

THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

Iddhipāda 4 and the Enhancement of Creative Thinking at Work

Dr. Chanuntakorn Kiatjanon

Lecturer of Master of Arts Program in Buddhist Psychology,
Mahachulalongkornrajavidyalaya University, Thailand

Abstract:

Iddhipāda 4 is the path of accomplishment at work. One of the means to enhance creative thinking at work effectively is to apply Iddhipāda 4 in the process of enhancement, which consists of 4 virtues in training human resources, as follows:

1) *The enhancement of Chanda, called Chandasamādhīpadhānasaṅkhāra, means to enhance the aspiration of human resources towards their work, to create the willingness to work, and to work with happiness and courage; thereby, this continues the process of work and enhances the creative thinking at work. The personnel will have aspiration, love, commitment, motivation and determination to work for their organization. Whether the personnel have enough Chanda, they will fully dedicate their knowledge and ability to work so that the work contains good quality, efficiency and concrete success.*

2) *The enhancement of Viriya, called Viriyasamādhīpadhānasaṅkhāra, means to enhance the perseverance of human resources, to eliminate the indolence, and to intend to succeed at work. Those who lack perseverance often fail at work, or finish the work slowly and ineffectively. In essence, Viriya values the perseverance at work, the responsibility in one's duty, and the courage in order to encounter the obstacles or difficulties at work.*

3) *The enhancement of Citta, called Cittasamādhīpadhānasaṅkhāra, means to enhance the thoughtfulness of human resources, to determine the mind to solve the problems. As a consequence, the work will be continually operated through its process; and the personnel realize the advancement of their work. This enhancement also raises the awareness of importance of one's duty and responsibility to create the effective work.*

4) *The enhancement of Vīmaṃsā, called Vīmaṃsāsamādhīpadhānasaṅkhāra, means to enhance the reasoning of human resources, to think analytically, to understand the process of work, to solve the problem effortlessly in case that it happens, and to work successfully and carefully under the framework. This principle emphasizes the wisdom use by considering one's own ongoing activity with circumspection, including: process of work, results, advantages, disadvantages, problems and obstacles caused by the organization's operation.*

Keywords: *Iddhipāda 4, creative thinking, the enhancement of creative thinking at work*

1. Introduction

Nowadays the economy and society is changing very quickly; and working in each organization involves high competition and pressure. Therefore, the organization must apply the creative thinking and also enhance it from the personnel in order to improve the manufacturing process, the package types, the effectiveness and efficiency in better condition. Accordingly, the organization can survive and grow in a rapidly changing environment under globalized world (Andriopoulos and Lowe, 2000; Cumming and Oldham, 1997; Tierney, Farmer, and Graen, 1999; Tushman and O'Reilly, 1997). In consequence; various factors are required to create success to the organization. These factors do not include only knowledge or experience but also process of thinking or creative thinking of the personnel, thinking outside the box, and thinking initiatively. This enables the personnel to find new solution for each problem in order to develop the organization sustainably and achieve the business goals effectively. Therefore, the creative thinking becomes an important factor to all organization because many worldwide successful organizations value the creative thinking of the personnel to create innovation of the organization (McGregor, 2007). In addition, the creative thinking takes part in all activities in every social context, for example, creative economy, creative organization, creative university and creative research. In short, the creation of organizational innovation begins with individual's creative thinking (Trompenaars and Hampden-Turner, 2010).

Creative thinking remains necessary for present world society because many sciences in the world continually advance, resulted by the creative thinking and invention of new items and solutions for each problem. The creative thinking, as greatly useful and valuable for mankind, develops human resources to be in good quality, to value the society and oneself, to enhance the initiation, invention and imagination, and to enlighten the application of knowledge and experience in solving problems in life (Susaoruj, 2013). In addition to the use of creative thinking mentioned above, the creative thinking can be applied in broader dimensions, for example, creative work, creative study, or creative activity, such as the science experiment or sport requiring a variety of games to beat the opponent.

The creative thinking at work is compared to the thinking mechanism demanding the combination of imagination and experience to become the problem solution. The creative solution must be useful and able to present such creative thinking to be approved by the organization. This approval ameliorates the competitive capability and change of the organization, contributes to the society, and uplifts the quality of life in working. The creative thinking at work consists of;

- The ability to present thoughts; to present the thought from analysis in the practical manner to be valued by the society and accepted by the organization in order to apply in development and benefit creation.
- The ability to create innovation; to create initiate thought and action which is never invented before or which is improved from the original. This innovation also develops the work to be more effective and leads to good changes.
- The ability to solve problems; to solve problem issues that have changed over time with a new means, to generate new solution for developing and improving the operation. (Charoenwongsak, 2006)

The key virtue to be successful at work is Iddhipāda 4. The word 'Iddhipāda' is defined as basis for success, or path of accomplishment, which consists of 4 components, as follows;

- Chanda means to have aspiration, to work with love.
- Viriya means to persevere, to work with diligence. Diligence is compared to love in the practical manner; love in working enables to know what work should be done, but the diligence enables to succeed in such work. Working without diligence will not lead to expertise in working.
- Citta means to have thoughtfulness, to go deep down into that work, to work seriously and dedicatedly. Those who dedicate themselves to work will be successful.
- Vīmaṃsā means reasoning, including: analysis, synthesis, creative thinking and development. No matter what work we do, we should consider, create and develop. (PhraMahaWutthichaiWachirametee, 2008)

One means to enhance creative thinking at work effectively is to apply Iddhipāda 4 because this principle is the process to practice, to train, and to develop human resources; consisting of 4 aspects, as follows:

- The enhancement of Chanda, called Chandasamādhīpadhānaśāṅkhāra,
- The enhancement of Viriya, called Viriyasamādhīpadhānaśāṅkhāra,
- The enhancement of Citta, called Cittasamādhīpadhānaśāṅkhāra, and
- The enhancement of Vīmaṃsā, called Vīmaṃsāsamādhīpadhānaśāṅkhāra.

In conclusion, the researcher aims general people to apply Iddhipāda 4 in working or in officiating to be successful, and to support the creative thinking at work.

2. Creative Thinking

Creative thinking is one of the important factors in supporting the advancement of the organization because creative thinking is the process to generate new thought as the direction to find problem solution, to eliminate conflicts, and to create things useful to the development of personnel and organization. According to Torrance (1962), creative thinking is the ability of individual in solving problem with profound thought beyond the normal process of thinking, and also the internal trait of individual to think in various dimensions, combining to be new product. According to Osborn (1963), creative thinking is the imagination created by human for solving problem; thereby, imagination is an important qualification of creative thinking leading to invent new items. In addition, Taylor (1964) defined creative thinking as the ability to think back by combining things or knowledge seeming unrelated for finding new solution. Wallach and Kogan (1965) also described that creativity is the thought in connecting relationship, for example, when seeing a pen, people will think about paper, pencil, ink, desk and textbook. The more connecting relationship people think the more potential of creative thinking people show.

Guildford (1967) explained that creative thinking is the ability of brain to think broadly in many directions, the process of thinking which leads to the invention of new items, and the finding of problem solutions. Anderson et al. (1970) said that creativity is the behavior of individual that shows new thought from experiences. Everyone has creative thinking in different level, which is developed by arranging the environment appropriately. De Bono (1982) clarified that creative thinking is the ability to think out of the box that blocks the ideas. It also lightens other thought to be used in solving the expected problem. Therefore, the creative thinking is the ability to think, which is newly created by human by connecting the relationship and old experience, including new experience to generate new concept. Some concepts may be furthered and developed to be in better condition to create new work task which is different from others.

Moreover, in the dimension of work, it is necessary to practice the creative thinking in order to broaden the existed scope of thought in order to generate new thought. Accordingly, the problem will be solved with the best solution for developing the organization. The enhancement of creative thinking is the thinking mechanism demanding the combination of imagination and experience to become the problem solution. This enhancement also ameliorates the competitive capability and change of the organization, contributes to the society, uplifts the quality of life in working, and causes good benefit for the personnel and organization (Charoenwongsak, 2006).

The creative thinking at work includes:

The ability to present thoughts; to present the thought from analysis in the practical manner to be valued by the society and accepted by the organization in order to apply in development and real situation.

The ability to create innovation; to create initiate thought and action which is never invented before or improved from the original. This innovation also develops the work to be more effective; it is to use the new means which passed the experiment or the development in order, by combining "newness" and "thinking" to be the ability to create the commercial benefit or the organizational advantage.

The ability to solve problems; to solve problem issues that have changed over time with a new approach, to generate new solution for developing and improving the operation. While the general problem resolution will have its own exact direction, the problem which requires creative thinking has more flexible solution. The technical problem needs the creative thinking in finding solution. At last, it will lead to the invention of technology leading to create innovative business with novelty. (Suksoiet al., 2010) In essence, the creative thinking at work is the thinking mechanism about the ability to present thoughts, the ability to create innovation, and the ability to solve problem. The purposes are to practice the skills on solving problem happening in the organization, to create innovation in the organization, to have courage to present good thoughts for developing the organization. Thereby, the organization should support the personnel to think creatively at work, to think out of the box, and to dare to present creative thinking to be accepted in the organization. This creative thinking can really guide to the operation and development of work. These all enable the organization to be successful in case that the creative thinking is applied appropriately.

3. The Concept about Iddhipāda 4

Among all virtues about human development as appeared in the Buddha's teachings, Iddhipāda 4 is one of the most important because this principle talks about path of accomplishment in living. In other words, when human has aspiration in self-development to be unique in any field, they will express their perseverance to achieve their goal by relying on thoughtfulness and paying attention to that mission which leads to their goal with reasoning; thereby, that person will be successful in life and be a good-quality member of the society.

Iddhipāda 4 is the dhamma for accomplishment. As the Buddha said "Herein a bhikkhu, Iddhipāda 4 (the basis of accomplishment) is the discipline, including: 1) develop Iddhipāda consisting of ChandasamādhīpadhānaSaṅkhāra, 2) develop Iddhipāda consisting of ViriyaSamādhīpadhānaSaṅkhāra, 3) develop Iddhipāda consisting of CittasamādhīpadhānaSaṅkhāra, and 4) develop Iddhipāda consisting of VīmaṁsāsamādhīpadhānaSaṅkhāra. Herein a bhikkhu develop Iddhipāda 4 to know, to determine, to finish, and to neglect Uddhambhāgiyasamyojana – 5 higher fetters." (Suttapiṭaka (Thai) 19/898/427) According to PhraBrahmagunabhorn (P. A. Payutto) (2008), Iddhipāda 4 is path of accomplishment or dhamma for success. Iddhipāda 4 includes 4 important components, which demonstrate its importance and the direction to practitioners to support their action to be successful, as follows:

1) Chanda; love of what to do, satisfaction in destination of what to do, desire to succeed something and to achieve the goals.

In other words, it is to love the work and its goal. In the aspect of dhamma, it is love and aspiration towards completely good condition which is the goal of what to do or the terminal of that action; it is the desire towards something to remain good, exquisite and complete; and it is the longing to reach the good goal of that work. This longing, as Chanda, is different from the craving to occupy something, which is called Taṇhā.

2) Viriya; perseverance, braveness, courage, determination, and fearlessness to fight against obstacles and difficulties. When realizing that something is valuable enough to accomplish, plus with the perseverance, that person will not fear to reach that goal even though it requires dedication or takes long time. That person will think that such difficulty is challenging.

3) Citta; thoughtfulness or dedication, which is to have commitment to that work. If a person fully concentrates on some work, that one will not acknowledge other issue or other's words. However, if someone talks about that work, this person will immediately pay attention to what that one says. Moreover, sometime that person can live with that work all day and night but neglect his/her health, dressing, eating or sleeping. This kind of obsession causes Samādhī: concentration, and stable mind. Then, PadhānaSaṅkhāra happens with the support of creative effort.

4) Vīmaṁsā; investigation, use of intelligence to consider, contemplate, find a reason, and check for defects. It is important to experiment and investigate, then consider what is the cause, what is the result, what is the result if adding this component factor, what is the result if changing the component factor, and what is the cause of the failure. This kind of investigation helps collect the mind to always follow that issue; this also causes the stability in mind, certainty, and courage which is Vīmaṁsāsamādhī, including PadhānaSaṅkhāra of creative effort. (PhraBrahmagunabhorn (P. A. Payutto), 1997)

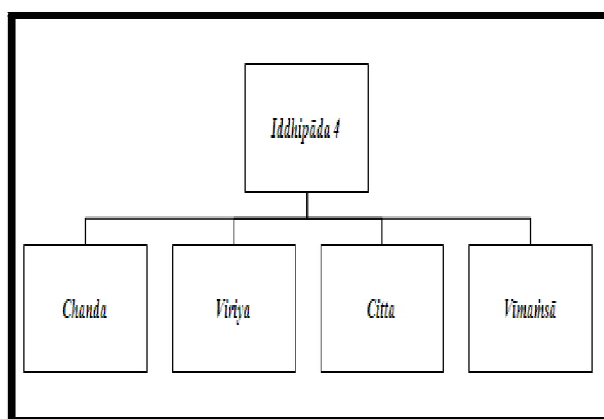


Figure 1: The Components of Iddhipāda 4

Therefore, the important virtue in working and officiating to be successful is Iddhipāda 4, as follows;

- Chanda – satisfaction means to show pleasure, willingness and desire to work for that organization. In short, it is to have love, attachment, motivation and commitment to work in the organization.
- Viriya – perseverance means to work with perseverance, continual and correct responsibility, and courage to encounter problem, obstacle and difficulty occurred from that work.
- Citta – attention means to recognize an importance of one's duty and responsibility with willingness so that the work is effective, and
- *Vīmaṇisā* – careful consideration and contemplation. This principle focuses on the use of wisdom by considering the ongoing action carefully, including operational process, result, advantage and disadvantage, problem and obstacle, or impact caused by the operation of the organization.

4. The Enhancement of Creative Thinking at Work According to Iddhipāda 4

The mean to enhance creative thinking at work by using Iddhipāda 4 is the process of training human in 4 aspects, as follows;

4.1. The Enhancement of Chanda - Chandasamādhīpadhānasāṅkhāra

It is to enhance the satisfaction and love towards work, to create the willingness to work, and to work with happiness and courage; thereby, this continues the process of work and enhances the creative thinking at work. With regard to Chandasamādhīpadhānasāṅkhāra, as prescribed in Tripiṭaka, "(506) And how does a monk develop the basis of accomplishment furnished with "wish-samādhī, striving-activity"? If a monk, having made wish dominant, gains samādhī; gains one-pointedness of consciousness. This is called "wish-samādhī". He engenders wish, makes effort, arouses energy, exerts the mind, strives for the non-arising of bad unskillful dhammas that have not arisen; engenders wish, makes effort, arouses energy, exerts the mind, strives for the abandoning of bad unskillful dhammas that have arisen; engenders wish, makes effort, arouses energy, exerts the mind, strives for the arising of skillful dhammas that have not arisen; engenders wish, makes effort, arouses energy, exerts the mind, strives for the stabilizing, for the collocation, for the increase, for the maturity, for the development, for the completion of skillful dhammas that have arisen. These are called "striving-activity". Thus, this "wish-samādhī" and this "striving-activity", these taken together collectively and briefly go by the name 'wish-samādhī, striving-activity'."

Therefore, the enhancement of creative thinking at work requires Chanda, which will be cultivated to the personnel by training or seminar to educate and to give advice from the commander, the expert, or the management system. The examples are high enough compensation, good welfare, opportunity to get promoted and professional advancement. Thus, the enhancement of Chanda is to love what to do; this love must be born of faith and confidence in what to do; thereby, it comes to success. Importantly, such love in what to do cannot be forced because it was not born of the real faith. Such force invokes suffering, although the goal is accomplished. Chanda is born when the personnel have conscious mind and responsibility towards the organization by thinking that the organization gives us work, income for earning a living, experience in working and learning new things from colleagues and commander.

4.2. The Enhancement of Viriya - Viriyasamādhīpadhānasāṅkhāra

It is to enhance the perseverance of human resources, to eliminate the indolence, and to intend to succeed at work. Those who lack perseverance often fail at work, or finish the work slowly and ineffectively. With regard to Viriyasamādhīpadhānasāṅkhāra, as prescribed in Tripiṭaka, "(509) And how does a monk develop the basis of accomplishment furnished with "energy-samādhī, striving-activity"? If a monk, having made energy dominant, gains samādhī; gains one-pointedness of consciousness. This is called "energy-samādhī". He engenders wish, makes effort, arouses energy, exerts the mind, strives for the non-arising of bad unskillful dhammas that have not arisen; Complete as first example. for the abandoning of bad unskillful dhammas that have arisen; Complete as first example. for the arising of skillful dhammas that have not arisen; engenders wish, makes effort, arouses energy, exerts the mind, strives for the stabilizing, for the collocation, for the increase, for the maturity, for the development, for the completion of skillful dhammas that have arisen. These are called "striving-activity". Thus this "energy-samādhī" and this "striving-activity", these taken together collectively and briefly go by the name 'energy-samādhī, striving-activity'."

Therefore, the enhancement of creative thinking at work requires Viriya, which means the dedication of the body and mind to learn and to the true nature of that thing. If doing something, keep doing it until mastering in it. If studying something, keep studying it to understand its root. The important thing is to keep practicing, thinking, writing and presenting without laziness and fear of doing a mistake. Moreover, it is necessary to have courage to be responsible to one's own failure, to not be discouraged by hard work and abundant work; thinking that the more we do, the more we expertise in that field. It is unreasonable to claim of timelessness. Consequently, the enhancement of Viriya is the aftermath of Chanda, plus with the readiness on knowledge and ability of each person, the readiness on budget, the readiness on staff in the aspect of knowledge, ability and power, the readiness on equipment and tools, and other supportive factors at work, which facilitate the work process with individual's perseverance. In summary, the perseverance in the organization can be considered both in the level of personnel and the level of organization. In the level of personnel, the perseverance is important to them because they should greatly persevere to achieve the expected goal; while in the level of organization, the perseverance is important because the organization should support the personnel to work conveniently without being blocked by the obstacle.

4.3. The Enhancement of Citta - Cittasamādhīpadhānaśākhāra

It is to enhance the thoughtfulness of human resources, to determine the mind to solve the problems. As a consequence, the work will be continually operated through its process; and the personnel realize the advancement of their work. With regard to CittaSamādhīPadhānaŚākhāra, as prescribed in Tripiṭaka, "(512) And how does a monk develop the basis of accomplishment furnished with "consciousness-samādhī, striving-activity"? If a monk, having made consciousness dominant, gains samādhī; gains one-pointedness of consciousness. This is called "consciousness-samādhī". He engenders wish, makes effort, arouses energy, exerts the mind, strives for the non-arising of bad unskillful dhammas that have not arisen; Complete as first example. for the abandoning of bad unskillful dhammas that have arisen; Complete as first example. for the arising of skillful dhammas that have not arisen; engenders wish, makes effort, arouses energy, exerts the mind, strives for the stabilizing, for the collocation, for the increase, for the maturity, for the development, for the completion of skillful dhammas that have arisen. These are called "striving-activity". Thus this "consciousness-samādhī" and this "striving-activity", these taken together collectively and briefly go by the name 'consciousness-samādhī, striving-activity'."

Therefore, the enhancement of creative thinking at work requires Citta which means to concentrate and be responsible. With concentration and responsibility, the work will be better done. Moreover, Citta helps gaining knowledge with a mind focused and pursuing learning; such knowledge leads to prudence; and such prudence leads to less and less mistake. Thus, the enhancement of Citta is to pay attention to process of work, means of work and goal of work importantly. In other words, both process and result should be prioritized. To pay attention comes from the continual perseverance, plus with mindfulness and clear comprehension. The organization whose personnel pay attention to and take responsibility for work and duty, will achieve the expected objective of the organization, will advance at work, and will accomplish the goal in the aspects of the benefit of organization and society. This principle accordingly relates to the discretion or living with sensibleness, which is to live with mindfulness in every step of life.

4.4. The Enhancement of Vīmaṁsā - Vīmaṁsāsamādhīpadhānaśākhāra

It is to enhance the reasoning to have analytical thinking, to understand the process of work, to solve the problem effortlessly in case that it happens, and to work successfully and carefully under the framework. With regard to VīmaṁsāSamādhīPadhānaŚākhāra, as prescribed in Tripiṭaka, "(515) And how does a monk develop the basis of accomplishment furnished with "reason-samādhī, striving-activity"? If a monk, having made reason dominant, gains samādhī; gains one-pointedness of consciousness. This is called "reason-samādhī". He engenders wish, makes effort, arouses energy, exerts the mind, strives for the non-arising of bad unskillful dhammas that have not arisen; Complete as first example. for the abandoning of bad unskillful dhammas that have arisen; Complete as first example. For the arising of skillful dhammas that have not arisen; engenders wish, makes effort, arouses energy, exerts the mind, strives for the stabilizing, for the collocation, for the increase, for the maturity, for the development, for the completion of skillful dhammas that have arisen. These are called "striving-activity". Thus this "reason-samādhī" and this "striving-activity", these taken together collectively and briefly go by the name 'reason-samādhī, striving-activity'." Therefore, the enhancement of creative thinking at work requires Vīmaṁsā which means to revise the action and thought which are born of aspiration (Chanda), perseverance (Viriya), and thoughtfulness and responsibility (Citta), plus with well-round and discrete judgment. This leads to self-revision and the revision of organization and process, including what was done, its advantage and disadvantage, both the personal and common issue for the reason of improvement. In addition, the enhancement of Vīmaṁsā is the intellectual process which all personnel should rely on in order to consider the reasoning appropriately for correctly understanding and leading the organization to the concrete prosperity. The process of consideration with Vīmaṁsā can be operated both in the managing level and operational level.

In the managing level, Vīmaṁsā is used to consider one's own action whether it is correct or not, how to improve that action; while in the operational level, Vīmaṁsā is used in considering the operation according to the duty and role as designated in the policy of the organization in order to find strength, weakness, threat and opportunity to develop the organization with the policy of the organization itself and the feedback from other relevant authority, society and general people. This enables the organization to be operated and developed in the correct and creative direction which is truly beneficial to all section in the society.

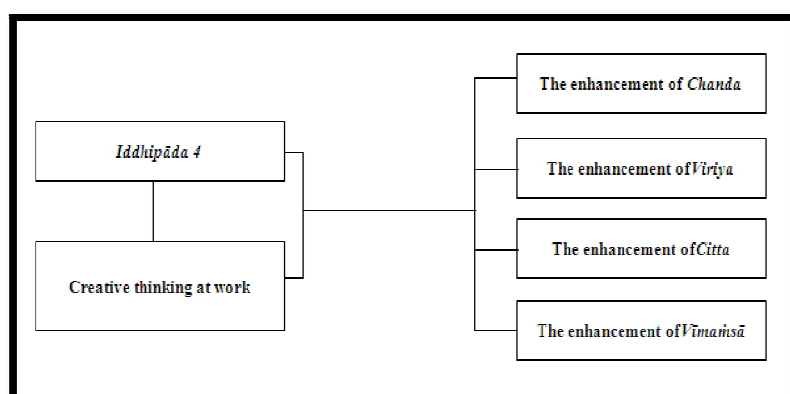


Figure 2: The Enhancement of Creative Thinking at Work According to Iddhipāda 4

5. Conclusion

Iddhipāda 4 is the key virtue that is the path of accomplishment for succeeding at work. It is one of the means to effectively enhance the creative thinking at work, which is to apply Iddhipāda 4, which consists of 4 aspects in training human resources, as follows:

- The enhancement of Chanda, called Chandasamādhīpadhānasaṅkhāra, means to enhance the aspiration of human resources towards their work, to create the willingness to work, and to work with happiness and courage; thereby, this continues the process of work and enhances the creative thinking at work. Thus, the enhancement of Chanda is to love what to do; this love must be born of faith and confidence in what to do; thereby, it comes to success. Importantly, such love in what to do cannot be forced because it is not born of the real faith. Such force invokes suffering, although the goal is accomplished.
- The enhancement of Viriya, called Viriyasamādhīpadhānasaṅkhāra, means to enhance the perseverance of human resources, to eliminate the indolence, and to intend to succeed at work. Those who lack perseverance often fail at work, or finish the work slowly and ineffectively. In addition, Viriya means the dedication of the body and mind to learn and to the true nature of that thing. If doing something, keep doing it until mastering in it. If studying something, keep studying it to understand its root. The important thing is to keep practicing, thinking, writing and presenting without laziness and fear of doing a mistake. Moreover, it is necessary to have courage to be responsible to one's own failure, to not be discouraged by hard work and abundant work; thinking that the more we do, the more we expertise in that field. It is unreasonable to claim of timelessness.
- The enhancement of Citta, called Cittasamādhīpadhānasaṅkhāra, means to enhance the thoughtfulness of human resources, to determine the mind to solve the problems. As a consequence, the work will be continually operated through its process; and the personnel realize the advancement of their work. The enhancement of Citta needs to concentrate and be responsible. With concentration and responsibility, the work will be better done. Moreover, Citta helps gaining knowledge with a mind focused and pursuing learning; such knowledge leads to prudence; and such prudence leads to less and less mistake.
- The enhancement of *Vīmaṃsā*, called *Vīmaṃsāsamādhīpadhānasaṅkhāra*, means to enhance the reasoning of human resources, to have analytical thinking, to understand the process of work, to solve the problem effortlessly in case that it happens, and to work successfully and carefully under the framework. The enhancement of *Vīmaṃsā* is to revise the action and thought which are born of aspiration (Chanda), perseverance (Viriya), and thoughtfulness and responsibility (Citta), plus with well-round and discrete judgment. This leads to self-revision and the revision of organization and process, including what was done, its advantage and disadvantage, both the personal and common issue for the reason of improvement.

6. References

- i. Anderson, R. D. et al. (1970). *Developing Children's Thinking Through Science*, Englewood Cliffs N.J.: Prentices Hall.
- ii. Andriopoulos, C. and Lowe, A. (2000). Enhancing Organizational Creative thinking: The Process of Perpetual Challenging. *Management Decision*, 38, 734-742.
- iii. Charoenwongsak, K. (2006). *Creative Thinking*, (7th ed.), Bangkok: Success Media.
- iv. Cumming, A. and Oldham, G. R. (1997). Enhancing Creative Thinking: Managing Work Contexts for The High Potential Employee. *California Management Review*, 40, 22-38.
- v. De Bono, E. (1982). *Lateral Thinking. A Textbook of Creative thinking*, London: Penquin.
- vi. Guilford, J. P. (1967). *The Nature of Human Intelligence*, New York: McGraw-Hill.
- vii. Mahachulalongkornrajavidyalaya University. (1996). *Tripitaka (Thai) Veision of Maha-chulalongkornrajavidyalaya University*, Bangkok: Mahachulalongkornraja-vidyalaya Printing Press.
- viii. McGregor, J. (2007). The world's most innovative companies. *Business Week Online*, 9.
- ix. Osborn, A. F. (1963). *Applied Imagination*, New York: ChurlesJorbnes& Son.
- x. PhraBrahmagunabhorn (P. A. Payutto). (1997). *A Constitution for Living: Buddhist principles for a fruitful and harmonious life*, Bangkok: Pimsuay.
- xi. PhraBrahmagunabhorn (P. A. Payutto). (2008). *Dictionary of Buddhism*, (17th ed.), Bangkok: Mahachulalongkornrajavidyalaya Printing Press.
- xii. PhraMahaWutthichaiWachiramatee. (2008). *Happy Man Success Work*, (17th ed.), Bangkok: Amarin Publishing.
- xiii. Suksoi, W. et al. (2010). *Innovation Management for Executives*, Bangkok: National Innovation Agency.
- xiv. SUSAORUJ, P. (2013). *The Development of Thinking*, Bangkok: Technique Printing.
- xv. Taylor, C. W. (1964). *Creative thinking: Progress and Potential*, New York: McGraw-Hill.
- xvi. Tierney, P., Farmer, S.M., and Graen. (1999). An Examination of Leadership and Employee Creative thinking: The Relevance of Traits and Relationships. *Personnel Psychology*, 52, 591-620.
- xvii. Torrence, E. P. (1962). *Guiding Creative Talent*, Englewood Cliffs, N.J.: Prentice Hall.
- xviii. Trompenaars, F. and Hampden-Turner, C. (2010). *Riding the Waves of Innovation*, New York: McGraw-Hill.
- xix. Tushman, M. and O'Reilly, C.A. (1997). *Winning through Innovation: A Practical Guide to Leading Organizational Change and Renewal*, Boston, MA: Harvard Business School Press.
- xx. Wallach, M. A. and Kogan N. (1965). *Modes of Thinking in Young Children: A Study of the Creative thinking-Intelligence Distinction*, New York: Holt, Rinehart and Winston.