



Plagiarism Checker X Originality Report

Similarity Found: 26%

Date: Jumat, Juli 05, 2019

Statistics: 2063 words Plagiarized / 7987 Total words

Remarks: Medium Plagiarism Detected - Your Document needs Selective Improvement.

INTEGRATING VIRTUAL TRAINING ENVIRONMENT INTO VOCATIONAL HIGH SCHOOL TO FACILITATE CHARACTER EDUCATION TO DELIVER A PROFESSIONAL WORKFORCE
Hendra Jaya¹, Sapto Haryoko² Abstract The success of workers in the electronic field is not only determined by the mastery of hard skills but also of soft skills. The soft skills can reach by using an Information Technology (IT) through multimedia. A New technology introduced based on virtual reality for training activity.

Virtual laboratory consists of collaborative learning, training program, and student's character assessment form. Virtual training was developed in productive subjects are supported by the software authoring tools web based. Virtual training are interactive, dynamic, and animatif, not boring and can to support the user desires to learn and understand training material.

Virtual training improved the competence students of vocational high school in the form of cognitive aspect, psychomotor aspect, and character (affective) aspect. Through integrated virtual training environment into student of vocational high school in facilitating character education become a basic to prepare the student to entering in the workplace. Character education should begin in the vocational high school to improve the competence of vocational labor force.

This paper is proposed to facilitate the character education through virtual training environment. It is a fact that virtual training has been a scope of interest for vocational training for a very long time. However, it needs more time to be more common in all specific training fields.

Interactive teaching program was developed and put into a website to form a virtual

training centre. Keywords: Virtual Training Environment, Character Education, Vocational high school.

1.

Introduction During the 1960's and 1970's, teaching and learning tools were nothing but a piece of chalk and a blackboard, eraser, teachers and students who met each other face to face inside the classroom during class. In the 1980's, videotape programs were used as teaching aids. In the 1990's, one-way teaching by computer arrived. And finally today's advanced computer and information network technology has introduced radical innovative breakthroughs in our teaching and learning methods as well as in the learning environment.

Students can listen to their teacher or trainers in distant classrooms through PC's and get a simultaneous view of their teachers and texts as well. They can ask questions and record the "class" for repeated viewing. Training organizations can conduct professional training directly via the computer network. These learning environments are not so different from a teacher-guided class with discussions and tests as well [1].

One of the concrete future strategic objectives of education and training systems in vocational high school is the improvement of the quality and the effectiveness of education and training systems in the workplace. This includes improving education and training for teachers and trainers, developing skills for the students, ensuring access to ICT for everyone, increasing recruitment to scientific and technical studies, and making the best use of resources.

The second strategic objective is facilitating the access of all to education and training systems. This objective includes open learning environment, making learning more attractive, and supporting active citizenship, equal opportunities and social cohesion. 2.

Distance Learning Traditionally, distance learning is defined as a means of providing access to educational courses or programs for students who are separated by time and physical location from a teacher.

The courses or educational programs are packaged as a collection of lecture notes, exercises, assignments, and examinations assembled in the form of either a binder, a set of cassette tapes, or CD-ROMs, or a set of video tapes that an institution ships out to a distance student. The student who is an isolated learner, meeting certain predetermined deadlines, sends back the course work and completes the course with little or no interaction with teacher or

Proceedings of ICVET 2011 | Universitas Negeri Yogyakarta |
9 July 2011 ISBN : 979 820 450-6 course monitor.

Unfortunately, this perception of distance learning still prevails. Today's information technologies and web-based software packages such as Lotus Notes provide resources to simulate a classroom in a virtual setting allowing a rich interactive distance learning experience, which in some cases can surpass the interactivity of a traditional classroom.

Considering extensive use of information technology we, thus, define or rather redefine distance learning as "interactive distance learning" that provides a virtual classroom using interactive technologies such as web, internet, multimedia, etc. Instead of teaching, it promotes learning experiences based upon a variety of interactions including teacher with students, students with other students, students with other experts in the field, students with resources such as posted lecture notes, reference books, other web sites, etc.

Through the use of technology, these interactions can occur at any time or place providing a 24X7 hours learning environment [2]. Learning models are frequently described as points on a spectrum. As depicted in Figure 1, at one extreme is instructor-led training (ILT, also referred to as classroom training or direct instruction).

At the other end of the spectrum is a family of technology-based models including computer based training (CBT) and web-based training (WBT). Collectively, models at this end are grouped into the e-learning category. Blended learning occurs between the two extremes, which is a combination of direct instruction and e-learning.

Figure 1: Spectrum of Learning/Training Models Figure 2: Training Models Shown in Two Dimensions [13] 3. Virtual Training Environment - An Ideal Training Place The Virtual Training Environment models the new training environment, which is a place that students can customize their study in their own pace. Providing up-to-date training material and personal study guide, it is an ideal study environment for the 'life-long' learners.

The main goal of the Virtual Training Environment is to deliver the 'own-paced' material to the right person at any time. In the Virtual Training Environment, students can fully engage in the training process through an interactive, dynamic environment. The on-line material for each student is scheduled personally depending on his/her studying pace.

Consequently, students will not waste their time learning irrelevant or already-known material, while other students may fail to understand the material. In addition, the Virtual Training Environment supports group-paced learning. The collaborative facility allows students to accomplish group projects and discussions. The Virtual Training Environment not only transmits information to the students, but also provides forums

for exchange.

When group members participate and share their knowledge, their knowledge base increases and members continue to benefit [6]. This kind of real-time communication is not restricted to only peer interaction (student/student). It can also encourage active participation of students and the instructor in a shared task for understanding and applying the concepts and techniques that characterize a subject area [7]. 4.

Teaching Road Safety using computer applications A substantial amount of Road Safety teaching material consists of multimedia and hypermedia applications. What is easily ascertained is that almost all of them focus on knowledge acquisition. Very few include some form of road simulation, even so, student's active participation is limited.

In general, these applications present traffic situations with the use of static or animated graphics and ask student to make judgments about what to do next, if there is something wrong, what should have been done and so on. Even if this can be considered as a form of training in detecting dangerous situations, it does not train any of the crucial pedestrian skills.

Two research projects came to our attention that used computers for training specific skills [8]. The first one investigated the problem of distraction in children's attention and how audiovisual search strategies can be applied to help in partially solving this problem.

The second research project examined how the pedestrian skills of safe place finding, roadside search, gap timing and perception of others' intentions can be improved [9]. Training in each of the above skills was a separate module of the application, with four training sessions in each one. All modules shared the same small town setting and a common cast of characters to emphasise the relationship between the skills.

The activities in each training session were about making decisions on if, when or how the character that represented the child in the Proceedings of ICVET 2011 | Yogyakarta State University | 9 July 2011 ISBN : 979 820 450-6 application should cross the street. When a decision was made, the character crossed the street and the computer demonstrated the consequences of that decision.

Virtual Reality The two research applications presented in the previous chapter derive their theoretical background mainly from the theory of constructivism as it was shaped by Piaget and Vygotsky [9]. This is a common place for multimedia and hypermedia applications, because ideas of constructivism are easily realised. A basic attribute of

multimedia and hypermedia applications that renders them compatible with the theory of constructivism is that they allow non-linear access to the content, thus leaving students free to select their course.

In general, the main characteristics of a constructivist teaching approach -computer based or otherwise- as noted are [10]: a) it offers multiple and complex presentations of reality, avoiding simplifications; b) it engages students with authentic tasks; c) it helps knowledge to be constructed in relation to its content; d) it encourages practices based in reflection; e) it supports collaborative learning instead of competition amongst students.

VR applications encapsulate all the features of multimedia; hence, they also have close relationship with constructivism. However, VR holds a significant advantage over multimedia applications: it can present vastly more complex and realistic presentations of reality. The basis for this attribute is mainly technological, but from a cognitive perspective this happens because VR offers a specific type of experience and does not require the use of symbols [11]. It is worth analyzing this assertion. First we have to indicate the value of an experience.

The experience (virtual or real) with which an idea or a portion of knowledge is associated is important for the comprehension of the idea/portion of knowledge as much as for the use of it [12].

5. Discussion

The Virtual Training Environment (VTE) is a Web-based knowledge library for Information Assurance, computer forensics and incident response, and other IT-related topics.

Five important factors that contribute to learning were taken into account in order to prepare the training: 1) motivation, 2) aptitude, 3) presentation, 4) repetition, and 5) practice with reinforcement. The approach for developing the appropriate training material was based on the following key concepts: 1) motivation, 2) know your electronics identification, 3) prepare to write programs, 4) understand the motion types, 5) know the compensation types.

The VTE aims to improve the skills and competences of people to promote and reinforce the contribution of vocational training to the process of innovation, with a view to improving competitiveness and entrepreneurship, also in view of new employment possibilities. The specific aims of VTE can be defined as follows: a) training the trainers, trainees, technicians and apprentices and all enthusiastic about Electronic services; b) preparing technicians as intermediates having common measurable qualities the industry is seeking; c) helping to form a labour force that can use current knowledge and technology, and thus, in search for life-long learning; d) supporting the sectoral

communication through the national centres in partners; e) setting up a website to publish the data collected; f) adapting the collected materials to enhance the new curriculum satisfying the requirements in a modern sense; g) helping to improve and upgrade competences and skills of the involving institutions' didactic staff and exchange experiences over the virtual training environment; h) enabling the participants to extend the common educational qualifications of electronics services tools technologies; i) the accreditation of the skills and knowledge of electronics services tools technologies acquired within the network created between participating institutions and organizations; j) increase the quality of employment through qualified workers; k) helping to increase active use of technology acquired and thus to increase the standards; l) contributing to individuals by behaving through life long learning; m) having a labour power in accordance with common design and production standards; n) contributing to labour market by using the common technology and equipment effectively; o) helping to enhance available potential of human sources.

Target groups include trainers, trainees, technicians, apprentices and all enthusiasts about Electronic Services. The final and potential users of the project's results are the training organisations, the dealing with electronics repair, and the universities, colleges, vocational schools, and training centres.

Students need to develop the necessary skills and methods that will eventually render them capable of tackling complicated traffic situations. The most effective teaching method is expected to be one that simulates nearly real traffic conditions. Solutions, like traffic parks, roads closed to traffic and even a 'pretend road' method, were tested by research teams for their effectiveness and found to produce positive outcomes. Nonetheless, it is impractical to incorporate such methods in everyday school teaching.

Such solutions would require a number of actions and prerequisites that are time consuming, expensive and depend on imponderable factors. Among others, the requirements include finding the appropriate location for the 'pretend road', construction of the necessary infrastructure, transportation of students to and from that location, hiring and training a sufficient number of adults who will act as guides- tutors to students, revision of the school's curriculum and timetable and finally good weather that is needed for outdoor activities.

Considering all the above on a national scale it is obvious that a more practical, feasible and cost effective solution is needed. In the field of ICT, Internet and multimedia are the prevailing type of applications. The problem is that applications of this type aim at knowledge acquisition, which is not the major factor in Road Safety.

A very limited number of them focus on training skills, with encouraging results. These applications can be described as 2D simulations of an environment, in which the user/student has to face a number of traffic situations. Simulation is the key element of their success. But simulations are more closely related to 3D rather than to 2D graphics.

Therefore one has to examine the possibility of using VR (a broader type of 3D simulations) in order to provide skill training. From a theoretical perspective, the underlying cognitive theory both in multimedia and in VR is constructivism. This theory suggests that knowledge is constructed and not simply transmitted through teaching, admits that each individual creates their own representations of the world, acknowledges that we learn via active exploration and finally points out that learning is a dialectic and interactive activity with our social environment.

VR encapsulates these ideas, through the non-linear exploration of the content, the provision of elements that arouse the learner's interest, interaction-collaboration with other users present and through manipulation of the environment's objects. All of these characteristics can also be found in multimedia applications. Nevertheless, the capabilities of VR extend even more, since it is possible to present vastly more complex and realistic environments.

Furthermore, first person view puts the user literally inside the virtual world, giving him/her the chance to have first person experiences, with the additional advantage -with the use of specialised hardware- of not having the need to use symbols for interaction with the virtual objects. The benefits of using VR for training environment: a) Training needs to be done in a manner very close to real traffic conditions.

No other training form; b) conventional or ICT based- can provide students with enough elements that will help them improve co-ordination of information from different directions, visual timing judgments, coordination of perception and action. An obvious example is pilot training using simulators. It is possible to simulate traffic situations that are very complicated to be presented in reality, or extremely dangerous for students to be exposed; c) Contrary to other teaching techniques, in VR, students are not limited to third person experiences in order to acquire the necessary knowledge, thus missing, to a large extent, the benefits offered by first person experiences; d) The elevated degree of interaction with the virtual world gives students the chance to test alternative approaches in a traffic situation, to experiment and learn from their mistakes; e) The playful character -VR applications are, up to a degree, very similar to modern computer games stimulates students' interest and gives extra incentives for learning; f) The teacher can be present in the virtual world.

Therefore, different teaching styles can be implemented. For example, collaboration between students, guided tutoring, or a combination of collaboration and tutoring is possible. The virtual training facilitate the character education through the job sheet or piece assesment to show a level of character of the students.

Media of training will be design by using a character education. Figure 3. Virtual Training Electronics Service 6. Conclusion The integration of ICT in this virtual training environment for electronic services course, the student demand and interest in increasing the quality of education through ICT.

At the national level, integration of ICT should become a key priority with national and regional institutions making a commitment to ICT and the development of networks. Virtual Training Environment addresses the strategic objectives mentioned above: Proceedings of ICVET 2011 | Yogyakarta State University | 9 July 2011 ISBN : 979 820 450-6 improving the quality and effectiveness of education and training systems in vocational high school by developing skills for the knowledge society, ensuring access to ICT for everyone, increasing recruitment to scientific and technical studies, and making the best use of resources.

Facilitating the access of all to education and training systems by providing open learning environment, making learning more attractive, and supporting active citizenship, equal opportunities and social cohesion is the other strategic objective that can be achieved through this virtual training environment. REFERENCES [1] M. Sahin, S. Yaldiz, F. Unsacar, B. Yaldiz, N. Bilalis, E. M aravelakis, A. Antoniadis. Virtual Training Centre for Computer Numerical Control. Int. J.

of Computers, Communications & Control, ISSN 1841-9836, E-ISSN 1841-9844 Vol. III (2008), No. 2, pp. 196-203. [2] Khalid J. Siddiqui and Junaid A. Zubairi. Distance Learning Using Web-Based Multimedia Environment. Department of Mathematics and Computer Science SUNY College at Fredonia, Fredonia, New York. [6] Karen E. Goeller, "Web-based collaborative learning: a perspective on the future", Computer Networks and ISDN Systems 30 (1998) 634-635. [7] Lynnette R.

Porter, "Creating the virtual classroom: distance learning with the Internet, New York: J. Wiley & Sons, c1997. [8] Emmanuel Fokides. Virtual Reality in Education: A Theoretical Approach for Road Safety Training to Students. Aegean University. European Journal of Open, Distance and E-Learning. [9] Tolmie A., Thomson J., Foot H., McLaren B., Whelan K.

(1998), 'Problems of Attention and Visual Search in the Context of Child Pedestrian Behaviour', Department of Transport, Road Safety Report No. 10. [10] Jonassen D. H. (1994). Thinking technology: Toward a constructivist design model. Educational Technology, 34(4): 34-37. [11] Winn, W. (1993). A Conceptual Basis for Educational Applications of Virtual Reality. Human Interface Technology Laboratory, Report No. TR-93-9. [12] Jonassen D. H. (1994).

Thinking technology: Toward a constructivist design model. Educational Technology, 34(4): 34-37. [13] Jim Wrubel, David White, Julia Allen. High-Fidelity e- Learning: SEI's Virtual Training Environment (VTE). Carnegie Mellon University.2009. Proceedings of ICVET 2011 | Universitas Negeri Yogyakarta | 9 July 2011 ISBN : 979 820 450-6 NATION & CHARACTER BUILDING; TO DEVELOP AND MAINTAIN THE STABILITY OF PROFESIONALISM TO ACHIEVE OPTIMUM PRODUCTIVITY AND QUALITY Dra. Hamiyati A affiliation Ilmu Kesejahteraan Keluarga-Fakultas Teknik-Universitas Negeri Jakarta hamiyati32@yahoo.com Abstract Indonesia has the nation's ideals the realization of a prosperous society, noble in behave, and noble character with a republican form of the unitary state of Indonesia based on national unity and integrity, to make it happen required the construction of nation character building and the hard work of all components of the nation together - together to defend the interests of all countries, in order to compete with other nations in facing challenges in the global era, there are several challenges at once with the alternative government policies in anticipation of education and employment problems in Indonesia.

Of which is the world's changing, competitive world, new economy, required competencies, and regional autonomy, Indonesia must ensure the readiness of human resources that are reliable and able to compete globally di era this, for the sustainability of development, one of the main factors that determine the success of development is the availability human resources quality, which has the competence needed for the development of industry and other sectors, it takes a comparative advantage and competitive advantage will enter the labor force labor market competition, professionalism and work ethic can not be separated, by means of adequate education infrastructure and will get a professional graduates. Keywords: Nation character building, human resources, professionalism, and competitive advantage 1.

Preliminary Professionalism is one of the foundations to achieve optimum productivity and quality, to achieve a steady professionalism required some prerequisites, such as education and knowledge, the quality of education and knowledge of the community is equipped to compete in life, especially in terms of work, education and knowledge in a broad sense including the formation of work ethics, technology and skills (competencies).

Without a clear competence and good work ethic, it is difficult to work professionally. Curriculum improvement is a priority in order to increase knowledge in line with the development of skills and expertise needed to meet the employment market, there are actually five aspects that need to be addressed in education, namely the hardware (physical facilities), software (curriculum and learning systems), brainware (teachers, students and parents), network (cooperative network), and dataware (data muridgurululusan).

need to be inculcated early on a passion for entrepreneurship, so that knowledge learned in school can be practiced for the development of technology and living facilities, for, every student has equipped students with life skills (life skills) and entrepreneurship (entrepreneurship), so it can ease the burden of family and communities that have been loaded. Education is one of the important pillars in nation-building.

High-low degree and position of the nation can be seen from the quality of education that is applied. Appropriate and effective education that will give birth to the children of intelligent, moral, has a work ethic and innovation are high. The whole countries that have managed to achieve progress in the mastery of technology and civilization begins by giving great attention to national education.

It is done in an effort to support, oversee, and continuously improve the system of education for their people. Streamline the process of education that instills a spirit of freedom and independence by cultivating the soul entrepreneurship for the existence of learners in the future through improved life skills and fighting spirit (adversity quotient).

Curriculum development efforts are directed to a balanced learning experience of the intellectual aspects (IQ), emotional (EQ), and spiritual (SQ) and implemented in a learning environment that is inclusive and free from discriminatory attitudes. Education needs to form the character of learners for students to possible learners can be lifelong learning.

In addition to education and knowledge, skill is also one critical requirement. The current global era of much-needed skills, even for some types of skills must be supported by a certificate of competency (certificate of competence coc). Independent practice or internships to equip themselves with appropriate skill levels and fields, [Proceedings of ICVET 2011](#) | Yogyakarta State University | 9 July 2011 ISBN : 979 820 450-6 and get a certificate of competency in order to compete in a global era.

To the later, public health is indispensable to improve the quality, the public health community can create power; who were on welfare and the estuary is one of the foundations to achieve the national security. Health care was held in plenary, covering aspects of physical, emotional and mental. Physical health is maintained and enhanced by ensuring adequate nutrient supply, particularly of infants and children, because they will become the successor to future generations.

Emotional health is done by creating conditions for a peaceful family and a peaceful environment, as well as a positive association, especially among children children and adolescents because this is when the character of a human being is formed. While it pursued a healthy life by promoting religious values and environmental transcendental cultural progressive, so that everyone can control the people living an increasingly heavy pressure, with a productive creative energies on the right target.

The health sector reform aimed at improving infrastructure(houses pain clinic),increased the capacity of medical and paramedical personnel, and provision of medicines and medical devices are reachable. Leadership or a persona that will either support the work ethic and professional enough for a person or group. Entrepreneurship is the nature and attitude that must be owned by all components of the nation to foster community self-reliance.

Entrepreneurship can improve the productivity of the public to participate in wealth creation. Investment and the value of independence social solidarity are two sides of the formation of character (character building) that can not be separated. Often culminating in social problems conditions that have the attitude and behavior(mental models)are not in line with the changing times.

Those who behave bad and always rely on the kindness others, including government policy intervention. Therefore necessary to build new confidence and independence as a starting point value changes. The soul of independence instilled from childhood to adulthood would make every individual is able to solve problems in their respective environments, without waiting for instructions or outside intervention.

However, a spirit of independence which to encourage it should not lead to symptoms of individualism and egoism, because it would undermine the social capital that have been stocked. Individual independence is built on the foundation of social solidarity that must continue to be expanded. Thus, forming a community that loves ko virtue.

Irrespective of how the problem will be addressed, if this nation build a new national solidarity that unites a group all of society. One reason for the high number of

unemployment and poverty in Indonesia is the lack of optimal utilization of resources with fixed based on the sustainability of the system. Many of the nation's dependence on foreign Indonesia (especially economic) of them due to lack such optimization. 2.

Discussion One concept that can be used **as a framework for** achieving goals - goals are the nation's independence and nation character building or the nationality and character development. Concept N & C Building namely national security, nationality, character (character development among other nations towards nations that have the identity characterized by having a democratic and human nature), and welfare, national character development can be done through several ways, as in the following description. 2.1

Developing qualified nation character building "To build Indonesian human intelligence, piety social, and cultural advancement for the sake of raising the dignity of the nation". mission can only be executed by strengthening exemplary factor in various fields, in a more heroic, the mission can be translated as "delete stupidity, social violence, and cultural backwardness," because we see ignorance (poor quality of education), violence (the loss of civility and peace in resolving any conflict), and backwardness (stagnation and cheese Mudan) as a social enemy of the whole nation, to build intelligence not only from the side intellectual rationality (IQ).

But also covers the emotional side (EQ) and spiritual (SQ), so completed the human figure that will be built up (perfect man). A very necessary quality in a social situation that is being dogged by the disaster. The new man is born through the coaching process and the cadre was very aware of her position and goals to be achieved.

They are not experiencing an identity crisis as seen in some people around him, so that they can play a role as an element of environmental modifiers and steering people toward a common goal that has been launched. The new generation is also well aware of the reform agenda should they stand for. And in line with the ideals of freedom that has diproklamsikan long ago, they did not waver and dissolve in the changes times, even became pillars guard the values of struggle and create a new stream that will save people from dilapidation and destruction of social.

Intelligent man who not only think about the interests and safety of themselves, but think about the interests and public safety. The best human being will be fostered is their greatest contribution to society and those who **Proceedings of ICVET 2011 | Universitas Negeri Yogyakarta | 9 July 2011 ISBN : 979 820 450-6** implement their adherence to the creator by doing good and serving as all creatures.

Personal piety that accumulation became public piety will establish a positive environment for the development of the entire human potential (humanity) and citizenship (citizenry). It reflected the increased work ethic. Attitude will open a new creation and innovation, and strong social solidarity, with human support a new generation. Then the nation's identity crisis and modalities can be overcome, those who would change the conditions of underdevelopment into cultural advancement, personal improvement not only physical nature.

However we develop universal values of humanity, so that each citizen to realize the function and role of his life as a servant, leader, and builder of new civilization. Collective progress is also not just physical and material, but the proliferation of values and institutions of charity, and the depletion of the values and institutions into the vice. Cultural progress for this nation means a nation reawakened to her identity that has long been eroded.

All mission changes and improvements to community conditions will not be met without the presence of a person or group of people who spread the exemplary model (role model). Example in the private sphere (consistent character and reliability), family (harmonious and productive), society (harmonious and innovative), and the nation (beretos high and virtuous).

Appearance of a new generation who have competence in various areas of life will overcome the crisis that policy can not touch the concrete problems of society and end the crisis exemplary among formal authorities. Heavy mission will be achieved with a solid strategy and precise, ie, "improve quality of life and create social harmony in a cultural environment which is progressive and open".

Quality of life of residents viewed comprehensively, including the adequacy of the primary needs (food, clothing, housing, vehicles and accounts), secondary (safety, business opportunities and civil liberties), and tertiary (freedom of expression, thought and creativity). Besides that, the increasing quality of life vertical-transcendental (faith in the omnipotent) and horizontal-sosietal (relationships with fellow human beings) would create social harmony that is needed by all her citizens, so that the rights and obligations can be done perfectly improved quality of life and embodiment of cultural harmony within the framework of a forward (future-oriented is better) and open (to learn from the environment locally, nationally and globally).

This strategy will be outlined the importance of seeding new values (cultural), the new actors coaching in various sectors of life (personal), as well as changes in social structures, political and economic desired (structural). This strategy is run simultantly, do

not exaggerate or rule out one factor in above and below other factors.

However, attainment targets tailored to the actual development of society. In a closer to reality with a vision, then arranged the main steps and supporters, these measures are more detailed and concrete explanation of the mission that has been outlined, as all these measures are related to each other and complement each other.

Of any steps we began efforts to solving the existing problems, then it will eventually be met, and you need support from the other side, the main steps are: a. Fulfillment of Basic Needs b. Education Participation Improvement, Quality c. Plenary Health Services d. Investment Value Independence and Social Solidarity e. Progressive Culture Movement It's enough that we talk about culture in the conceptual level-academic, it is time to mobilize a new progressive movement in terms of: artist enlightened cadre, the formation of cultural communities in urban and rural areas, as well as assembling a network of local culture, national and global.

Thus the new cultural heritage of Indonesia highly appreciates the local culture / traditional as well as being selective / adaptive to the current global culture / modern. We **can no longer be** a nation that closing down or being humble, because we aspire to be an important contributor to world civilization. To strengthen and complement the main step, then we set a number of steps supporting comprising: a. Sakinah Family Development and Productive b.

Partnership development between Type c. Youth Leadership Development d. Arts and Creativity Development Populist and Religious Culture e. Structuring Information and Communication Channels Family coaching is an important step that will determine the condition of society as a whole. Social acceleration that occurs as a result of modernization and urbanization are challenging family values (family values), because humans have now been boxed-boxing as a small unit of a giant machine production.

Some residents have experienced alienation and social life in a cracked frame, they just appreciated the sweat and sheer skill, mental and social needs are being neglected altogether. If the condition of alienation is allowed to continue, it will bring its own turmoil, at least will increase the diversion and social vulnerability. To prevent and reduce social problems, then the condition of the family must be strengthened in a climate sakinah (peaceful), mawaddah (love) and mercy (love each other).

The family played a role as a social safety net with spur and melesatkan aspects of creative / **Proceedings of ICVET 2011** | Yogyakarta State University | 9 July 2011 ISBN : 979 820 450-6 productive, in order to address the problems of p overty and

unemployment can be started from the smallest institutions. Families are independent and empowered actually become the foundation of societal expectations, not merely the burden to be borne by the state.

Pioneering youth in the social aspect (as the glue between the elements of a plural society), economic (generating entrepreneurial spirit to push the unemployment rate), politics (battering ram feudalistic and authoritarian system towards a consolidated democracy), defense (guard the sovereignty of the nation), and security (supporting social order). Multi-faceted role that must be managed systematically through a cadre in the whole field.

The energy of youth is very large, so it needs to be delivered and optimized in scholastic achievement in the arts, sports, science and technology. It was time to seriously scouted potential of young people most likely at the global level with a very tight competition system. All were intended to make this nation truly recognized his greatness, not only in terms of geographic and demographic quantitatively, but **because of the superior** quality of human resources.

Stability of relations between adherents of different religions will become an essential foundation for the birth of the nation's religious and civilized noble. One aspect **that can not be underestimated** in this era of globalization today is the management of information in a positive and open and equal communication and enlightening.

In fact, it must be admitted that the development of information technology and rapid communication are **the main characteristics of** world civilization in the present and future. So far we become a nation of consumers against invasion of information and communications products from other countries. In fact, the unity and sovereignty of this nation that comprises thousands of islands and united with the hundreds of straits and seas, in desperate need of a solid network. Socio-cultural fundamentals that must be rebuilt as follows: a. Indonesian human personality is tough to face diverse challenges; b.

A disciplined society and culture high employment c. Mutual trust between people of different backgrounds; d. High religiosity and spirituality. The four fundamental aspects that are built through character building programs (personal disciplines), nation building (national culture), social-trust building (social cohesiveness), and spiritual purification and enrichment (/ enrichment of the soul). 2.2

Human Resource Development **To Achieve Competitive Advantage** In order for the purpose of human resources provide a greater contribution to the organization **to achieve competitive advantage** needed in planning appropriate strategies in an

integrated human resources. Activities of the HR strategy is based cooperation among HR departments in an integrated manner.

Activities based human resource strategy of cooperation between departments with line managers and human resources management involvement in explaining the vision and mission of the organization that DAPT outlined in the strategic business objectives. Three main objectives of this strategy greatly increases the performance of present and future **on an ongoing basis** so as to maintain a competitive advantage.

HRM strategy development process benefit the organization, namely: a. Defining HRM chance constraints in achieving its business goals b. Clarify new ideas on issues of HRM results- oriented and provide a broader perspectiv c. Perform tests of management's commitment to the activity, creating a process of allocating human resources for specific programs and activities. d.

Focusing on long-term activities are chosen by considering the first priority for 2 or next 3 years. e. Pursuing a strategy that focuses on the management of HR functions and staff development are a blessing. HR departments **can create competitive advantage** with four approaches, namely: a.

Strategic partners senior manager and line managers in implementing the planned strategy, translating business strategy into action with a diagnosis in organizations, namely the assessment system (assessment) and grouping the organizational practices with business objectives that can be formed at any level of organization. b. Administrative Expert, Become an expert in managing the implementation work as well so that the resulting output of low cost and efficient administration.

However the quality is guaranteed. This effort can be done by reengineering, including back to engineer human resources field. Become an expert administration need to master the two-phase re- engineering. First, process improvement, focused on identifying processes that are ineffective and plan an alternative method to improve the quality of care.

Both think the re- creation (value creation rethinking values) which the customer begins the process. So it can change the focus of work of what can be done into what should be produced. **Proceedings of ICVET 2011** | Universitas Negeri Yogyakarta | 9 July 2011 ISBN : 979 820 450-6 c.

Employee Champion, to mediate between e employees and management to meet the interests of both parties. With an increasingly strong business competition led to

charges against the employee the higher management. Therefore line manager must consider the circumstances relating to the employee.

First, reduce the demand (demand) by reducing the workload and balance with the resources owned by employees. Second, the level of resources to help employees define new resources (in the employees) so they can adjust to the needs of the organization. Third, the changing demands of a resource to help employees learn how to transform demand into the resourced. d.

Change Agent, become agents of change, refine processes and culture that can enhance organizational capacity for change. There are three types of changes: first, the change initiative, focusing on the implementation of programs, projects or new procedures. Both the change processes within the organization by focusing on how to work together optimally.

Third, cultural change will occur if the basic strategy of the business organization re-conceptualized. Fourthly it is a new role of the Department of HRM will be able to achieve competitive advantage by working with line managers and top managers. Competitive advantage will be achieved with three strategies, namely: innovation, quality improvement as well as cost reduction.

Some things that can be worn by each individual to develop himself, among others: a. Get to know yourself. b. Get to know one's own power. c. Get to know their own weaknesses d. Trying to develop interaction and open communication with the environment in a positive and educative. e. Getting used to always perform a self-criticism, self-evaluate, and develop a sense of humor. f. Trying to accept the situation rationally and objectively. g.

Getting used to always hold checking, and meticulous in every action. h. Having a goal in the stages of programmed time. i. Not imitate yourself to someone, but erect. The measures taken in self-development, are: a. Assess yourself: Get to know our strengths, our abilities, our interests and the various attributes of other issues. Consider our previous experience.

Describe the results of our findings in a summary form or recording. b. Researching ideas and opportunities: Looking at future opportunities. Seek and consider the relevant information. Marking sources of help and support. c. Making connections: Get feedback from our career development. Know your priorities and personal impulses. Combine the results of self- assessment by the choices available to us. d.

Doing action: Write and implement a plan of activities. Communicate effectively both orally and in writing to reach the target. Review our progress and observe the aspects that need to be learned for the planning of our future careers. Discipline and goal setting is a decisive factor in the management of our careers.

Discipline make us responsible and target-setting to determine how the careers we want can be achieved. According to David Mc. Clelland there is a prominent motivational pattern: a. Achievement motivation, namely a desire to overcome / defeat a challenge, to progress, and growth. b. Affiliation motivation, namely the urge to make contact with others. c. Competence motivation, namely the drive to do quality work d.

Power motivation, the encouragement that can control a situation. In this case there is a tendency to take risks and break down the barriers that occur. This property is mostly done / are the people who are involved in politics. Power motivation will not result in too bad, if followed by achievement, affiliation and competence motivation. The purpose of motivation are as follows: a.

Improve employee morale and job satisfaction b. Increase employee productivity c. Maintaining the stability of the company's employees d. Improve employee discipline e. Streamline procurement employee f. Creating an atmosphere and a good working relationship g. Increasing loyalty, creativity and employee participation h. Increasing the level of welfare of employees i. Heightens the sense of responsibility to employee duties.

j. Improving the efficiency of the use of tools and raw materials Human Resources Management have an obligation to understand the increasingly complex changes that always occur in the business environment, must anticipate changes in technology, and understand the international dimension which began to enter the business due to the fast growing information. Paradigm shift of human resource management has provided a different focus in carrying out their functions within the organization.

Proceedings of ICVET 2011 | Yogyakarta State University | 9 July 2011 ISBN : 979 820 450-6 There is a tendency to recognize the importance of HR in the organization and focus on the contribution of the HR function for the successful achievement of corporate strategy. This can be done by integrating the company's decision-making strategy with HR functions, the greater the opportunity to gain success.

Level of integration between strategic planning with HR functions are manifested in four kinds of relationships: a. Administrative Relationships Here top managers and functional managers with other regarded HR function is relatively unimportant and saw man not as

a limitation as well as assets of the company in making business decisions. b. One Way Relationships There sequential ties between strategic planning with HR functions.

HR function design programs and systems to support corporate strategic objectives. So the HR reaction of strategic initiatives but has no effect, because even though it was considered important but not yet regarded as a strategic business partner. c. Two-Way Relationship Characterized by reciprocal relationships and interdependence between the human resource strategy planning.

HR function is deemed essential and can be trusted. HR plays a role in determining the company's strategic direction and has become a strategic partner. d. Integrative Relations Characterized by a dynamic and inter- relationships between the active HR functions and strategic planning. Here, the HR manager is seen as truth stategis and business partners involved in strategic decisions.

Associated with the development of integrative relationships, it can be done with due regard, a few things, namely: a. Environment: The Power of an environment that was instrumental in carrying increased competition, technological changes and changes in labor femography b. History and culture of the organization: organizational culture that oriented on a strong human resources capable of developing a natural relationship between human resource activities with strategic planning. c.

Strategic: Strategies focusing on one type of core business can boost the potential for the creation of relations of strategic planning with human resource is increasingly integrated because it allows the development and implementation of programs and human resource systems across the agency, d. Structure: The placement of units of human resources in organizational structure, senior human resources executive was given the same status as other functional directors e.

The skills and values espoused executive: human resources have a good knowledge of business and are able to provide input into the strategic planning process. f. Skills and Values Employee owned: HR functions received aid management to solve the employment problem will reinforce the importance of HR functions. g. Management System which includes reward systems, communication systems and human resources so that human resource information and planning strategies will be more integrated if the senior executives have a substantial percentage of compensation bear the risk. h.

Communications systems that have the goal of building awareness of managers of the company's strategic tujaun and encourage them to encourage their subordinates to develop the motivation of human resources database is supported with a

well-developed. Referring to the above description, that one of the development of integrative relationships are through the environment.

Learn about the environment, of course, we must understand the system of environmental management. All human activities have an impact on the environment. With the development of economic activities and technology that gives him the ability to perform engineering and increase energy use. Our attitudes and behavior towards environmental stimuli are dominated by economic considerations, sometimes even excessively so as to encourage the exploitation without being followed by an adequate protective measures.

Such behavior is also influenced by the lack of knowledge or lack of respect for the ecological functions of the environment that provide services to humans, resulting in damage to the environment. For that **we need to change our** attitudes and behavior to be environmentally friendly behavior. Changing attitudes and behavior is not an easy job. Environmental management systems are now recommended are the System of Self-Set.

Regulate itself is certainly not in an absolute sense. The government still has authority to supervise and regulate. With the growing democracy and education, the public would be more able to conduct surveillance. ADS is the meaning more people have a responsibility to maintain compliance and law enforcement.

ADS has begun to evolve in the Indonesian business world, for example, many companies are trying to get ISO-14000. For example the chemical industry in Indonesia has begun moving toward the ADS which is the **Proceedings of ICVET 2011** | Universitas Negeri Yogyakarta | 9 July 2011 ISBN : 979 820 450-6 practice of voluntary environmental management a ssociation international chemical industry.

The key to the success of the business world in the application of ADS is to change the view of the environment as external factors of business becomes an internal factor of business. Internalization of the environment into business strategy opens the possibility for development of an integrated business environment. This view is diametrically opposed to the common view that the internalization of environmental life gives bad impact to business because businesses have to bear the environmental costs currently charged to the environment and society. 3.

Conclusion Based on the description of material mentioned above, especially regarding the definition of qualified national character development **and human resource development** in order to achieve competitive advantage, it is expected that the more

insightful character development in acts the various issues of nationality and weak human resource capacity, as well as the existing environment.

Thus, it can be more wise and prudent alternatives provide solutions to overcome the problems of nation and character building management.

INTERNET SOURCES:

13% -

<http://digilib.unm.ac.id/files/disk1/3/universitas%20negeri%20makassar-digilib-unm-hendrajaya-130-1-hendraj-.docx>

1% - http://elektro.um.ac.id/ceie/2013/download_pdf/el/10.pdf

<1% - <https://www.sciencedirect.com/science/article/pii/S0360131516300227>

<1% - <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.528.2703>

<1% -

<http://www.m3.tuc.gr/ANTONIADIS/13.%20INTERNATIONAL%20CONFERENCES/13.46.pdf>

<1% - <https://sciemce.com/>

<1% - <https://www.osha.gov/shpguidelines/education-training.html>

<1% - http://europa.eu/rapid/press-release_PRES-01-179_en.htm

<1% - <https://numerons.files.wordpress.com/2012/04/7distance-learning-using-web.pdf>

<1% - <http://www.cs.fredonia.edu/~zubairi/aiworc00.pdf>

<1% - <http://flinders.libguides.com/evaluate>

<1% -

[http://www.cse.cuhk.edu.hk/~lyu/student/mphil/sam/apweb99/A%20Web-based%20Customized%20Virtual%20Learning%20Environment\[apweb99\].ppt](http://www.cse.cuhk.edu.hk/~lyu/student/mphil/sam/apweb99/A%20Web-based%20Customized%20Virtual%20Learning%20Environment[apweb99].ppt)

<1% - http://www.cse.cuhk.edu.hk/~lyu/paper_pdf/ap0010.pdf

<1% - https://www.techylib.com/en/view/holeknown/6_virtual_campus

<1% - <https://support.mozilla.org/en-US/questions/1166695/feed>

<1% - http://www.eurodl.org/materials/contrib/2008/Fokides_Tsolakidis.pdf

2% - http://www.eurodl.org/materials/contrib/2008/Fokides_Tsolakidis.htm

<1% -

<https://docplayer.net/29594316-Proceeding-international-conference-on-vocational-education-and-training-icvet-2011.html>

<1% - https://en.wikipedia.org/wiki/Development_communication

<1% -

https://www.academia.edu/4929684/Virtual_Training_Centre_For_CNC_a_Sample_Virtual_Training_Environment

<1% -

https://www.researchgate.net/profile/Aura_Mihai/publication/241765089_THE_VIRTUAL_

TRAINING_CENTRE_VTC_FOR_CNC_COMPUTER_NUMERICAL_CONTROL/links/0f31752e6d397baa9f000000.pdf?origin=publication_detail

<1% -

<https://www.linguee.com/english-italian/translation/employment+possibilities.html>

<1% -

https://www.academia.edu/1991896/Virtual_Training_Centre_for_Computer_Numerical_Control

<1% -

https://www.researchgate.net/publication/228700347_Virtual_Training_Centre_for_Computer_Numerical_Control

<1% - <https://informationcradle.com/kenya/education/vocational-schools-in-kenya/>

<1% -

https://www.researchgate.net/publication/287645484_Virtual_Reality_in_Education_A_Theoretical_Approach_for_Road_Safety_Training_to_Students

<1% -

https://www.academia.edu/3184078/ICTs_in_the_Field_of_Education_in_Bangladesh_Some_Salient_Features

<1% - <https://news.ycombinator.com/item?id=9486391>

<1% -

https://www.iises.net/download/Soubory/soubory-puvodni/pp168-175_ijoteV2N3.pdf

<1% -

https://www.researchgate.net/profile/Aura_Mihai/publication/237550139_THE_VIRTUAL_TRAINING_CENTRE_FOR_SHOE_DESIGN_VTC-SHOE_A_MULTILATERAL_VIRTUAL_TRAINING_MODEL_BASED_ON_A_COMMON_CURRICULUM/links/0f31752e6d398082a1000000/THE-VIRTUAL-TRAINING-CENTRE-FOR-SHOE-DESIGN-VTC-SHOE-A-MULTILATERAL-VIRTUAL-TRAINING-MODEL-BASED-ON-A-COMMON-CURRICULUM.pdf

<1% - <http://univagora.ro/jour/index.php/ijccc>

<1% - <https://www.slideshare.net/EraCaboy/cost-vs-benefits-of-distance-education>

<1% - <https://www.sciencedirect.com/science/article/pii/S1369847813000296>

<1% - <http://legacydirs.umiacs.umd.edu/~hal/tmp/foo.html>

<1% - <https://quizlet.com/2121888/apush-3-tests-flash-cards/>

<1% - <http://www.oecd.org/environment/index.xml>

<1% - https://mafiadoc.com/untitled_5a111ffc1723dd415c3e8c77.html

<1% -

https://www.academia.edu/19906921/Education_in_Pakistan_Problems_and_Their_Solutions

<1% - https://en.wikipedia.org/wiki/Professional_development

<1% - <https://www.sciencedirect.com/science/article/pii/S2212567114000100>

<1% - <https://www.sciencedirect.com/science/article/pii/S0140988316301347>

<1% -

<https://safesupportivelearning.ed.gov/discipline-compendium/choose-type/California/Prevention>

<1% - https://issuu.com/uzualgupta/docs/tifac_-_tv2035_-_medical_document

<1% - <http://www.un.org/esa/socdev/publications/FullSurveyEmpowerment.pdf>

<1% -

https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp0910/10rp08

<1% -

<https://www.abc.net.au/news/2016-01-21/dalsanto-germanys-compassion-moment-is-over/7103576>

<1% -

<https://unispal.un.org/DPA/DPR/UNISPAL.NSF/5ba47a5c6cef541b802563e000493b8c/e4c9480931667c78525611c00567ce0>

<1% -

<https://www.intechopen.com/books/new-knowledge-in-a-new-era-of-globalization/how-to-discover-a-new-world-without-being-in-danger-of-wreck>

<1% - http://www.ijhssnet.com/journals/Vol_2_No_10_Special_Issue_May_2012/7.pdf

<1% - http://createthefuture.com/strategic_thinking.htm

<1% -

http://www.sobiad.org/eJOURNALS/journal_IJBM/archives/2011_Vol_3_n_2/13isik_cicek.pdf

<1% - <https://www.slideshare.net/NguynHuTun/managing-the-human-ressource>

<1% -

https://s3.amazonaws.com/assets.cce.cornell.edu/attachments/33716/Subject_Educator_I_-_WAYNE_-_ESNY_-_Campus_Approved_10-18-2016_VACANT.docm?1539186936

<1% - https://www.mindtools.com/pages/article/newHTE_90.htm

<1% - https://issuu.com/cpercper/docs/3._s._ary_yudhistianto

<1% - http://journal.umy.ac.id/index.php/mrs/article/download/5062/pdf_82

<1% - http://shodhganga.inflibnet.ac.in/bitstream/10603/3780/10/10_chapter%202.pdf

<1% -

<https://2012books.lardbucket.org/books/beginning-management-of-human-resources/s06-developing-and-implementing-st.html>

<1% -

https://www.researchgate.net/publication/40940640_Managing_Human_Resources

<1% -

<http://www.oxfordscholarship.com/view/10.1093/oso/9780190636272.001.0001/oso-9780190636272-chapter-1>

<1% -

https://www.researchgate.net/publication/249873699_Diversity_Issues_and_Public_Relations

<1% -

https://www.zef.de/fileadmin/downloads/forum/docprog/Tempapers/2004_3b_Mensah_Castro.pdf