

# RE-CONCEPTUALIZATION VOCATIONAL EDUCATION AND TRAINING IN INDONESIA BASED ON “WIWEKASANGA”

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## Abstract

*Wiwekasanga* is the theory of contextualized multiple intelligences illustrated as a chakras with eight leafs of intelligences which learning as a core intelligence. Eighth leaf of contextualized multiple intelligences are: (1) emotional intelligence; (2) spiritual, cultural art intelligence; (3) technological intelligence; (4) political intelligence; (5) intelligence economics; (6) kinesthetic intelligence; (7) intellectual intelligence; and (8) social-ecological intelligence. Reconceptualize vocational education and training (VET) based on *wiwekasanga* intended to develop new concepts of VET with contextualized multiple intelligences *wiwekasanga*. A new concept of VET based on *wiwekasanga* aimed developing personal of students as the core of Indonesian workers development in aspects technological, political, economic, emotional, spiritual, art and culture, kinesthetic, intellectual, and social-ecological. A new concept VET based on *wiwekasanga* intended to develop the existence of VET are socialized congruent with the vision of society in the dimensions of local, national, and global. The goal is the realization of new concepts of VET that can develop in a balanced and sustainable for social harmony and progress together, harmonious environment, cultural preservation, and effective in improving skilled educated workforce.

Keys word: *wiwekasanga*, Contextual Multiple Intelligences, VET, reconceptualization, triplization

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## 1. Introduction

Innovation and development quality of VET in the era of knowledge-based industries are expected to: (1) moving the students to think critically, responsible for managing the environment, information, and knowledge, (2) finalize the emotional, mental, moral and students to cooperate with each other, manage and solve the problems of life, (3) using technology (new) in an interactive, effective, and accountable, (4) foster the quality of students' individual self-intact and correct, (5) establishing a culture and entrepreneurial spirit, work culture, learning culture, and culture serve productively, (6) contextualized fit with the *desa, kala, and patra* (place, time, real conditions on the ground) (Ref. [9]; [4]; [5] [14]; [1]; [11]; [8]; [6]). VET is no longer simply be understood only as an education within the framework of the transmission of knowledge and work skills as a vehicle for economic and employment needs of the territory of a country, province, or district. VET in Indonesia should be developed as an education in order to produce culture, inculturation and acculturation process civilize the new generation of Indonesia's character. VET are required proactive and responsive to changes in economic, political, social, cultural, adopt a long-term strategy, and cultural grounding of local communities to meet their personal needs (Ref. [3]; [7]).

Globalization in the field of technological, economic, social, politics, art & culture, learning has a significant influence on innovation and

development of VET. This becomes a major challenge for policy makers and decision. According to Cheng (2000) not only globalization but also the localization and individualization in the reform. They are all triplization process that can be used as a discussion in the reform and reformulate the concept of VET to the future. How to make the formulation of curriculum, teaching methods, development of facilities and so forth can be developed from the process of triplization (*triple*-lization: globalization, localization, individualization). Cheng (2005) define six categories of contextualized multiple intelligences (CMI), namely: (1) technology intelligence, (2) economics intelligence, (3) social intelligence, (4) political intelligence, (5) cultural intelligence, and (6) learning intelligence. In Cheng's perspective if it is associated with the development of VET community could be viewed as an education that is contextualizedly related to the problems of technological, economic, social, political, and cultural.

Cheng view of six CMI is not enough for the Indonesian context. Sudira (2011) developed the multiple intelligences into 9 CMI, namely: (1) learning intelligence as central, (2) emotional-spiritual intelligence, (3) socio-ecological intelligence, (4) intellectual intelligence, (5) kinesthetic intelligence; (6) economics intelligence, (7) political intelligence; (8) technology intelligence, and (9) art-cultural intelligence. The nine intelligences are called *Wiwekasanga* like Figure 1.

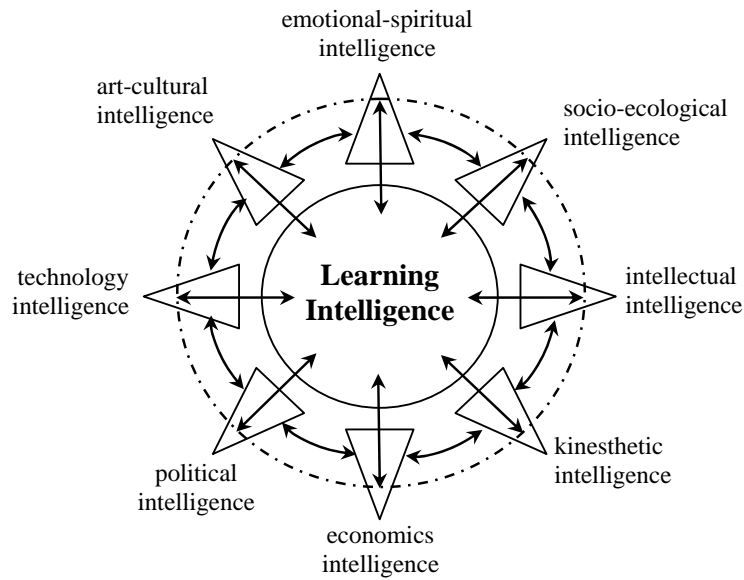


Figure 1. *Wiwikasanga* Theory (nine of contextualized intelligence)

*Wiwikasanga* theory developed from the Pentagon theory (Cheng 2000) to re-conceptualize VET as depicted in Figure 1 above. The nine CMI is interactive and relationship with each other gives reinforcement which learning intelligence as the central. VET planning should encourage and facilitate interaction among multiple intelligences and strengthening of contextualized if we want to equip people with extensive knowledge or multiple intelligences to face the challenges of a new era of global era of platinum. To increase the pace of development of CMI, development of learning intelligence plays a central role (see Figure 1).

Thus teaching and learning must provide intelligence to learn with a variety of learning experiences for students and contextualized circumstances and problems of the field. Information, educational materials must be placed within the framework of character development and ability of learners to learn how to learn systematically, creatively, critically, and cultured. To maximize your chances of developing the *Wiwikasanga* in learners then globalization, localization, and individualisasi in teaching and learning is important and necessary. The definition and impact of the nine contextualized multiple intelligences “*Wiwikasanga*” towards VET is described in Table 1 below.

Table 1. *Wiwikasanga*: 9 Contextualized Multiple Intelligences (CMI) and Impact on VET

Contextualized Multiple Intelligences	Definition of the Contextualized Multiple Intelligences	Expected Outcomes of VET
<b>Emotional-Spiritual Intelligence</b>	It refers to the ability to think, act, manage emotions and spirit to enhance the ability of sense though, <i>olah kalbu</i> , sensitivity, faith, piety, noble character.	Individuals and community leaders who are emotionally - spiritually intelligent, and thus contributing to the development of a sense though, <i>olah kalbu</i> , sensitivity, noble character, faith, piety, and spirituality.
<b>Socio-Ecological Intelligence</b>	It refers to the ability to think, act, manage socially, effecting the growth of balance and harmony between individuals. Ability to promote environmentally friendly development, uphold the basic rights of every creature to defend itself and multiply, as a partner of the universe, is responsible for the future of the whole cosmos.	Individuals and community leaders who can contribute to the development of mutual relations, democratic, empathetic and sympathetic, uphold human rights, cheerful and confident, appreciate diversity in society and state, as well as insightful nationality with an awareness of rights and obligations as citizens, responsibility for the future of the whole cosmos.
<b>Intellectual Intelligence</b>	It refers to the ability to think though, did, manage to secure a competency and self-reliance in science, technology, and art, critical, creative and imaginative.	Individuals and community leaders who can contribute to the development of competence and independence in science, technology, and art, critical, creative and imaginative.

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Contextualized Multiple Intelligences	Definition of the Contextualized Multiple Intelligences	Expected Outcomes of VET
<b>Kinesthetic Intelligence</b>	With regard to the ability to think, process the body, to manage themselves to achieve a healthy human being, fit, helpless-resistant, quick, skillful, and <i>trengginas</i> as the actualization of human <i>adiraga</i> .	Individuals and community leaders who can contribute to the development of health, fitness, resilience, alert, skillful, and <i>trengginas</i> as the actualization of human <i>adiraga</i> .
<b>Economics Intelligence</b>	It refers to the ability to think, act and manage economically and to optimize the use of various resources	An economically intelligent leader and citizen who can contribute to the economic development of the society
<b>Political Intelligence</b>	It refers to the ability to think, act and manage politically and to enhance win-win outcomes in situations of competing resources and interests	A politically intelligent leader and citizen who can contribute to the political development of the society
<b>Technology Intelligence</b>	It refers to the ability to think, act and manage technologically and maximize the benefits of various types of technology	A technologically intelligent leader and citizen who can contribute to the technological development of the society
<b>Art-Cultural Intelligence</b>	With regard to the ability to think, act, manage subtlety and beauty of art and culture, as well as the competence to express, using art and cultural assets and create new values.	Individuals who are intelligent in art and culture that can contribute to the development of art and culture in society.
<b>Learning Intelligence</b>	It refers to the ability to learn and think creatively and critically and to optimize the use of biological/ physiological abilities	A continuously earning leader and citizen who can contribute to the learning development of the society
<b>Contextualized Multiple Intelligences (CMI)</b>	It refers to the comprehensive ability including intellectual, technological, economic, socio-ecological, emotional-spiritual, political, art and cultural, and learning intelligences as well as intelligence transfer and creation	A CMI leader and citizen who can creatively contribute to the intellectual, technological, economic, socio-ecological, emotional-spiritual, political, art and cultural, and learning developments of the society.

Sources: Cheng, 2005

## 2. Triplization of VET

Current movement of globalization with a faster and more liquid is one aspect that can not be avoided by anyone. Interconnection network of the Internet has opened a total of boundaries of a territory. In line with the opinion of Cheng (2000) there are multiple dimensions of globalization, namely: (1) economic globalization, (2) technology globalization, (3) social globalization, (4) political globalization, (5) art and culture globalization, and (6) learning globalization in the new millennium.

Globalization refers to the transfer, adaptation, and development of values, character, knowledge, technology, and behavioral norms across countries and across societies in various parts of the world. Typical phenomena associated with globalization is the growth of global networks in the form of the internet network, world-wide communication, *transfortasi*, distribution technology and global digital data stream, economic, social, political, cultural, and various aspects of learning, trusts and international competition, international cooperation, the global village, multi-cultural integration, and use of international standards and benchmarks. Implications of globalization on VET is the increasing demand for educational relevance of global development, support and initiative of various learning resources from various countries, teaching and learning.

Localization refers to the transfer, adaptation, and development of values, character, knowledge,

technology, and norms of behavior or to the local context in both of the regional or national scope. Indonesia is local in the international dimension. Likewise, the provincial or local district is in a country's national outlook. Some characteristics of localization are: local networking, adaptation of technology, economic, social, cultural, artistic, political, learning initiative, knowledge, decentralized communities, local cultural development, development of local knowledge, needs and expectations of society, the involvement of regional, inter-agency cooperation in one area, community support, *kesesuain* or local relevance, attention to the needs of community-based, and ethics or social norms. Implication of localization in the reform of VET is to maximize the relevance of education to regional development / regional as well as support and community resources, local cooperation, collaborative learning, teaching and schooling.

Individualization refers to the transfer, adaptation, and development of values, character, knowledge, technology, and behavioral norms to meet the needs and individual characteristics. Individualisasi importance in human development based on the theory of motivation and needs (Maslow, 1970; Manz, 1986; Manz & Sims, 1990; Alderfer, 1972). According Tilaar (2002) educational process is essentially a process of individualization, develop human identity. In other languages according

to Suminto A. Sayuti (2005) educational process is the process of acculturation. Process related to ways of thinking and all acts that are considered true by a community, as follows planning work attempts to make it happen so that people still survive, including

the process of adapting to the environment. The implications of triplisasi namely globalization, localization, and individualization in innovation and development of VET are summarized in Table 2.

Table 2. Implications Triplization on VET

Triplization	Conceptions and characteristics	Implications on VET
<b>Globalization</b>	Transfer, adaptation, and development of values, knowledge, technology and behavioral norms across countries and societies in different parts of the world: <ul style="list-style-type: none"> <li>• Global Networking</li> <li>• Economic, Political, Technological, Arts-Cultural, Emotional-Spiritual, Social-Ecological, Intellectual, Kinesthetic, and Learning Globalization.</li> <li>• Global Growth of Internet</li> <li>• International Alliances and Competitions</li> <li>• International Collaboration &amp; Exchange</li> <li>• Global Village</li> <li>• Multi-cultural Integration</li> <li>• International Standards and Benchmarks</li> </ul>	To maximize the education relevance to global development and pool up best intellectual resources, support, and initiatives from different parts of the world for learning, teaching and schooling: e.g. <ul style="list-style-type: none"> <li>• Web-based Learning</li> <li>• International Visit/Immersion Program</li> <li>• International Exchange Program</li> <li>• Learning from Internet</li> <li>• International Partnership in Teaching and Learning at group, class, and individual levels</li> <li>• Interactions and Sharing through Video-Conferencing across Countries, Communities, Institutions, and Individuals</li> <li>• Curriculum Content on Technological, Economic, Social, Political, Cultural, and Learning Globalizations</li> </ul>
<b>Localization</b>	Transfer, adaptation, and development of related values, knowledge, technology, and behavioral norms from/to the local contexts: <ul style="list-style-type: none"> <li>• Local Networking</li> <li>• Economic, Political, Technological, Arts-Cultural, Emotional-Spiritual, Social-Ecological, Intellectual, Kinesthetic, and Learning Localization</li> <li>• Decentralization to the Local Site Level</li> <li>• Indigenous Culture</li> <li>• Community Needs and Expectations</li> <li>• Local Involvement, Collaboration and Support</li> <li>• Local Relevance and Legitimacy</li> <li>• Community-based Needs and Characteristics</li> <li>• Social Norms and Ethos</li> </ul>	To maximize the education relevance to local developments and bring in community support and resources, local partnership, and collaboration in learning, teaching and schooling: e.g. <ul style="list-style-type: none"> <li>• Community Involvement</li> <li>• Public-Institutional Collaboration</li> <li>• Institutional-based Management &amp; Accountability/School-based Management</li> <li>• Inter-institutional Collaboration</li> <li>• Community-related Curriculum</li> <li>• Curriculum Content on Technological, Economic, Social, Political, Cultural, and Learning Localizations</li> </ul>
<b>Individualization</b>	Transfer, adaptation, and development of related external values, knowledge, technology, and behavioral norms to meet individual needs and characteristics: <ul style="list-style-type: none"> <li>• Individualized Services</li> <li>• Development of Human Potential in Economic, Political, Technological, Arts-Cultural, Emotional-Spiritual, Social-Ecological, Intellectual, Kinesthetic, and Learning Aspects</li> <li>• Human Initiative and Creativity</li> <li>• Self-actualization</li> <li>• Self-managing and Self-governing</li> <li>• Special Needs</li> </ul>	To maximize motivation, human initiative, and creativity in learning, teaching and schooling: e.g. <ul style="list-style-type: none"> <li>• Individualized Educational Programs</li> <li>• Individualized Learning Targets</li> <li>• Methods, and Progress Schedules</li> <li>• Self Lifelong Learning, Self Actualizing, and Self Initiative</li> <li>• Self Managing Students and Teachers</li> <li>• Meeting Special Needs</li> <li>• Development of Contextualized Multiple Intelligences</li> </ul>

Sources: Cheng, 2005

### 3. Reconceptualization in VET

Through the concept of CMI (*wiwekasanga*) and triplization in VET, shift of the VET paradigm can be expressed as a shift from the traditional paradigm to *Wiwekasanga-Triplization* paradigm. Between the two paradigms there are two very different things about the future of vocational education. In the new paradigm, the future of VET is assumed to have a thorough globalization is the globalization of Economic, Political, Technological, Arts-Cultural, Emotional-Spiritual, Social-Ecological, Intellectual, Kinesthetic, and Learning. Despite

having a thorough globalization, local values remain in use as the base and root development footing. Pearls of wisdom and excellence of local Indonesia, which has high relevance to globalization rather should be developed as a contribution to the global life. The goal of VET in order to become part of local and global communities. In the *Wiwekasanga* theory society has considered moving towards multiple intelligence community capable of providing the necessary knowledge and intelligence. Instead of the traditional paradigm educational environment

primary that is characterized by the needs of local communities, the changes are relatively slow with a modest uncertainty and complexity. Educational institutions and educational systems must be assumed to be relatively stable and unchanged. Education reform is limited to the skin surface or just as a reaction to increasing demands of public

accountability and the attention surrounding communities. From this paradigm the purpose of education is to equip learners with the necessary skills and knowledge to live in the local community alone. Table 3 shows the paradigm shift from traditional vocational education to the paradigm triplisasi.

Table 3. Paradigm shift in VET Context and Purpose of Education

New Paradigm <i>Wiwekasanga</i> -Triplization	Tradisional Paradigm
<b>Contexts of Education</b>	
<ul style="list-style-type: none"> <li>• <b>Triplization:</b> Education environment is characterized by globalization, localization, and individualization</li> <li>• <b>Past Changing</b></li> <li>• <b>Disappearing Boundary</b></li> <li>• <b>Continuous Development:</b> Continuous education reform and development are inevitable due to various local and global challenges</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Local Needs:</b> Education environment is mainly characterized by the needs of local community</li> <li>• <b>Slowly Changing</b></li> <li>• <b>Stable Boundary</b></li> <li>• <b>Lifited Reform:</b> Limited and superficial education reforms due to the public accountability and local concern</li> </ul>
<b>Purpose of Education</b>	
<ul style="list-style-type: none"> <li>• <b>Develop CMI Leaders and Citizens:</b> To support students to become CMI leaders and citizens who will be engaged in lifelong learning and will creatively contribute to building up a CMI society and a CMI global village</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Equip Citizens with Knowledge and Skills:</b> To equip students with the necessary skills and knowledge to survive in a local community or to support the development of a society particularly in the economic and social aspects at a certain stage</li> </ul>

Sources: Cheng, 2005

#### 4. Reconceptualization in VET Learning

In the new paradigm *wiwekasanga* and triplisasi, learning must be an individual, local/national, global as Table 4. The individualization of learning, the learner is the center of education. Learning the learner must be facilitated through the discovery of all of their needs and personality traits. Learning has also developed potential learners particularly overall of *wiwekasanga* intelligence

optimally. Learners are growing motivation to learn independently with guidance, direction, and provision of appropriate facilities. Learning is self-actualization as a process of self-reflection to find its own identity, the uniqueness of yourself as a person, the obligation of life, origin and where the future will go. Experiences is an important part of the learning process.

Table 4. Paradigm Shift in Learning of VET

Wiwekasanga-Triplization Paradigm	Traditional Paradigm
<p><b><u>Individualized Learning:</u></b></p> <ul style="list-style-type: none"> <li>• Student is the Centre of Education</li> <li>• Individualized Programs</li> <li>• Self-Learning</li> <li>• Self-Actualizing Process</li> <li>• Focus on How to Learn</li> <li>• Self Rewarding</li> </ul> <p><b><u>Localized and Globalized Learning:</u></b></p> <ul style="list-style-type: none"> <li>• Multiple Sources of Learning</li> <li>• Networked Learning</li> <li>• Lifelong and Everywhere</li> <li>• Unlimited Opportunities</li> <li>• World-Class Learning</li> <li>• Local and International Outlook</li> </ul>	<p><b><u>Reproduced Learning:</u></b></p> <ul style="list-style-type: none"> <li>• Student is the Follower of Teacher</li> <li>• Standard Programs</li> <li>• Absorbing Knowledge</li> <li>• Receiving Process</li> <li>• Focus on How to Gain</li> <li>• External Rewarding</li> </ul> <p><b><u>Local and International Outlook:</u></b></p> <ul style="list-style-type: none"> <li>• Teacher-Based Learning</li> <li>• Separated Learning</li> <li>• Fixed Period and Within Institutions</li> <li>• Limited Opportunities</li> <li>• Site-Bounded Learning</li> <li>• Mainly Institution-based Experiences</li> </ul>

Sources: Cheng, 2005

Since information and knowledge accumulate and grow in extremely high speeds, it is very difficult to convey the skills and knowledge as a whole. Learners can find their own knowledge and information quickly and easily via the internet. Thus the focus of

learning is learning how to learn, researching, critical thinking, and act real. Thus in order to learn it lasts and sustainable it must enjoy learning and growing sense of pride and self-esteem as learners. In local/national and global learning, learners should be

facilitated using any type of resource, support, and network that can maximize all the opportunities held during the learning process. Learners can learn from various sources, both who are in school or university and who is outside the school or university locally/nationally and globally, not at all limited by a small number of teachers in schools or universities. Participation in locally/nationally and internationally learning programs can help learners gain insights and new experiences. Learning in some countries such as Japan, Hong Kong, France, Holland, England, America, Australia has implemented a network-based learning. Study groups and learning networks will be very easily formed through the internet. This group could include members in a single institution, cross-institutional networks in one area, or cross-country network of institutions that have a common field of study or program. The internet has provided excellent facilities to conduct the process of sharing information and share learning experiences from many different angles region can be ensured even negara.Sudah learning can occur anytime and anywhere and in the long term. Opportunities to learn almost without limit. Learners can maximize learning opportunities through local knowledge, national, and global through the internet, web-based learning, video-conferencing, cultural exchanges, tourist visits,

research collaboration, and some interactive multi-media materials. Learners can learn from teachers or guest lecturers abroad or international-class teachers, experts, couples learn, and learning materials from some developed countries in the world. Thus, their learning becomes a world-class learning.

In the traditional paradigm of thinking, learning on the learner is part of the process of reproduction or repetition of knowledge re-existing knowledge and resources in the community structure is maintained, especially in socio-economic aspects (Cheng, 2005). Education interpreted as a process in which learners and all forms of learning into reproductive structures need to find employment in the community or the nation (see Table 4). In the reproduction of learning, learners are followers of his teachers. They run educational programs are standard. Thus the students will think the same way and walked the same when in reality they have different abilities and talents at all. Self-appreciation and understanding of learning and self-esteem as learners do not exist at all. Obviously this would be very detrimental because in a short time the knowledge, skills possessed became obsolete and withered because a lot of knowledge and new skills emerge with new, more effective value of efficient and high value.

### 5. Reconceptualization in VET Teaching

In the new paradigm, teaching VET must happen Triplization of individualization, localization/nationalization, globalization as Table 5.

Table 5. Paradigm ship in VET Teaching

Wiwekasanga-Triplisasi Paradigm	Tradisional Paradigma
<p><b><u>Individualized Teaching:</u></b></p> <ul style="list-style-type: none"> <li>• Teacher is the Facilitator or Mentor to support Students' Learning</li> <li>• CMI Teacher</li> <li>• Individualized Teaching Style</li> <li>• Arousing Curiosity</li> <li>• Facilitating Process</li> <li>• Sharing Joy</li> <li>• As Lifelong Learning</li> </ul> <p><b><u>Localized and Globalized Teaching:</u></b></p> <ul style="list-style-type: none"> <li>• Multiple Sources of Teaching</li> <li>• Networked Teaching</li> <li>• World-Class Teaching</li> <li>• Unlimited Opportunities</li> <li>• Local and International Outlook</li> <li>• As World-Class and Networked Teacher</li> </ul>	<p><b><u>Reproduced Teaching:</u></b></p> <ul style="list-style-type: none"> <li>• Teacher is the Centre of Education</li> <li>• Partially Competent Teacher</li> <li>• Standard Teaching Style</li> <li>• Transferring Knowledge</li> <li>• Delivering Process</li> <li>• Achieving Standards</li> <li>• As a Practice of Previous Knowledge</li> </ul> <p><b><u>Site-Bounded Teaching:</u></b></p> <ul style="list-style-type: none"> <li>• Site-Bounded in Teaching</li> <li>• Separated Teaching</li> <li>• Bounded Teaching</li> <li>• Limited Opportunities</li> <li>• Mainly Institutional Experiences</li> <li>• As Site-Bounded and Separated Teacher</li> </ul>

Sources: Cheng, 2005

The individualization of teaching, teaching is a process of taking initiatives, facilitating the learning process of learners on an ongoing basis, provide an opportunity to explore and self-actualization. Thus, teachers must play a role as a facilitator or a mentor who works to give suport to the learning process of

learners. The focus of teaching is the growth of the high curiosity of the learner and motivation to think, act,and learn.

Besides teaching must also be able to create a fun atmosphere in each process and provide a positive impact on learners. Class organization

becomes very important to form a teaching that is fun and avoid the tedious teaching much less boring or intimidating. For teachers / lecturers themselves, teaching is a process of lifelong learning. A teacher / lecturer if you stop learning then he is worthy stop teaching. Conduct research, experiments, aktualiasi self, self-reflection, writing books, writing materials in order to develop professionalism as a teacher / lecturer is a must. Wiwekasanga teachers or lecturers are teachers / lecturers who can model for students to develop contextual wiwekasanga multiple intelligences. Each teacher has the potential and unique personal characteristics, so that each teacher / lecturer can be taught with different styles to maximize its contribution in teaching and education.

In the teaching of localization and globalization, the new paradigm emphasizes the one thing that teaching should be facilitated in such a way that the sources of knowledge derived from the components of local/national and global/international donation and maximize opportunities for teachers in developing learning and its contribution to the study participants learners. Many local and national knowledge with superior value that can be used as a source of learning and teaching resources. Sources of local knowledge such as the concept of *Taman Siswa* education, development concept of *Tri Hita Karana*, Subak technology in Bali, the natural wealth in the forest and the sea, literature, art works, kerawitan and so has the value of local excellence worthy as a learning resource.

Through localization and globalization, there are a variety of teaching resources such as self-learning packages, web-based learning, bring in experts, community programs independent village, cooperation within and outside the country. Teachers can maximize the opportunities in dealing pemngajaran by maximizing learning resources from

## **6. Paradigm Shift in Curriculum and Pedagogy**

Traditionally, the curriculum is usually intended to meet students' needs for knowledge and skills to survive (survive) in the local community and social development in the region together. What about triplisasi paradigm, where the objectives of the curriculum should terplisasi with the ability to build students as leaders and educated citizens

the network locally, nationally, and globally via the internet, web-based teaching, video conferencing, cross-cultural exchanges, and several sources of interactive multimedia. Instead of the traditional paradigm, teaching is seen and understood as part of the reproductive process and the recall of existing knowledge. In the reproduction of knowledge-based teaching of teachers or lecturers to be the center of education. Teachers are seen to have some technical competence, social, and professional in delivering knowledge to learners. Teachers / lecturers to teach some of the models and patterns to meet the security standards of standardized knowledge even though we know the potential, talents, and characteristics of each indivisu different learners. Their main job is to transfer some knowledge and skills to learners. Thus the teaching is often associated with discipline problems, presentation, training, and socialization processes. Teaching is also understood as the hard work of achieving external standards with a centralized authority.

In the traditional paradigm, teaching is limited to the scope of the institution whether it be school or university. The main educational institutions conducting teaching and teacher as the primary source of knowledge. Teachers / lecturers are often taught by a separate and remain responsive to the impact of teaching. They have few opportunities to support learning. Limited to standardized teaching curriculum with textbooks and some material related to the institutions and authorities. The teachers and teaching is often stranger than the context of changing local and international community. Based on the traditional perspective, the teacher explained constrained by institutions and indivisible, and less to have views and insights globally and regionally in the developing world-class education for the participant students.

wiwekasanga intelligence in a global village with the characteristics of growth and development aspects of technological, economic, social, political, cultural, artistic, spiritual, emotional self in atmosphere of learning without stopping. According to Cheng (2005) a paradigm shift in learning and teaching and curriculum design and a paradigm shift in pedagogy is as shown in Table 7.

Table 7. Shifting Paradigm Design Curriculum and Pedagogy

Wiwekasanga-Triplisasi Paradigm	Traditional Paradigm
<p><b><u>New Curriculum Aims:</u></b></p> <ul style="list-style-type: none"> <li>• To develop students as CMI leaders and citizens who will creatively contribute to the formation of a CMI society and a CMI global village</li> </ul> <p><b><u>New Curriculum Characteristics:</u></b></p> <ul style="list-style-type: none"> <li>• CMI-Focused Curriculum</li> <li>• Triplized Curriculum Structure</li> <li>• World-Class and Globalized Curriculum</li> <li>• Localized Curriculum</li> <li>• Individualized Curriculum</li> </ul> <p><b><u>New Pedagogy Characteristics:</u></b></p> <ul style="list-style-type: none"> <li>• Facilitating Students' LifeLong Self-Learning</li> <li>• Multiple Sources of Learning and Teaching</li> <li>• Globally and Locally Networked Learning and Teaching</li> <li>• Worldwide Networked Pedagogical Environment</li> <li>• Boundless and Unlimited Opportunities for Learning Inside and Outside Institutions</li> <li>• Pedagogy is Based on <i>Wiwekasanga</i> Theory of CMI Development</li> </ul>	<p><b><u>Traditional Curriculum Aims</u></b></p> <ul style="list-style-type: none"> <li>• To equip students with the necessary knowledge and skills to survive in a local community or meet the manpower needs of a society</li> </ul> <p><b><u>Traditional Curriculum Characteristics:</u></b></p> <ul style="list-style-type: none"> <li>• Subject Focused Curriculum</li> <li>• Standard Subject Curriculum Structure</li> <li>• Subject-Bounded Curriculum</li> </ul> <p><b><u>Traditional Pedagogy Characteristics:</u></b></p> <ul style="list-style-type: none"> <li>• Delivering Knowledge and Skills to Students</li> <li>• Site-bounded Sources of Learning and Teaching</li> <li>• Separated Learning and Teaching</li> <li>• Classroom-Bounded Pedagogical Environment</li> <li>• Fixed Period, within Institutions, and Limited Opportunities for Learning</li> <li>• Pedagogy lacks a clear linkage with CMI development and it is often driven by the delivery of subject knowledge and external standards in examinations</li> </ul>

Sources: Cheng, 2005

In the traditional paradigm focused on the content of the curriculum design and delivery of subject knowledge in some particular field or specialization. Curriculum structure is based primarily on the knowledge and needs standardized. Curriculum structure is usually linear, its own and relies on subject matter content. What if a world-class curriculum or globalized, localized, and individualization.

On the other hand, a new paradigm focused on curriculum design for the development of CMI *wiwekasanga* students and the ability to build triplization in learning and developing themselves. Thus the design of curricula based on the characteristics of the development of CMI *wiwekasanga* and maximize opportunities for the development of individualization, localization, and globalization on the student learning experience. Curriculum structure is usually a hybrid, integrative, and interactive with the development of IT, network, local and global growth, field experience, and reality, bring different needs of students and society in the future. The contents of the new curriculum should be world class and globally, encourage continuous world-class materials and design for learning and teaching process that maximizes its relevance to the needs and global developments as well as community development where future. Curriculum content should also be relevant to the globalization of technology, economics, social development, ecology, art and culture, and learning.

Localized curriculum consists of local sources, local materials, and concern on the suitability and the needs of the community in maximizing student learning opportunities locally. Community-based curriculum is one type of model to increase local

relevance dandudukan field. Technological, economic, socio-ecological development, cultural arts, and learning that is local is also an important area of the contents of the new curriculum.

The individualized curriculum is designed contain or contains objectives, contents, methods, and schedules are fleksibel and adaptabel in meeting the needs of individual students, facilitate self-learning/self-study and self-actualization them in order to optimize the potential of students to openly self-triplisasi as intelligence leaders multiple contextual and as citizens.

Characteristic shift from the traditional pedagogy that emphasizes the delivery of knowledge and skills-based subjects to a new paradigm that gives more assurance to the students to perform self-actualization, find, gain experience, enjoy, and undergo the process of self reflection. Teachers inspire and students are strongly motivated and able to reward themselves become part of the process of self-learning.

## 7. CONCLUSION

Multiple globalization makes VET society in Indonesia more diversified and multifarious and moving towards a learning CMI society. Our new generation should be prepared as a CMI *wiwekasanga* person in such a fast changing and interacting with local and global development. Reconceptualization the aims of VET should be to develop students as CMI *wiwekasanga* leaders and citizens who will creatively contribute to the formation of a CMI society and a CMI global village with multiple developments in economic, political, technological,



arts-cultural, emotional-spiritual, social-ecological, intellectual, kinesthetic, and learning aspects. The new VET based-on *wiwekasanga* should facilitate the triplization of learning and make its process interactive, self-actualizing, discovery, enjoyable, and self-rewarding. VET curriculum and pedagogy should triplized and also CMI *wiwekasanga*-based, that can provide world-class learning from world class teachers, experts, peers, and learning materials from different parts of the world in any time. A new concept VET based on *wiwekasanga* intended to develop the existence of VET are socialized congruent with the vision of society in the dimensions of local, national, and global. Thi is a new concept of VET which is expected to grow in a balanced and sustainable social harmony and progress together, the harmony of the environment, cultural preservation, and effective in performing repairs terlaltih educated workforce.

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