to schools and appreciate the learning activities organized by their teachers. (For further details, please see information on the Project on Strengthening the Potential of Students in the Bangkok Area from the experience of the Bangkok Metropolitan Administration).

2. Vanissa School (a private school in Bangkok)

"..... I don't trust the methods used in most schools, that is to say, put the children in a pen... I don't want to use such words, but it is so. Forcing the children to sit still hampers the potential of the brain to grow..." Such is the opinion of the principal who founded Vanissa School. It is a pleasure to learn that such mistrust has, after 19 years, led Vanissa School to organize the learning process through encouraging full freedom of thought and self-expression on the part of both learners and teachers, based on a common recognition of the

importance of the children or learners, which is similar to the concepts put forth in section 22 of the National Education Act, 1999.

It can therefore be seen that the method adopted by Vanissa School for the organization of the learning process was implemented long before the enactment of the National Education Act. Its experience of more than 20 years has proved that organization of the learning process through the learner – centred approach is nothing new, but has long been implemented. Many other schools might have adopted similar approaches, which have not as yet been discovered by us or made known.

We would like to hereby present, in sum, the method and line of organization of the learning process of Vanissa School.

The school provides teaching and learning, based principalle on the "Project Approach", which places emphasis on training through activities carried out by learners and teachers together. Methods of organizing various types of activities have been constantly improved.

Preparatory Stage Teachers work as a team on curriculum analysis; then brainstorm and present main learning units, divided into sub – units, which are interlinked and relate to different bodies of knowledge in the learners' surrounding world.

Each learning unit is an integration of various subjects e.g. Science, Thai Language, English Language, Social Studies, Mathematics, and is not divided into separate subjects. Both teachers and learners clearly understand the objective of each learning unit regarding the knowledge, attitudes and skills to be attained.

Teaching Stage Learning through "Project Approach" involves a thorough search for information based on the learners' interests. Learners and teachers will therefore build together questions on the theme of the learning unit, acitivities and teaching — learning methods. It thus stimulates learners to find a variety of answers; places emphasis on creativity through open- ended questions; and enables learners to carry out activities requiring simultaneous use of both the right and left sides of the brain.

At the teaching – learning stage, there will be organized group discussions, out – of – school studies, presentation of previous experience, searching for information, exhibition on achievements or innovative of ideas and new experiences etc.

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Evaluation Stage Evaluation of learners will be based on process and quality of achievement with the indicators and criteria being jointly set by learners and teachers.

The experience of Vanissa School has shown that organization of learning through the "Project Approach" will hardly succeed or attain learning objectives without financial support and personnel of quality – teachers and administrators alike. It requires cooperation of all concerned, particularly teachers, who must have a full understanding of the curriculum and subject matters; appreciate learners' thinking; have the courage to think and exchange opinions; and use their imagination in designing teaching – learning activities.

3. Wat Sribuaban School, Muang District, Lamphun Province

The school under the jurisdiction of the Primary Education Office of Lamphun, adheres to the objectives of the curriculum for primary education and follows the guidelines for pre-primary education through application of a variety of methods so as to achieve an integration of curricular contents. Interactions with communities are attained through different activities. The learning process is organized through the learner – centred approach.

Organization of the learning process with the main objectives of developing life skills includes, in sum, the following stages:

1. Identification of line of work, contents and methods of organizing learning. In co-operation with administrators and supervises, the teachers will work in a team and, based on curricular contents and problems identified in local situations, materials for individual subjects will be prepared. Plans for the provision of learning will thus be formed together with measurement and evaluation of life skills acquired by the learners.

The extent and steps for promoting basic life skills depend on various considerations. Learners of different ages will receive promotion of life skills commensurate with their maturity and the situations faced in their daily lives. For older children, the contents and skills provided will be more sophisticated. The same life skills will nevertheless be repeated. For instance, for children in the 7-8 age group, emphasis will be placed on the theme of "violence", in the course of study of which the children will be allowed opportunities for analytical thinking, problem solving, creative thinking, searching for

alternatives, communication etc. For the 8-9 age group, the emphasis will be shifted to the theme of "safety". Training to acquire similar skills will be provided, but through new activities.

- 2. Organization of teaching learning activities through "Touring the Village" from pre-primary to primary levels.
 - 2.1 Desirable characteristics to be acquired by learners are:

Pre-primary level: The children should be virtuous; with capability at the level commensurate with their age; with self-confidence and ability to express themselves. At this stage emphasis should be given to development in all aspects – physical, emotional, social and mental.

Grades 1-3: This stage continues from that at preprimary level. Emphasis is therefore given to making one's own decision, knowing about oneself and a good co-ordination of all parts of the body.

Grades 4-6: This stage is a continuation from that of grades 1-3. Emphasis is given to attainment of nine life skills, namely: problem solving; self - reliance; resistance to pressure; stress and anxiety management; self-evaluation and understanding; analytical thinking, decision – making; co-existence and relationships with others; and effective communication.

2.2 Different emphases for organization of learning at each educational level are as follows:

Pre – primary education: Organization of activities in accord with the interests of learners, who learn in school and also in the temples nearby. The children will analyze what they see and tell stories through pictures or oral presentations etc.

Primary education: Organization of "Visits to the Neighbourhood" for students at lower primary level. The students will decide on the theme of study themselves, while teachers will assess possible risks. If acceptable, the teachers will give support to the activities proposed. Emphasis will be given to building knowledge themselves through learning from the surrounding world.

Lower secondary education: "Cycling through the Neighbourhood" is organized for the students who can cycle around the neighbourhood and have already decided on the themes of study for themselves. Teachers will, nevertheless, place emphasis on

acquiring basic life skills and preparation for careers in the wide world.

- 2.3 Organization of learning activities carried out together by teachers and learners include the following stages: collective planning; community commitment; cuiosity; brimming with knowledge; leading to analysis; appropriateness to the situation; through the learning process; and leading to development.
- 3. Evaluation of learners: the skills identified by the school as being conducive to the development of learners' desirable behaviour will serve as indicators and criteria for assessment and evaluation of learners. The methodology adopted includes observation, preparation of behavioural records, portfolios, self-reports and feed-back information through group process.
- 4. Evaluation of teachers: the methodology adopted includes records about each teaching learning activity constituting a self report, and expression of view points in consultation meetings etc.

4. Rung Arun School, Bangkok Stages in the learning process of Rung Arun School

- 1. The underlying principle of learning provided by the school is based on the fundamentals of bodies of knowledge; in other words, based on the fact that human beings learn throughout their lives from inner and outer factors.
- 2. The learning process comprises three main elements, which are all interlinked and complementary to each other. These are:
- ◆ **Human life** means physical and mental faculties of perception through the sense organs, namely, eyes, ears, nose, tongue, body and mind. Interactions of the body, brain, sense organs as well as the mind will result in a functioning of the inner factors for learning. For a normal human being, it can be assumed that the learning process will begin and will continue automatically.
- ◆ Inner factors comprise the following three main elements:

 *Age which is the factor that governs ability to perceive.

 *Quality of perception or interpretation of what is perceived through feeling, memory, association, processing and analytical as well as synthetical reflection.

Determination means resolute will power for good purposes, perserverance, close attention and profound and comprehensive reflection until the absolute truth is attained.

◆ Outer factors, namely:

Individuals and the creation of different types of relationships, e.g. parents willingly bringing up their children with loving care and without any hidden motives.

Teachers are well-meaning friends who provide support to the students, and serve as role models for analytical thinking and reaction to information received. They inspire their students with determination to attain different bodies of knowledge.

General public and environmental and disorderly situations which are not easily controlled and managed in accordance with one's wishes.

Substances of the bodies of knowledge are to be identified for sharing. They are fairly controllable. Most of all, there must be rationale and logic which make them meaningful to learners of a particular age.

These outer factors should always have the "learners" in mind. There are cases of parents who overprotect and are entirely devoted to their children, in order to compensate for what they have missed in life or in order to fulfil their own lofty desires. This prejudice might be such that they become blind to their children's real capability. There are also teachers who regard teaching as an occupation. They teach as a routine through lessons and workbooks, which have been successively passed on. In other words, they "teach subjects rather than humans". As a result they become insensitive to the fact that "the students will learn to be like their teachers, not what the teachers teach". This is because the teachers themselves do not truly appreciate what they teach, the knowledge to be attained or whether it is meaningful to real life etc.

3. Grouping learners into three main age groups, namely:

Early childhood : 0-7 years;Childhood : 7-14 years; andAdolescence : 14-21 years

4. Identification of "learning behaviour" for each age group together with inner and outer factors conducive to the attainment of such behaviour.

Sequencing of different stages of the learning process according to age group (Case study: Rung Arun School)

Stage / Age group	Inner factors	Learning behaviour	Outer factors
First Stage: early childhood	 ♦ Subconscious dependence on parents and adults based a feeling of trust; readiness for physical and mental perception through feeling and emotion so as to appreciate the meaning of all things around. ♦ Inclination for persuasion by love and virtue through the power of human instinct. ♦ Boundless imagination. 	◆ Imitation of adults in deeds emotion and linguistic, interpretation through observation and comparison of similarities and differences. ◆ Playing through which learners can show their curiosity, enthusiasm, constant search and experiment with something new through interaction of the six sense organs with objects around them. ◆ Training in concentration and memorization and accumulation of experience through perception both in thought and mind. Such training can be provided through role playing both in concrete and abstract terms. ◆ Experimentation through objects around and by establishing relationships with others.	 ◆ Parental love; kindness; bringing up by providing what is good and desirable for children in their early childhood when they are unable to help themselves. ◆ Through mindfulness, teachers and adults should all refine their thoughts and minds, so as to serve as models for children in laying the foundations in thought and mind for effective learning in the future. ◆ Provision of real opportunities or appropriate and varied real situations for the children's authentic experience. ◆ Regular training in self-help regarding daily routine ◆ Training in observation of rules and discipline through the daily routine of play and work.

Sequencing of different stages of the learning process according to age group (Case study: Rung Arun School)

Stage / Age group	Inner factors	Learning behaviour	Outer factors
Second stage : childhood	 ◆ Chanda (aspiration) which means having a strong desire for action and perception of what is truly meaningful to themselves. ◆ Viriya (diligence) which means having perseverance and patience for repetition with more concentration and on a continuing basis. ◆ Imagination for things more familiar and more realistic e.g. fear, love (pleasure in keeping pets), hatred, aesthetics (pleasure in painting from imagination and doing art work). ◆ Basing judgement on consciousness arising from within and outside themselves, but having a tendency to make decisions on a black-and-white basis. ◆ Uncertainty, confusion, hesitation, and inability to understand their own thoughts; lessening of experimentation. 	 ◆ Linking thought acquired from imagination with what has been actually learned. ◆ Use of role playing with what is more real and more complicated. ◆ More intensive relationships, in both negative and positive ways, with friends and others in order to have a clearer identification of their roles; starting interactions with various persons, places and situations. ◆ Obedience to teachers based on faith and imitation of teachers who appreciate and are proud of their imagination; readiness to follow examples. ◆ Striving to identify their own special talents, starting with an interest in challenging work with sequences; and an ability to make plans themselves. ◆ Showing determination and competitive ability so as to win appreciation and praise from teachers, parents and others. etc. 	 ◆ Parental love and understanding. ◆ Love and kindness from well-meaning teachers, who have faith in wisdom, learning and are able to identify strong points of learners to the extent that these points can be brought out and manifested by learners with pride and self - confidence. ◆ Substances of knowledge covering both thought and imagination e.g. stories, legends etc. and truth in it's totality. Such factors will contribute to training in more rational application of consciousness. ◆ Beauty and aesthetic work create a desire for perception and attract attention. They can thus contribute to training in concentration and encouragement for achievement. ◆ Training in responsibility for accomplishment of work. ◆ Training in discipline for regularly looking after oneself and daily routine, which is in a way training to be present – minded and aware of time and place. ◆ Training in team work through learning to listen and glean benefits from others. ◆ Sacrificing for minimizing one's ego and establishing good relationships with others. etc.

Sequencing of different stages of the learning process according to age group (Case study: Rung Arun School)

Stage / Age group	Inner factors	Learning behaviour	Outer factors
Third Stage: Adolescence	◆ Chanda (aspiration) which means being strongly desirous of contents meaningful to life and more concrete to the stage of permanency, constituting therefore a turning point for formation of permanent personality or character. ◆ More energy or inner driving force than that of any age group, bringing out inner factors to come into contact with and face outer causes; similar to a fire ready to ignite all sorts of firewood in both positive and negative aspects. ◆ Faith in teachers representing an embodiment of enlightenment. ◆ Faith in heroes as models to emulate. ◆ Faith in profundity of bodies of knowledge. ◆ Consciousness transforming itself into judgement; ability to think in concrete terms, if trained in logical sequencing of actions or logical thinking suitable to the requirements of situations. ◆ Gradual increase in self-confidence, and hence simultaneous building up of qualifications and immunity in order to be able to face the surrounding world which is not always as desired.	 ♠ Accumulation of self-enlightening experiences. ♠ Training in skills in selecting the essence of bodies of knowledge. ♠ Contesting in a trial of thoughts to seek their own identity. ♠ Ability to test, review and check their own thoughts as well as those of others. ♠ Challenging various authorities to verify their inner strength e.g. arguing, bargaining and daring at times. ♠ Establishing relationships with friends to seek a group of common interest, or on the contrary, separating themselves from the group in a quest for their own identity. ♠ Acquiring eloquence to test their own authority in society. 	◆ Love, kindness and confidence in learning ability of all children. ◆ Teachers who are well-meaning friends with scholarly qualifications, serving as models for providing moral support in accepting the surrounding world, which is complex and cannot be dictated by one's desires. ◆ Teachers with a cheerful disposition, always mindful of helping to train their students in careful use of their reasoning faculties, in considering all aspects of the surrounding world, both near and far e.g. through physical, verbal and mental control, realizing the truth of all things around, appreciating goodness and beauty from which the bodies of knowledge are derived. ◆ Substances of bodies of knowledge with traceable origins and with clear meaning to learners. ◆ Work conforming to practice and proper sequencing, starting with purposeful questioning and planning to search for and bring out data for analysis and synthesis. ◆ Team work for training in listening and the synthesis of valuable viewpoints. ◆ Thinking or working on limitations and on a variety of questions for which answers or solutions must be found through prioritizing, based on the extent of their relationship, both direct and indirect.

From home

Parental love + Care

to

Teachers provide mental support and serve as role models

School

Looking after one's way of life

Organizing daily routine

Self – care

Cleanliness

Personal health and hygiene

Hair, nails etc.

Clothing

Personal effects

Learning materials and facilities

Environment, classrooms

Travel

Punctuality, awareness of time

Relationships with family members

Relationships with friends

Teachers providing mental support and serving as role models Self-reliance in thought and mind Making the most of all situations Diligence in mastering subject matters Understanding of principal and secondary concepts – no confusion Knowing how to plan work Accomplishing one's own work through proper sequencing Interpretation of and having imagination regarding perceptions which prove to be true Perception with avidity of difficult, complex and abstract matters Patience in receiving information and materials Balance between thought and mind Always keeping cool and calm Mindfulness in physical, verbal and mental self-control

From the sequencing of different stages of learning, based on age groups and the three major elements seen in the above tables, teachers as well as those responsible for courses of study and classroom management will prepare a map of teaching – learning units for learners at each level. Such a map will be submitted for the consideration of those responsible for courses of study for further refinement and improvement.

Mapping of teachers' teaching and learning (learning units) comprises three major stages :

- ◆ Understanding all the concepts and subject matter, graduating from something fairly easy to a more difficult level; presentation of main learning attitudes or major aspects of learning behaviour for each stage as well as the overall objective. These are presented mostly through mind mapping.
- ◆ Presentation of details and identification of parameters of contents and behavioural objectives, activities or a programme or a piece of work, field trips etc. as well as the number of periods required for each stage. The second stage will be presented on a one-page management chart.
- ◆ Preparation of plans for measurement and evaluation whether the objectives of each stage have been attained; follow up on the individual learner's development at intervals or smaller intervals e.g. weekly, daily etc. The evaluation criteria should embrace more than one level e.g. simple, medium-range, difficult, so as to be line with differences in learners' capabilities. For this third stage, three types of evaluation form, comprising Ev.1. Ev.2 and Ev.3. will be availed of (For further details, please see Manual for Preparation of Unified Learning Units: Rung Arun School).

Teachers play an important role in the interpretation of each stage of the learning process of the learners under their responsibility. They will have to master the contents; adhere to its essence; follow the guidelines suggested; and identify the objectives based on the expected learning behaviour towards the materials of a particular subject. Designing a teaching – learning plan is thus creative work, which only teachers can aptly carry out. Through their creativity, teachers will realize their own development. Such an undertaking seems to be a difficult task, but if systematically carried out through their own research and development, success could be more easily attained.

It can therefore be seen that teachers have major responsibilities for learning reform; enjoy a high profile and are directly accountable for the success of development of thoughts and mind of educational personnel as well as learners. They should receive support in their new role, as researchers and developers of knowledge and the teaching – learning process, bringing benefits to themselves and learners and leading to the ultimate attainment of wisdom.

The cases referred to above are only some examples of what has been achieved in Thailand. There exist a large number of exemplary teachers and schools, similar to those already mentioned in many other areas. These persons and institutions are carrying out learning reform measures aimed at the highest benefits for learners on whom the future of our country depends.

Outcomes of the organization of learning through the learnercentred approach

All are happy. Evidence of contentment with the organization of learning through the learner – centred approach are apparent in many ways e.g. positive thought and understanding of the learning process; suggestions on concepts and approaches for improvement; self-evaluation in areas of responsibility etc. Following are opinions of different groups confirming such satisfaction.

Views of learners

Mr. Wanchana Maan Ngarn, secondary grade 5 student, Triam Udom Suksa School, Bangkok Metropolitan Area, commented on organizing the learning process through the learner – centred approach as follows: "I wish the child – centred approach to be a permanent feature. In other words, learners must be recognized as being most important. Teachers should identify learners' needs and interests and accordingly organize teaching – learning activities that serve such needs. The learner – centred approach allows us to learn a variety of matters and is not confined to only what is prescribed in textbooks or curricula. At present, we can no longer focus on the subjects only. With almost daily changes in circumstances in the world, importance must be shifted to human beings and actual situations".

Master Mana Tuensuk, primary grade 3 student of Wat Nong Moo School, Nakhon Sawan province, said: "It is indeed a happy learning. Being confined to only a rectangular room, we students can see faces of the same teachers only. On an outing, however, we are

joined by students from other classes. Not facing the same teachers cheers us up tremendously. Besides, we are able to come in direct contact with nature."

Miss Hattakornchana Areesilp, primary grade 6 of Sri Iam Anusorn School, Bangkok Metropolitan Area, said that previously the teachers would "provide instructions to be followed religiously by the students. The child – centred approach, however, has enabled the students to think independently and do practical work themselves with the teachers' advice. The children are allowed to put their heads together and collectively seek solutions to problems. For instance, while the subject on "Life Experiences" is being studied, our teacher will ask us to group together to solve certain problems and exchange our viewpoints. Since all of us may have different views, we'll be able to see how we differ in our characters and ways of thinking. We gain experience through expressing our opinions and are at the same time able to listen to those of others.

Master Tassapol Chiewcharnpropun, secondary grade 2 student, St.Gabriel's School, said: "Learners are of highest importance in learning. Do let us have a chance to learn through authentic experiences, which can be applied to our daily lives. If possible, our teachers should organize activities suitable to the variety of students, bearing in mind their individual interests, abilities and aptitude. In the past, our teachers would organize the same activities for all of us and the whole class would have to follow our teachers' instructions. The new approach, however, allows us to identity our own aptitudes and how we are going to present them to the group or class meetings, with the teachers providing guidance on how to identify and draw out our hidden aptitudes into the open".

Views of teachers

Khru Boonplook Nernklang, teacher of Sri Iam Anusorn School, Bangna District, Bangkok Metropolitan Area, said that, through allowing teachers more freedom in designing teaching activities, the Project on Strengthening the Potential of Students in Bangkok Area has resulted in a positive change in teaching behaviour. Teaching – learning activities through folk performing arts (e.g. likay, a popular folk performance) would well integrate different subject matters and allow the students to acquire many aspects of knowledge which are in line with their daily lives. They are thus able to create bodies of knowledge themselves. (Report on the Sub-Commission on

Learning Reform of the National Education Commission on October 19, 1999).

Khru Kriengkrai Nanthathong, teacher at Baan Hong School, Chiang Rai Province, who is in the network of Khru Saowanee Chaimongkol, said: "I have taught through textbooks for a long time. From now on, through the child-centred approach, I' ll teach human beings. Different aspects of the environment will be availed of as media for learning to bring about changes:

- ◆ From a sad to a cheerful and lively atmosphere
- ◆ From learners as recipients to those who participate in collective learning
- ◆ From monotonous to varied activities
- ◆ From being confined to the classroom to learning from the world outside
- ◆ From lectures to the availing of media as learning instruments

Khru Pakdee Ratchatavipasnand, National Teacher of 1999 for Physical Sciences, Boonyavat Vidhayalai School, Lampang Province, said: "In using the learner – centred approach, the teachers will have to work harder than in the past. It is nevertheless worth the effort, since the children will be more intelligent, become creative and know how to communicate with others. They are able to learn what they are interested in and apt in".

Teachers and students of Bang Na Nok School, Bangkok Metropolitan Area, joined in the chorus: "Changes seen evident after adoption of such a teaching approach. In other words, the classroom atmosphere is cheerful and the students have been bolder in thinking and expressing themselves."

"We enjoy this approach, because apart from gaining knowledge and appreciating the contents of the textbooks, actual experiences have enabled us to express ourselves".

Many people with experiences in learning reform have echoed the above views. It is indeed difficult to mention each and every one of the teachers or groups, including yourself.

Chapter 5 Participatory Roles of Others and Benefits Accrued to All Concerned

An outstanding feature of the organization of the learning process through the learner–centred approach is that, apart from teachers who play an important role, there are also others concerned who can provide necessary support, thus contributing to the success of the reform. Even learners themselves need to take an important part in the learning process.

The learning society embraces personnel both within and outside the school. Within the school, other than teachers and administrators, there are staff members who provide support for teaching – learning activities as well. There is also a school board. Outside the school, there is a network of parents, local wisemen, community leaders, teachers, training institutions, agencies, organizations and enterprises including mass media, all of which can contribute to generating learning.

Acitivities to be jointly taken by those concerned with learning are:

- 1. Need identification which means finding out learners' needs through asking questions, observation, interview etc. to generate/stimulate interest and identify interests and basic knowledge already acquired by individual learners.
- 2. Standard setting which means setting targets and standards so as to enable learners to learn in accord with their aptitude and interests, and to their highest potential.
- **3. Planning for learning** which means planning of learning activities in accord with learners' needs.
- **4. Learning** which is an interactive process of building knowledge from analytical thinking, planning and action.
- **5. Evaluation** which is an assessment of experiences in the organization of the learning process, focusing on benefits obtained by learners.
- 6. Conclusion of learning outcomes which means application of assessment outcomes for further development, amending deficiencies in learning and organization of teaching learning activities.

Participation in the learning process enables all concerned to appreciate their valuable contribution to the encouragement and support of the effective development of learners. Schools are no longer "Trespassing Prohibited" areas. Schools, communities, community institutions and the families all have participatory roles in education. Co-operation of all involved will result in the building of strength and mutual support and will thus bring benefits to children and youth who are our hope for the future.

- ◆ Parents having more prominent roles through co-operation in the organization of and providing support for their children's learning process at home, in school as well as at different learning sources.
- ◆ Participation of communities in the formulation of policies regarding the organization of the learning process; the communities also serve as sources of local wisdom.
- ◆ Decentralization of authority by control agencies in the formulation of policies and goals for educational institutions, administrators and teachers.
- ◆ Mass media participating in public relations work, supporting educational activities; contributing to collective efforts to generate proper understanding and inculcate desirable attitudes for society as well as providing support for implementation.

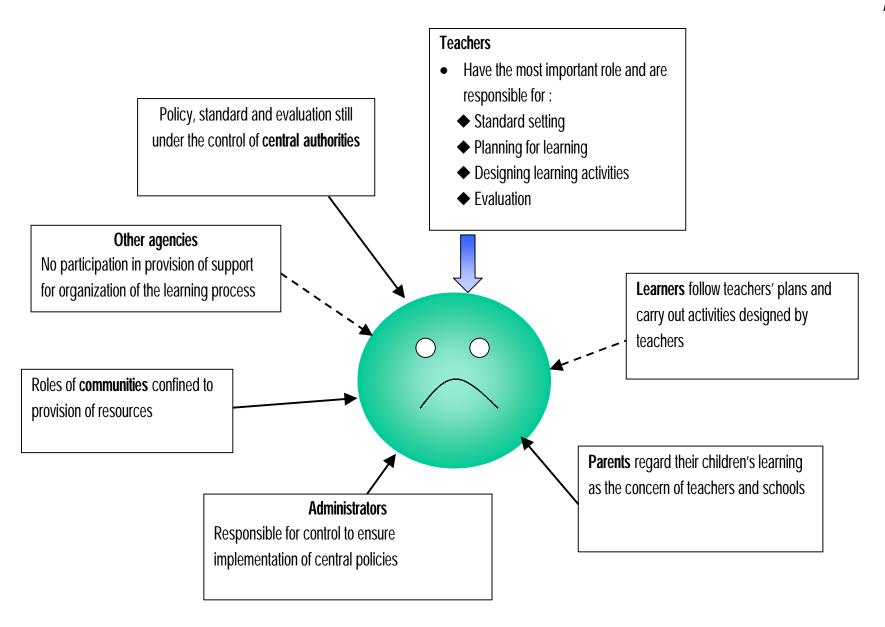


Chart 7: Situation without participation of all concerned

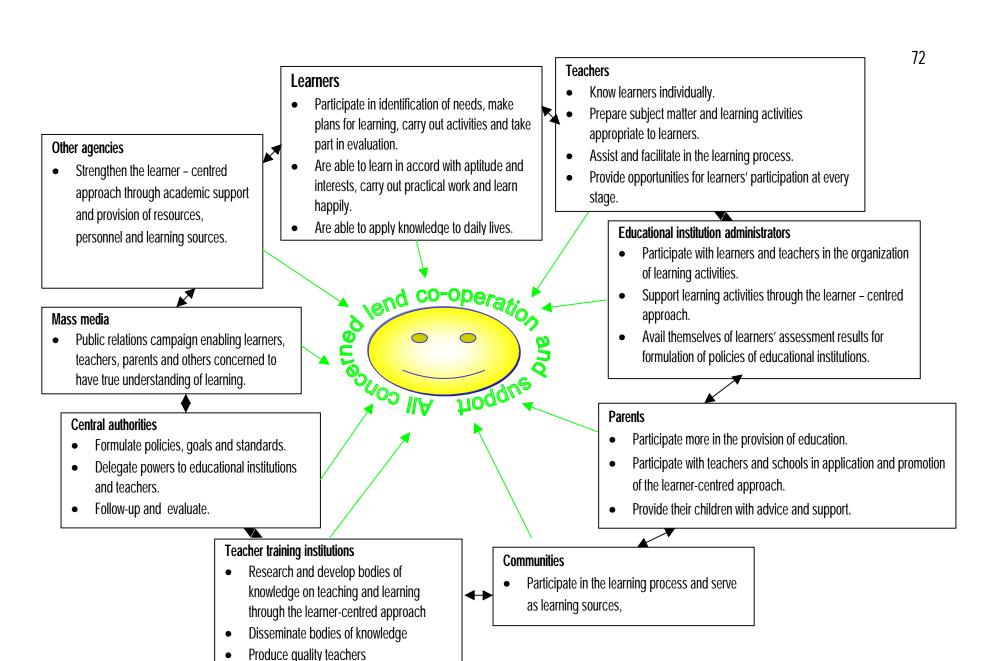


Chart 8 Situation with the participation of all concerned

Provide academic support

Benefits accrued to all concerned

- ◆ Learners are able to develop to their fullest potential, in accord with their aptitude, interests and capabilities; learn how to acquire knowledge; are happy in learning; and love to learn throughout their lives.
- ◆ Teachers are endowed with knowledge and understanding. When experiences in learning through the learner centred approach make the learner happy, teachers also become happy and learn to develop themselves to become professional teachers.
- ◆ Parents are cognizant of and realize their children's aptitude; interests, abilities and potential in learning; understand their roles in providing support and encouragement of their children's learning; and are happy to contribute to the development of their children's education and learning.
- ◆ Administrators will have developed schools to become institutions of quality and of the highest benefit to learners; in fact, institutions of learning, not of teaching. Administrators also carry out their functions with the participation of students, teachers, parents and communities.
- ◆ Teacher training institutions will have produced graduates and teachers of quality, with responsibility towards themselves, their profession, society and the country.
- ◆ Community and society as a whole will have people endowed with quality, potential and responsibility for the development of the community, society and country.
- ◆ Society and the nation will be endowed with people with virtue, quality, and the potential to further develop the country.
- ◆ Other bodies will have made a contribution to the country in developing the people to attain virtue, quality and potential for the further development of the country.

Chapter 6 Questions and Answers on Learning Reform

Education reform based on the guidelines provided in the National Education Act, 1999, was implemented in August 20 of the same year. Those in the world of education have been stimulated in their perception, learning and self – improvement to a greater extent, particularly teachers and educational institution administrators, who are bound by the provisions in chapter 4: National Education Guidelines. What follows are a large number of questions raised, which need clarification and answers for charity in solving the problems encountered. Many agencies involved e.g. ONEC, Ministry of Education, BMA and Bureau of Local Education Administration have learned of the problems which have been worrying teachers, administrators as well as stakeholders. Attempts have been made to provide clarification or suggestions through different media on a continuous basis. This document therefore includes major questions raised together with accompanying answers for further dissemination as follows:

1. Question What is the meaning of learning reform through the leaner – centred approach as stipulated in the National Education Act, 1999 and what are the operational guidelines?

Answer: The important principle of educational reform through the learner – centred approach is embodied in section 22 of the Act stipulating that: "Education shall be based on the principle that all learners are capable of learning and self-development, and are regarded as being most important." Such a requirement means that in organizing the learning process, the ultimate goal will be the attainment of maximum benefits for learners. Thus learners will be given opportunities to participate in activities as much as possible; learn from authentic experiences; think independently; have actual practice; and interact with many people or a variety of learning sources to such an extent that they are capable of constructing for themselves knowledge, which can be applied to real life. Teachers will make plans together with learners; provide an ambiance conducive to learning; stimulate; challenge; give moral support; assist in problem solving; and suggest proper guidelines for seeking knowledge to individual learners.

The guidelines for organization of the learning process through the learner – centred approach include many details, which can be found in the relevant section on organization of the learning process in Chapter 3 together with examples for each stage of the organization of the learning process.

2. Question In adopting the new teaching – learning approach, will the curricula have to be adhered to? What are the main lines of emphasis of the curricula prescribed in observance of the National Education Act? And which department will be responsible for formulating the curricula?

Answer: This is an important matter which all teachers and those responsible for educational provision must know. The new teaching—learning approach must certainly adhere to the curricula. The curricula required by the National Education Act, 1999, as stipulated in section 27 comprise two levels, namely, core curricula, which provides a broad framework, principles and directions, will be prescribed by the Basic Education Commission. Basic education institutions, however, will be responsible for prescribing curricular substances relating to needs of the community and society, local wisdom and desirable charactieristics.

The main lines of emphasis of educational provisions required by the National Education Act appear in section 23 stipulating emphases on knowledge, morality, learning process and integration of the following, depending on the appropriateness of each level of education:

- Knowledge about oneself and the relationship between oneself and society;
- Knowledge about the historical development of Thai society and matters relating to politics and a democratic system of government;
- Knowledge and skills in science and technology; management; mathematics; languages; pursuing one's career; and leading a happy life;
- Utilization and conservation of natural resources and the environment; and

- Knowledge about religion, art, culture, sports, Thai wisdom and the application of wisdom.
- **3. Question:** For teaching and learning at the level where many materials are included, how can the contents be integrated by teachers, so that all the curricular requirements can be met in time?

Answer: Teaching and learning at the level with many materials has been a worrying problem to teachers. In this regard, section 27 of the Act requires educational institutions to prepare their own curricular materials, based on the core curricula, which provides a broad framework, principles and directives. Subject matter will thus become more flexible and not so rigid as at present. Learning through authentic experiences and the learner – centred approach is a proper learning method, better than that previously adopted, and will yield real benefits to learners.

In organizing a learning process through the learner – centred approach, teachers are required to analytically study curricular materials and learning objectives until they fully appreciate the quantitative aspects, parameters and rationales for such requirement. Teachers are therefore required to work as a team in order to plan the learning process, which is meaningfully interlinked and integrates the materials of related subjects. Learning activities organized are linked with real life. Learners are henceforth able to learn from authentic experiences as much as possible. To achieve such purpose, teachers must provide learners with opportunities to participate in designing activities and do actual work at every stage; synthesize the knowledge themselves; and interact with members of the same and different groups. In allowing learners to learn how to seek knowledge, those contributing to the success of such an approach are teachers, who have to prepare data sources in terms of learning media, techniques, data sheets as well as materials and equipment. They are also required to suggest various learning sources for learners' research and study to meet their needs.

An example of integration of substances of related subjects is when studying on "Shadow". Here, learners will learn how a shadow is formed, calculation relating to a shadow, how it is drawn. Such a process

is an integration of science, mathematics and art, enabling learners to both learn the material and see the relationship between different subjects and skills.

4. Question How can educational institutions assess outcomes of learning, based on the learner – centred approach?

Answer: Regarding learners' assessment, section 26 of the National Education Act, 1999 stipulates that: "Educational institutions shall assess learners' performance through observation of their development; personal conduct, learning behaviour, participation in activities and results of the tests accompanying the teaching - learning process commensurate with the different levels and types of education." This is a change from the previous method of measuring knowledge and memorization of contents to an assessment with emphasis on learning outcomes. Measurement and assessment will therefore have to be all embracing, covering both process and outcomes; knowledge, emotion and skills in self-expression in all aspects. The assessment, based on real situations, can be both formative and summative with the following stages:

- 1. Setting of assessment objectives and goals.
- 2. Consideration of the aspects, criteria, methods and objects of assessment e.g.
- ◆ Assessment of development regarding art, music, mathematics, languages, science; physical development; personality development etc.
- ◆ Aspects to be assessed e.g. emotion, skill, feeling, characteristics etc.
- 3. Identification of assessors e.g. students themselves; peers; homeroom teachers; parents; communities or parties concerned etc.
- 4. Choosing a variety of evaluation techniques and tools appropriate to the assessment objectives and criteria e.g. tests, interviews, behaviourial records, questionnaires, memoranda from parties concerned, portfolios etc.
- 5. Identification of time and place for evaluation e.g. while an activity or group work/ project is in progress, one day of the week, during special events/assignment etc.

- 6. Analysis of findings and management of evaluation data e.g. through process components, portfolios, data records etc.
- 7. Conclusion of evaluation results for correcting learning deficiencies and the development of learners as well as improvement of teaching learning activities. In case of summative evaluation against the criteria already set for the purpose of transition to a higher grade, outcomes of formative evaluation will also be taken into consideration.
- **5. Question :** Is learning as stipulated in the National Education Act, 1999, in line with the prevailing system of university entrance examinations?

Answer: Learning in accord with the national education guidelines stipulated in Chapter 4 of the National Education Act, 1999, is in line with the procedure for university entrance examinations to a certain extent, as an attempt has been made by the Ministry of University Affairs to adjust the procedure by using the Grade Point Average (GPA) of at upper secondary education level as partial criteria for competition for university places. The GPA at present counts only as 10% of the total score. With the requirement in section 26 of the Act, which stipulates that : "Educational institutions shall use a variety of methods for providing opportunities for further education....", attempts have already been made to adjust the method of competitive examination through application of a variety of criteria e.g. use of a standard test in the selection or allowing educational institutions to admit the students themselves, taking into consideration both standard test scores and the GPA from the upper secondary education level. Hence, students' learning outcomes will be shifted from dependence on the score system to that based on abilities, achievement and participation in activities. In future, provision of education, no matter of which type: formal, non-formal and informal, the system and procedure for the university entrance examination will be more open and varied, and more weight will be given to achievement in school than at present.

6. Question At the moment, the number of students per classroom is too high. Students differ in their learning potential. Besides,

apart from heavy teaching load a teacher normally has many other responsibilities as well. How can organization of teaching — learning activities with emphasis on individual differences be carried out?

Answer: In organizing teaching and learning through the learner-centred approach, a requisite is a teachers' knowledge of each student, and individual differences must also be taken into consideration. The student to teacher ratio must therefore not be too high. Hence in educational reform implementation, attempts have been made to find a solution to the problem. While a system has not been put in place, however, it is incumbent upon a teacher to avail himself of his ability in management. If he has a heavy teaching load together with other responsibilities, he must increase his capability in time management and link his teaching and other tasks as far as is feasible.

For the organization of teaching — learning activities with emphasis on individual differences, one way of enabling a teacher to learn of the differences rapidly is allowing learners to learn and work in a group. Such a method will teach learners to seek knowledge themselves, instead of simply being told. In this case, a teacher must have a clear instruction sheet for the group and constantly observe learners in group work. A teacher must also set his own goals. For instance, for to-day's morning activities, his targets are to get to know at least 10 students, and another 10 in the afternoon, and so on until he knows all of them. He must also observe the way each student asks questions, thinks, solves problems, interacts with friends, expresses opinions etc. At the end of the hour, the teacher will make a note of his observations. Besides, he can also a note each student's achievements, language skills and ability to communicate with others etc.

7. Question What are an administrator's role in running an educational institution which organizes learning through the learner – centred approach?

Answer: In administering an educational institution through the learner–centred approach, an administrator has the following important roles in :

- ◆ Changing the management concept of learning reform by supporting and participating with learners and teachers in organizing learning activities.
- ◆ Including a school development strategic plan in the charter of the school, which plans to carry out learning reform along the lines stipulated in chapter 4: National Education Guidelines of the National Education Act, 1999.
- ◆ Availing of learners' assessment outcomes for formulation of school policies.
- ◆ Applying an administrative method which allows teachers to have freedom in learning designs; classroom research; exchanges among peers; team work; and strengthening co-ordination among different subjects with a view to raising learning outcomes to the standards required by the curricula.
- ◆ Arranging for an internal demonstration system to assist teachers in matters relating to curriculum and organization of learning on a continuous basis.
- **8. Question** Master teachers have an important role to play in disseminating method of organizing teaching and learning through the learner centred approach to teachers in their respective networks. Are there ways of giving permanency to the networks and can teachers all over the country be mobilized to follow suit?

Answer: Master teachers' methods of expanding their networks is not through pure imitation, but a process involving both parties with emphasis on exchanges of experience and development of learning methods on a continuous basis. Such an extension method has resulted in new perceptions, new findings and new bodies of knowledge. Enjoyment and happiness can therefore be derived from work.

Such a process of exchange and collective learning on the part of the master teacher and those in his network enables the former to extend his experiences to a large number of teachers on a multiplier and continuous basis. For instance, with a master teacher to network teacher ratio of 1:10 basis, the number of network teachers will be increased to 100, and so forth. Such important roles of master teachers will yield

benefits to their peers in learning development in line with the objectives of the National Education Act. The teachers will be respected by all segments of society, resulting in continuous dedication to work, sacrifice, patience and self - development with the resolve to making their achievements permanent.

Should there be continuous support to such expansion of networks, learning reform will reach all teachers. As a result, all learners will be developed on a nationwide basis in a relatively short period of time.

9. Question: How can teachers help children with family problems succeed in learning?

Answer: Family problems stem from a large number of causes e.g. poverty, broken homes, lack of love and warmth etc. As for poverty, the state has provided a significant solution to the problem, which can be seen in section 10 of the National Education Act by which the state will have to provide basic education, free of charge, for a period of not less than 12 years. Thus, tuition fees and other financial contributions towards education are covered. Besides, there are also funds for educational loans.

As for problems resulting from broken homes or lack of love and warmth, teachers have a highly important role to play in solving them. They must love and understand their students individually; provide them with special assistance and sufficient time; organize remedial and reinforcing activities; link with families; and provide students with moral support and constant follow – up.

Chapter 7 Conclusion

In this publication, recommendations on learning reform as required in chapter 4: National Education Guidelines of the National Education Act, 1999, have been proposed. The guidelines stipulate that education shall be based on the principle that all learners are regarded as being most important. Such a principle extends to the organization of teaching and learning as well as that of the learning process.

In Thailand, the organization of teaching and learning through the learner—centred approach has long been implemented. Unfortunately, the majority of parties concerned have understood only the theoretical concepts. When it comes to actual practice, importance is not at all attached to learners, but, on the contrary, to subject matter. As a result, learners acquire knowledge through rote learning instead of analytical thinking; neither do they use memorizing as a basis for further analysis. Teachers teach by providing information and giving instruction rather than guidance and stimulation of thought. Hence, as indicated in this publication, it constitutes a major problem in organization of learning at present, which should be solved together with other problems.

As reported in this publication, there are capable teachers, educational institution administrators and agencies responsible for educational provision, which have encouraged the learning process through the participation of parents, friends, teachers and administrators, thus enabling learners to learn various methods beneficial to their development in all aspects.

Perfect learning necessitates a learner's participation in perception, thinking, action and evaluation. Such a process will result in happiness among learners, teachers and all parties concerned, which continuously interact in accordance with their respective roles. For instance, teachers on their part, will provide encouragement; design activities and experiences; act as facilitators and advisers; assist learners in playing their roles and discovering their own capabilities; and developing their IO and EO.

In organizing the learning process through the learner-centred approach, the importance of teachers or instructors is not in any way

diminished. Their roles are still of importance, if not more important, since they are responsible for the organization of learning based on recognition of learners' highest benefits in accordance with their basic rights. Teachers and others concerned, particularly educational institution administrators and parents need to know how to innovate, create and provide an ambiance canducive to learning as well as open new paths for learners to discover and know themselves. Learners must therefore be trained in using a faculty higher than memory, i.e. using their wisdom in thinking, analysing, creating, decision – making, problem – solving and synthesising what has been learnt to form substance of knowledge meaningful to themselves. Learning skills are also acquired through research, discussion, reflection and action, both on an individual and collective basis. Such an approach will result in learning based on mutual assistance and happy co-existence. Teachers will know all students and encourage them to individually make their learning in accord with their interests and learn at their own pace.

The teaching – learning process encouraging such a learning approach is aimed at attaining the highest benefits to learners, who are recognized as being most important. Learners will have direct experience in acquirement of knowledge, attitudes and practice as well as morality and desirable values towards themselves and society.

Section 6 of the National Education Act, 1999 provides the concepts, principles and education reform guidelines aimed at the full development of the Thai people in all aspects: physical and mental health; intellect, knowledge; morality; integrity; and desirable way of life so as to be able to live in harmony with other people. This publication has also presented desirable characteristics of the Thai people as aspired by academics, thinkers, practitioners, administrators and learners, based on the concepts put forth in the National Education Act. In other words, our ultimate goal is for the Thai people to be endowed with virtue, competence and happiness.

The moment is now for all segments of Thai society, in particular those responsible for educational provision and learning, to collaborate with families and communities as well as learners, in carrying out the reform of learning culture. We should start with the change in our view of learners, from those previously neglected to the most important persons in the learning process. Learners are in fact human beings with dignity and are endowed with rights and responsibilities. They are capable of learning and self- development, as they have the brains to think independently. Being curious by nature, they are avid learners and find contentment in the learning process.

The content of all chapters in this publication is derived from a synthesis of bodies of knowledge, based on theories of learning and on a variety of experiences of concerned parties as well as those of stakeholders, already presented in different places, time and patterns. The publication has been scrutinized by members of the Sub-Committees on Learning Reform of the National Education Commission and of the Ministry of Education, scholars, experts, teachers with experience in the learner – centred approach, educational institution administrators and learners.

The materials thus synthesised and presented in brief in this publication might not be complete. The authors fully appreciate that the meaning, concepts and guidelines for "organization of learning through the learner – centred approach" will have to be changed in accordance with context and time conditions. Besides, for a revolution in learning culture, it is necessary for stakeholders and others concerned to join efforts in reflecting and drawing out benefits from in – depth and varied experiences on a continuous basis. The aim of the presentation is to inspire and disseminate the concepts in order to eliminate ignorance and lead to actual practice, eventually resulting in learning reform along the desirable procedure as stipulated in the National Education Act, 1999.

Name Lists of Sub-Committees on Learning Reform

Sub-Committee on Learning R	Reform of the National			
Education Commission	Chairman			
1. Prof Dr Prawase Wasi	Chairman			
2. Dr Rung Kaewdang	Vice-Chairman			
3. Dr Amrung Chantavanich	Vice-Chairman			
4. Director – General	Member			
General Education Departmen	ıt			
5. Secretary-General	"			
National Primary Education Commission "				
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Saridwongsa Foundation				

List of Experts Scrutinizing the Publication

- 1. Prof Dr Chai-Anan Samudhavanija
- Director, Vajiravudh College 2. Assoc. Vichai Wongyai
- Dean, Faculty of Education Srinakharinwirot University
- 3. Assoc. Prof Úsanee Potisuk
- Special Education Department, Srinakharinwirot University
- 4. Assoc.Prof Dr Lamduan Kasetsunthorn
- Dean, Faculty of Education, Rajabhat Institute Songkhla 5.Mr. Chaipreuk Sereerak
- - Director, Office of Special Projects ONPEC
- 6. Mr Pravit Bungsawang National Teacher 1997
- 7. Miss Salee Silpasatham National Teacher 1999
- 8. Mr Chatree Samrarn Master Teacher 1998
- 9. Miss Supaporn Munketvit Master Teacher 1998
- 10. Mr Narong Romneeyakul
- GED Superviser, Region 6, Lop Buri Province
- 11. Mr Samred Chanokul
- Director of Parinayok Kindergarten School

Working Group

- 1. Dr Laeka piya-Ajariya 2. Dr Waraiporn Sangnapaboworn
- 3. Mrs Somsri Kidchanapanish 4. Miss Sasitorn Leksuksri
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Advisers on Translation Dr. Rung Kaewdang

Secretary – General

National Education Commission

Mr. Christopher Vroege

Chulalongkorn University Language Institute

Chulalongkorn University

Translated by Ms. Srinoi Povatong

Adviser to the Office of the National Education Commission

Printing Coordinators and Computer Graphic

Ms. Wilailak Padungkittimal Ms. Nitchakamon Duangman Ms. Vipassarin Prapantasiri Ms. Bang-on Takaew