

# INTERNATIONAL PROCEEDING



STATE ISLAMIC UNIVERSITY  
SUNAN KALIJAGA  
YOGYAKARTA





**PROCEEDING  
INTERNATIONAL SEMINAR**

**“OPTIMIZING OF MULTIPLE INTELLIGENCES  
TO EXAGGERATE HUMAN POTENTIAL TOWARDS  
VIRTUOUS CHARACTER”**

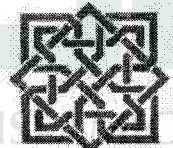
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STATE ISLAMIC UNIVERSITY  
SUNAN KALIJAGA  
YOGYAKARTA

**Teacher Education “Madrasah Ibtidaiyah”  
Faculty Islamic Education and Teacher Training  
Islamic State University Sunan Kalijaga  
Yogyakarta  
December, 19<sup>th</sup> 2013**



# **PROCEEDING INTERNATIONAL SEMINAR**

ON THE 1<sup>st</sup> SUMMIT MEETING ON EDUCATION, THE END OF THE YEAR 2013

**“OPTIMIZING OF MULTIPLE INTELLIGENCES TO EXAGGERATE  
HUMAN POTENTIAL TOWARDS VIRTUOUS CHARACTER”**

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## DAFTAR ISI

<b>KATA PENGANTAR.....</b>	<b>x</b>
<b>CAPACITY BUILDING BASED ON MULTIPLE INTELLIGENCES THROUGH EDUCATION(SOCIOLOGY PERSPECTIVE: CHARACTER AND DIGNITY) ISTINGSIH.....</b>	<b>1 ✓</b>
<b>THE IMPORTANCE OF EDUCATING CHILDREN SAEDAH SIRAJ .....</b>	<b>9</b>
<b>PENERAPAN NILAI MURNI MELALUI PEMBELAJARAN SAINS: PENGALAMAN MALAYSIA LILIA HALIM.....</b>	<b>13</b>
<b>LEADING BASED ON THE HUMAN RESOURCES COMPETENCE AND COMMITMENT W. ALLAN BUSH .....</b>	<b>21</b>
<b>CHILDREN’S CONCEPTIONS OF LEARNING JAINATUL HALIDA JAIDIN .....</b>	<b>25</b>
<b>ASSESSMENT INSTRUMENTS DEVELOPMENT OF SPIRITUAL INTELLIGENCE AS A CHARACTER-FORMING ALTERNATIVE LEARNERS ANINDITYA SRI NUGRAHENI .....</b>	<b>31</b>
<b>IMPLEMENTATION OF PORTFOLIO ASSESSMENT MODEL ON THE CHARACTER OF RESPONSIBILITY AND INDEPENDENT LEARNING JAMIL SUPRIHATININGRUM .....</b>	<b>41</b>
<b>DEVELOPMENT OF TEACHING MATERIALS WITH INDONESIAN COOPERATIVE MODEL FOR IMPROVING INTERPERSONAL AND INTRAPERSONAL INTELLIGENCE CHILDREN AT ELEMENTARY SCHOOL FIFTH GRADE ALFI LAILA &amp; MOH. BASORI.....</b>	<b>47</b>

**HUMANIZATION OF EDUCATION IN DEVELOPING POTENTIAL  
LEARNERS THROUGH MULTIPLE INTELLIGENT IMPLEMENTATION**

*AVANTI VERA RISTI P* .....59

**IMPROVING CHILDREN OF MULTIPLE INTELEGENGE USING  
CREATIVE GAMES**

*FEBRITESNA NURAINI* .....67

**PROFESSIONAL TEACHER ROLE DEVELOPING INTELLIGENCE IN CHILDREN  
IN SCHOOL COMPOUND**

*ROHINAH* .....71 ✓

**STIMULATION OF MULTIPLE INTELLIGENCES IN ELEMENTARY  
EARLY CHILDHOOD EFFORTS HOLISTIC OPTIMIZATION OF  
POTENTIAL CHILD THROUGH SIMPLE ACTIVITIES AT HOME  
PARENTS TOGETHER**

*IYAN SOFYAN* .....81

**STUDENT CENTERED APPROACH FOR EDUCATION ISLAMIC  
ELEMENTERY SCHOOL**

*KHOIRUL HADI & ATIK WARTINI* .....87

**IMPLANTING DISCIPLINE PROGRAM FOR CHILDREN AGES 4-6 YEARS  
BASED ON MULTIPLE INTELLIGENCE**

*MURFLAH DEWI WULANDARI* .....97

**IMPLEMENTING MULTIPLE INTELLEGENCES THEORY IN THE  
CLASSROOM**

*NURUL HIDAYATI ROFLAH* .....103

**THE APPLICATION OF MULTIPLE INTELLIGENCES-BASED TEACHING  
IN SD (ELEMENTERY SCHOOL) IMMERSION PONOROGO**

*RIRIEN WARDIANI* .....109

<b>OPTIMIZING MULTIPLE INTELLIGENCE THROUGH THEMATIC LEARNING IN EARLY GRADE STUDENTS OF ELEMENTARY SCHOOL</b> <i>AMALIYAH ULFAH &amp; M. TOLKHAH ADITYAS</i> .....	117
<b>THE BASIC MOTIVATION IN FORMING BEHAVIOR ABSTRACT</b> <i>MOCH. FATKHURONJI</i> .....	125
<b>ALTERNATIVE OF LEARNING MODEL WITH SOCIAL LEARNING BANDURA</b> <i>INDRYA MULYANINGSIH</i> .....	133
<b>THE MODEL OF IMPLEMENTATION OF EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD) IN THE ISLAMIC ELEMENTARY SCHOOL</b> <i>ZAINAL ARIFIN</i> .....	143 ✓
<b>CREATING POSITIVE LEARNING ENVIRONMENT IN ELEMENTARY SCHOOL/ ISLAMIC ELEMENTARY SCHOOL BASED ON INTEGRATIVE-THEMATIC APPROACH IN INCLUSION CLASS</b> <i>ZIDNIYATI</i> .....	149
<b>INDONESIAN RELISTICS MATHEMATICS EDUCATION THROUGH MULTIPLE INTELEGENCE AT ELEMENTARY SCHOOL</b> <i>IDA NURMILA ISANDESPA &amp; DILA NURROHMAH</i> .....	159
<b>BUILDING ISLAMIC-SCIENTIFIC INTEGRATION BASED LEARNING TOOLS FOR MI 5TH GRADER ON KEY SUBJECT “OW LIVING THINGS ADAPT” ORIENTED TO GUIDED DISCOVERY APPROACH</b> <i>FITRI YULIAWATI</i> .....	165
<b>DUALISM AND INTEGRATION ISLAMIC EDUCATION AND GENERAL EDUCATION IN INDONESIA</b> <i>SITI JOHARIYAH</i> .....	175 ✓
<b>FAMILY EDUCATIONAL INSTITUTION IN THE FRAME OF ISLAMIC RELATION AND SCIENCE TECHNOLOGY</b> <i>NADLIFAH</i> .....	187 ✓



<b>HUMANIST-RELIGIOUS EDUCATION (The Concept and the Implementation of the Humane Education in MIN 1 Yogyakarta on Science Learning)</b> <i>MOH. AGUNG ROKHIMAWAN</i> .....	197 ✓
<b>THE OPTIMIZING OF MULTIPLE INTELLIGENCES FOR INCREASING THE POTENTIAL TOWARDS HUMAN VIRTUOUS CHARACTER SUMMIT MEETING ON EDUCATION THE END OF THE YEAR 2013 YOGYAKARTA</b> <i>FAUZAN &amp; ASEP EDIANA LATIP</i> .....	207
<b>MAINSTREAMING MULTICULTURAL STUDIES FOR RADICAL ISLAMIC MOVEMENT IN YOGYAKARTA</b> <i>NUR HIDAYAT</i> .....	219 ✓
<b>THE DEVELOPMENT OF MATHEMATICS LEARNING PRODUCTS BASED MULTIPLE INTELLIGENCES</b> <i>LULUK MAULUAH</i> .....	229 ✓
<b>A REFLECTION OF A BASED ON CHARACTER BUILDING EDUCATION</b> <i>MAEMONAH</i> .....	239 ✓
<b>THE ANALYSIS OF ERROR IN ANSWERING MATHEMATICS QUESTION IN V CLASS OF SD/MI IN YOGYAKARTA CITY</b> <i>ENDANG SULISTYOWATI</i> .....	247 ✓
<b>THE IMPORTANCE OF VALUES CHARACTER EDUCATION FOR 2013 CURRICULUM</b> <i>H. SEDYO SANTOSA</i> .....	265 ✓
<b>OPTIMIZATION OF MULTIPLE INTELLEGENCES THROUGH SCIENCE LEARNING FOR SD/MI (ELEMENTARY SCHOOL) STUDENTS</b> <i>SIGIT PRASETYO</i> .....	281 ✓
<b>THE REFORM OF LEARNING SCIENCE THROUGH MULTIPLE INTELEGENT PARADIGM TO AGAINST CURRICULUM IMPLEMENTATION 2013 IN SD/MI</b> <i>DIAN NOVIAR</i> .....	291

<b>HOLISTIC-INTEGRALISTIC TEACHER “THE NECESSITY AND THE NEEDS FOR MULTIPLE INTELLIGENCES-BASED LEARNING PROCESS IN THE ISLAMIC ELEMENTARY SCHOOL”</b> <i>ANDI PRASTOWO</i> .....	301 ✓
<b>METAPHORICAL ITEMS ARE QUITE NECESSARY TO LEARN</b> <i>NA’IMAH</i> .....	311 ✓
<b>IMPROVING THE STUDENTS’ SKILLS IN WRITING DESCRIPTIVE TEXTS THROUGH DIGITAL IMAGES AT THE EIGHTH GRADE OF SMP ALI MAKSUM PONDOK PESANTREN KRAPYAK BANTUL IN THE ACADEMIC YEAR OF 2013/2014</b> <i>JUBAEDAH</i> .....	319 ✓
<b>DEVELOPING A PROCESS-BASED IN SCIENCE LEARNING THROUGH PROBLEM BASED LEARNING TO WELCOME THE IMPLEMENTATION OF CURRICULUM 2013</b> <i>RUNTUT PRIH UTAMI</i> .....	331



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## KATA PENGANTAR

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Kegiatan ini terselenggara atas dasar perlunya perubahan demi perubahan, inovasi-inovasi pembelajaran senantiasa menjadi perhatian kalian akademik dan praktisi pendidikan.

Dalam hal ini prodi PGMI akan berusaha semaksimal mungkin untuk senantiasa mengembangkan kegiatan yang mendukung peningkatan mutu tersebut, baik untuk dosen, mahasiswa, bahkan bagi alumni dari PGMI itu sendiri, serta masyarakat luas pada umumnya sebagai pengguna dari alumni PGMI Fakultas Ilmu Tarbiyah dan Keguruan UIN Sunan Kalijaga. Peningkatan mutu tersebut di antaranya dilakukan dalam bentuk pelaksanaan 'seminar internasional'. Seminar internasional akan menetapkan tema "*Summit Meeting on Education The End of The Year 2013*" dan Penandatanganan MOU dengan University Kebangsaan Malaysia (UKM).

Adapun kegiatan yang diselenggarakan meliputi kegiatan Seminar Internasional dengan tema Optimalisasi kecerdasan majemuk untuk melezitkan potensi menuju manusia berbudi pekerti. Dilanjutkan Fashion show Tarbiyah *Fashion Week 2015* yang bertajuk "Islami, Trendy and Syar'i". Kegiatan berikutnya adalah Seminar Nasional dengan tema Kurikulum 2013 "Realisasi dan Refleksi Kurikulum 2013". Berikutnya Seminar Peringatan hari Ibu dengan "Peran keluarga dalam pendidikan anak (Kolaborasi catur pusat pendidikan)". Dilanjutkan dengan acara Bedah buku yang bertema "Merajut pendidikan di kota Yogyakarta" karya: Bp. Zainal Abidin, M.Pd. Selanjutnya Seminar Edupreneurship dengan tema "Membangun kreatifitas melalui edupreneurship"

Adapun narasumber dari kegiatan ini dari berbagai negara, yaitu: dari negara Malaysia, Australia, Brunei Darussalam, dan Indonesia. Adapun nama-nama narasumber sebagai berikut: Prof. Dr. Lilia Halim (University Kebangsaan Malaysia), Bapak Setiyo Iswoyo, Drs. HD. Iriyanto, M.M., Dr. Slamet Suyanto (Dosen Pendidikan Biologi, UNY), Hj. Dyah Suminar (SE istri mantan walikota Yogyakarta), Prof. Dr. Taufik Ahmad Dardiri, SU (Dosen Fakultas Adab dan Ilmu Budaya, UIN Sunan Kalijaga), M Arief Budiman, S.Sn., Managing Director PT. Petakumpet Yogyakarta. Adapun peserta dari kegiatan ini dari berbagai negara yaitu Turki, Rusia, Thailand, Malaysia.

Dalam hal ini dosen atau pendidik pada umumnya adalah perintis pembangunan di segala bidang kehidupan dalam masyarakat. Seorang dosen atau pendidik yang benar-benar sadar akan tugas dan tanggung jawabnya, tentulah akan selalu mawas diri, mengadakan introspeksi, berusaha selalu ingin berkembang maju, agar bisa menunaikan tugasnya lebih baik, dengan selalu menambah pengetahuan, memperkaya pengalaman, menambah kualitas dirinya melalui membaca buku-buku perpustakaan, mengikuti seminar loka-karya, kursus-kursus penataran, dan sebagainya agar selalu bisa mengikuti gejolak perubahan sosiokultural dalam masyarakat serta kemajuan ilmu dan teknologi modern dewasa ini. Melalui kegiatan *international Summi Meetng* ini diharapkan dosen, guru, dan mahasiswa menjadi lebih profesional, khususnya terkait dengan kompetensi profesional.



Pekerjaan mengajar memang tidak selalu harus diartikan sebagai kegiatan menyajikan materi pelajaran. Meskipun penyajian materi pelajaran memang merupakan bagian dari kegiatan pembelajaran, tetapi bukanlah satu-satunya. Masih banyak cara lain yang dapat dilakukan guru untuk membuat siswa belajar. Peran yang seharusnya dilakukan guru adalah mengusahakan agar setiap siswa dapat berinteraksi secara aktif dengan berbagai sumber belajar yang ada. Guru pun sangat erat kaitannya dengan pendidikan karakter.

Pendidikan karakter yang semakin hangat sering menimbulkan kekhawatiran para guru. Namun sebenarnya hal itu tidak perlu khawatir, masih banyak tugas guru yang lain seperti: memberikan perhatian dan bimbingan secara individual kepada siswa yang selama ini kurang mendapat perhatian. Kondisi ini akan terus terjadi selama guru menganggap dirinya merupakan sumber belajar satu-satunya bagi siswa. Jika guru memanfaatkan berbagai strategi pembelajaran secara baik, guru dapat berbagi peran dengan strategi. Peran guru akan lebih mengarah sebagai manajer pembelajaran dan bertanggung jawab menciptakan kondisi sedemikian rupa agar siswa dapat belajar. Untuk itu guru lebih berfungsi sebagai penasehat, pembimbing, motivator dan fasilitator dalam Kegiatan Belajar Mengajar.

Upaya Pemerintah terhadap tenaga guru sebenarnya telah dilakukan oleh Pemerintah Republik Indonesia, melalui berbagai bentuk kebijakan. Ditetapkannya Undang Undang nomor 14 tahun 2005 tentang guru dan dosen merupakan dasar kebijakan untuk memperkuat eksistensi tenaga kependidikan sebagai tenaga profesional, seperti profesi-profesi yang lainnya. Kualitas profesi tenaga guru selalu diupayakan, baik melalui ketentuan kualifikasi pendidikannya maupun kegiatan in-service training, dengan berbagai bentuknya, seperti: pendidikan dan latihan (diklat), penataran dan pelibatan dalam berbagai seminar untuk memperbarui wawasannya dalam kompetensi pedagogi dan akademik.

Pemerintah mulai menyadari betapa strategisnya peran tenaga guru dalam mengantarkan generasi muda untuk menjadi sumber daya manusia (SDM) yang berkualitas dan kompetitif sehingga mampu mewujudkan suatu kesejahteraan bersama. Sejarah peradaban dan kemajuan bangsa-bangsa di dunia membelajarkan pada kita bahwa bukan sumber daya alam (SDA) melimpah yang dominan mengantarkan bangsa tersebut menuju pada kemakmuran, tetapi ketangguhan daya saing dan keunggulan ilmu pengetahuan dan penguasaan teknologi (ipteks) bangsa tersebutlah yang berperan untuk meraup kesejahteraan. Bahkan SDM yang menguasai ipteks cenderung memanfaatkan teknologinya untuk menguasai SDA bangsa lain. Dalam hal ini pemerintah ingin mengejar ketertinggalan dengan menyempurnakan kurikulum KTSP menjadi Kurikulum 2013.

Kurikulum 2013 yang telah diimplementasikan pada tahun ajaran 2013/2014 menimbulkan pro dan kontra atas kurikulum tersebut masih terus terdengar. Banyak pihak yang mempertanyakan kesiapan implementasinya, pengembangan bahan ajarnya, evaluasinya, dan proses pembelajarannya di kelas. Perwakilan guru di Kota Kupang menilai implementasi kurikulum pendidikan 2013 akan menjadikan guru-guru seperti robot. Alasannya, semua Rencana Pelaksanaan Pembelajaran (RPP) dan Silabus disusun oleh pemerintah pusat. Sedangkan guru hanya siap untuk mengajar dengan RPP yang ada. Pada tahun ajaran 2013/2014, kurikulum baru akan diberlakukan untuk siswa kelas 1 dan 4, sedang siswa kelas 2,3,5, dan 6 masih menggunakan kurikulum lama. Beberapa pendapat pro dan kontra masih terus berlanjut, tapi mau tak mau kurikulum baru akan segera diimplementasikan secara bertahap. Seminar ini memperbincangkan masalah tersebut dari sisi pembuat kebijakan, ahli kurikulum, dan praktisi pendidikan/pengajaran.

Demikian yang dapat kami sampaikan terkait dengan esensi dari penyelenggaraan kegiatan “*Summit Meeting on Education The End of The Year 2013*”. Kami mengucapkan terima kasih banyak atas partisipasi dan dukungan dari berbagai pihak yang tidak dapat kami sebutkan satu per satu. Tanpa bantuan dan partisipasi rekan-rekan semua kegiatan ini tidak dapat terlaksana dengan baik. Semoga kegiatan ini dapat menambah kontribusi pada khasanah keilmuan khususnya pada Pendidikan Dasar dan memberi manfaat kepada para peserta dan pembaca. Amiin

Yogyakarta, 19 Desember 2013

Ketua Panitia

**Dr. Aninditya Sri Nugraheni, M.Pd.**



STATE ISLAMIC UNIVERSITY  
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## FAMILY EDUCATIONAL INSTITUTION IN THE FRAME OF ISLAMIC RELATION AND SCIENCE TECHNOLOGY

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### ABSTRACT

If we see from the chronological process of human revolution, family education is the early phase and basis for human education. It is also called as the natural education closed to every household. The early education phase and basis is extremely influenced and determined for the next education. For the life of nowadays household, it could not avoid the relation with Educational Science and Technology (IPTEK). This brought us to the humanity area and dehumanization in the same time. The effect of IPTEK has caused for the arrangement of family structure bringing on the alienation and the status of inconsistency in the family. However, we could not deny that Islam as the celestial religion based on Al-Qur'an given the sign what is the importance of Educational science and Technology for human life.

**Keywords:** *Family education, Islam, and Science Technology*

### A. INTRODUCTION

Education in the wide meaning occupies extremely strategic role in the culture and social life. A society has a regularity that is bound by the value system of living in a culture owned by the community. Culture is a soul of society because it lives the society by its values. The values that have lived, live, and direct for its society life now and then. Culture is a power, a vital thing for the society because it is supported by dynamic individuals as the cultural actors. The actors are developed and guided by the education process. Not surprisingly, when education became a bone of contention in the arena of modern society, because educational institutions are the future foundation of the nation. Educational institutions become the arena of the struggle for influence community groups for the benefit of its group.

Education, society, and culture are the *single tripartite* where culture is essentially the foundation, the society provides the means, and the process of education is an activity to preserve and develop the values that bind people together in life.<sup>1</sup>

The term of *Tri Pusat Pendidikan* is used firstly by Ki Hajar Dewantara to mention education environment consisting of family, school and society.<sup>2</sup> Family environment is the informal educational environment run naturally between parents and children. School environment is the

1 Tilaar, *Pendidikan, Kebudayaan, dan Masyarakat Madani Indonesia Strategi Reformasi Pendidikan Nasional* (Bandung: Rosda Karya, 1999), page.vii.

2 Rohmat Mulyana, *Mengartikulasikan Pendidikan Nilai* (Bandung: Alfabeta, 2011), page.149.

formal educational environment intentionally created and institutionalized relationship in which the teacher and the student occurs. A society environment is a non-formal educational environment implementation involving the participation of the community at large.

Taking the family to the perspective of science development and technology or IPTEK, enables a useful cultural conversation. The talks are expected to explore a number of fundamental questions about the family as one of *culture unit* in the rapidity era of science and technology development is often addressed ambivalently.

On the other hand, most of us idealize the role of the family as a Centrum role maintained the integrity of human life when various institutions-call, -for instance, school institutions, peer relationships, government and politics, economics, art, religion- experiences a variety of lighting effects of the dislocations as the effect of the illumination of science and technology. Besides, we look for the family institution become brittle and often helpless to face the technological culture change. If we borrow the language of Erich from (he first published his book *The Sane Society* in 1955), the family bandwagon suffer "pain", especially in the mental connotations.

## B. DISCUSSION

### 1. The Definition of Islam

Abuddin Nata quotes the argument from Maulana Muhammad Ali, in terms of the Islamic language is derived from The Arabic words which means *salima*, tranquil and peaceful. From the word *salima* further transformed into meaningful *aslama* surrender of entry in peace.<sup>3</sup> In line with above opinion, Yudian Wahyudi stated that etymologically, the word Islam is derived from

*aslama- yuslimu- islam-salama* or *salamah*, which is subject to the will of Allah SWT. In order to achieve greetings or *salam/salamah* (safety or peace) in the world and the hereafter, the process is called *Islam* and the perpetrators are called *Muslim*. Thus, Islam is a process not a destination. That is often forgotten in the Islamic understanding of this is to explain what the will of God that if followed will deliver the safety and peace of the world to the hereafter and vice versa.<sup>4</sup> Likewise Harun nasution, he defines Islam as round as spherical surrender to the will of God. With this surrender, that is to obey the commandment of the Lord and restrictions.<sup>5</sup>

As Yudian Wahyudi said, The God's wish is expressed in three ayah which are different but completed each other.

*Firstly*, verse of *Qur'aniyah*, it is the signs of Allah who stated in the Qur'an and hadith. Among the most important law here is *Tauhid* (Unity of God), *Akhlaq* (Morality), and justice (law paired with positive and negative or *maslahat* and *mafsadat*). The biggest function of morality "none of God unless Allah" is as the key when crossing from the world to the hereafter, it immediately created to be followed. Allah.<sup>6</sup>

*Second*, verse of *Kauniyah*, it is the signs of God in the universe (cosmos). Signs of Allah that is importance here is the law of God deposited on any natural object. Sunnatullah or the fate of God is a key role in determining the safety of the world. Thus, at the level of Islamic nature is balancing negative and positive potential and positive potential of each object. Islamic here can be stretched to the point maximizing positive potential and minimalizing negative potential of each subject.

3 Abuddin Nata, *Metodologi Studi Islam* (Jakarta: PT. Grafindo Persada, 2000), page.61- 62.

4 Yudian Wahyudi, *Islam dan Nasionalisme sebuah Pendekatan MaqashidSyari'ah* (Yogyakarta: UIN Sunan Kalijaga,2006),page.7.

5 Harun Nasution, *Islam Ditinjau Dari Berbagai Aspeknya* (Jakarta: UI- Press, 1985),Cet.ke lima,page.16.

6 Yudian Wahyudi,*Islam...*, page.7-8.



This natural law applies to anyone without knowing the limits of any human as race, religion, and social status. At the level of nature, that all religions are equal, because anyone who violates this equal laws must be punished by God instantly. Conversely, anyone who obeys ("subject" to this equal laws), surely be rewarded by God, the Salvation.

In thi case, Yudian Wahyudi gives an example: If Jews, Christian, Moslem, Bhudist or Hindu across Pacific Ocean and Vancouver (Canada) to Hongkong swimmingly (without any balancing stuffs), they must be put by God. They will sink and die because they have committed infidel and tyrannical (disavow and break the balance rule regulated himself or Ocean as like law density). conversely, if a communist (disobeying God) crossing this ocean through big ship even plane then they will save because they essentially are *moslem*. Essentially, they faith to the law's partnership as the biggest law which regulateing cosmos live that they achive safety (connected to the word "iman"). As *Islam*, *Iman*, it is the process aimed for safety which is in Indonesian language "keamanan". Safety, peace, or safety here is only on the level of cosmos or worldly. To across the hereafter needs a key: *Tauhid*.<sup>7</sup>

*Thirdly*, verse of *Insaniyah* (humanity), it is signs or laws of God regulating human life (cosmic). Again, the most important law here is the law's partnership. Islam and faith (so safe and secure) at this level is to balance the positive and negative, that creates a balance or social justice. Allah has delegated to human as reflected to the hadis "the willingness of God depends on the willingness of human being". This law is strengthened by the principle of *mutual agreement*. Social error must be firstly solved between the former related parties. If the parties concerned not to forgive, Allah also did not want to forgive. So, the position of verse of *insaniyah* (humanity) is on the middle; more certain than verse of *Qur'aniyah* (vertical sins is easy to forgive by the God), but more flexible than compared with verse of *kauniyah* because social error can be forgiven but the natural false cannot often be forgiven. If, example, people swims from the Vancouver to Hongkong and dies, so she could not live anymore (the natural repent is rejected).<sup>8</sup>

Therefore, Islam is *Tauhid* (unity of God) integrated the God's wish in the holy Qur'an, world and human that save from teology disaster, cosmos, and cosmic. This is called *taqwa* peaked often called *ihsan* which is a process of awareness represented the God everywhere (at the level of theology, cosmos, and cosmic) and whenever. This is called as *Islam Kaffah*.<sup>9</sup>

## 2. The Definition of Science and Technology

At the moment the world is entering to the third millennium all the developed nations agreed stating that mastering science and technology (IPTEK) is a prerequisite to achieve prosperity in the arena of international relation.<sup>10</sup> Thus, science and technology is as an icon of progress of a nation. The more advanced the development of science and technology of a nation, and then the nation is more respected by other nations.

According to A. Baiquni, science is a community of human collective rationality, which is human knowledge community about the world gotten as the consensus for experts, solvers rationally about critical result analysis to the measuring data obtained from observations of the nature symptom.<sup>11</sup>

7 *Ibid*.page.8.

8 *Yudian Wahyudi*, *Islam....*,page.8-9.

9 *Ibid*. page.9.

10 Zuhail, *Visi Iptek Memasuki Millenium III* (Jakarta: UI-Press, 2000),page.1

11 Ahmad Baiquni, *Al-Qur'an Ilmu Pengetahuan dan Teknologi* (Jakarta: Dana Bhakti Wakaf, 1955),page.58-59

In Wikipedia, science is taken from the Latin word *Scientia* which means knowledge. Sund and Trowbridge pattern that science is sum of knowledge and process. Whereas Kuslan Stone calls that science is sum of knowledge and ways for getting and using its knowledge. Science is a product and process that cannot be separated. "Real Science is both product and Process, inseparably Joint".<sup>12</sup>

Science as process is steps achieved by the scientists to observe in order to find the explanation about natural symptom. Those steps are formatting problems and hypothesis, planning experiment, collecting data, analyzing and finally summarizing. It clearly shows that the basic character from science is quantification which means natural symptom can be a quantity.<sup>13</sup>

At the glory of Moslem, natural science is understood as the behaviour science (science of nature characteristic) because it studies about nature, attitude, characteristics, and natural behaviour in certain conditions. At that time, the scientists who pursue this science is called as a philosopher but they are very different from The Greek philosopher, according to Sir James Jeans, "alcoholic themselves by speculating", so they did not achieve any progress in science.<sup>14</sup> Whereas Technology, according to A. Baiquni, is sum of human application knowledge about process of exploiting natural obtained from science application, in the economy productive.<sup>15</sup> Terminology is manufacture, and tool knowledge, machine, technic, trade, system, or organization method to solve a problem or finish certain function. Technology can also infer to tool collection, machinery, and procedure.<sup>16</sup>

Ki Supriyoko summerizes some expert arguments about technology as follows:

- a. Technology is science application or science that produce the goods or service (*Cyril Stanley Smith: 1970*)
- b. Technology is science application of natural science (*Brinkmann: 1971*)
- c. Technology is a disciplined process using science, material, and human resource to achieve desired goal of human (*Maurice Adelman: 1974*)
- d. Technology is applying science and science application (*Melvin Kranzberg: 1980*)
- e. Technology is something that can make it better and useful. Technology is means used by humman to control natural environment. Technology is practical application of theoretical subject, like science (*Michael Hacker and Robert Barden: 1987*).
- f. Technology is great engine change (*Alvin Toffler: 1991*).<sup>17</sup>

At the end of 20th century, six new technologies namely *microelectronic, computer, telecommunication, artificial materials, robotic, and biotechnology*, interact synergistically to support the formation of community with the new economic system that is different from previous periods. Developments in the field of basic science that became the foundation for the six areas has created a variety of technological breakthroughs that led to the emergence of a new major industry in the field of computer, information, semiconductor, and biotechnology. For example, internet has been supporting the service industry and retail trade, mobile phones, and multimedia devices exist everywhere, plants, and animals of the result of agro-industry has been geneticxally engineeered; and even the economy is no longer national or regional, but it is global in nature due to the presence of information technology.<sup>18</sup>

12 [http://id.wikipedia.org/wiki/ilmu\\_alam](http://id.wikipedia.org/wiki/ilmu_alam) (23 mei 2012).

13 *ibid*.

14 Ahmad Baiquni, *Al-Qur 'andan Ilmu Pengetahuan Kealaman* (Jakarta: Dana Bhakti Prima Yasa, 1996),page.63.

15 *ibid*.,hlm.60.

16 [http://id.wikipedia.org/wiki/Ilmu\\_alam](http://id.wikipedia.org/wiki/Ilmu_alam).(23 Mei 2012)

17 Ki Supriyoko, *Pendidikan Nasional Sebagai Media Pengembangan IPTEK*, materi kuliah program pascasarjana UIN Sunan Kalijaga Yogyakarta, tahun 2007.

18 Zuhail, *Visi IPTEK...*,page.3.

### 3. Science and Technology in Al-Qur'an

Many verses in Al-Qur'an command muslim to deepen, review, research, the contain truth of Al-Qur'an. One of them is how Allah commands people to observe the secret of universe cited in Q.S. Al-Ghasiyyah (88): 17-20. In this verse, it is clearly shown that Al-Qur'an commands people to research, observe surrounding environment. For the research, the study definitely needed a scientific thought to look for the answer of human life problems. Explicitly, in that verse, Allah commands people to study and observe surrounding environment by the progress of science and technology. Smarter of people in doing research, so it needs science and high technology to solve human life problems.

Al-qur'an also suggests people to explore science and technology which is stated in Q.S Al-Ankabut(29):20.

Explicitly, verse above commands people to explore science and technology by concerning to the God creation in this earth. The phenomena happened in the world definitely have a wisdom. It needs to be deepen, researched and observed to develop science and technology for human life good in the world. Natural phenomenon usually called as verse of Karuniyah or natural law which is entrusted by Allah to the earth to be studied for human. As explained by Yudian Wahyudi, verse of Kauniyah, is signs of of God's greatness. The importance is the partnership law entrusted by Allah to every natural objects.<sup>19</sup>

Thus, the development of science and technology closely related to the development verses of Kauniyah from Allah entrusted to the universe, or commonly known as natural law (sunnatullah). For example, the law of cause and effect, the law of density of objects, and so forth. The more people want to review researching the law of nature, then people will be able to develop the science and technology needs to be balanced with morality not to damage nature or use the power of nature to destroy most other human beings. God also has insinuated that actual human nature damage is caused by human dirty hands. This could be shown in QS. Al-Qur'an (2): 11-12

### 4. The difference between Islamic and Western Human Resource

In the tradition of western scientific tradition, after the victory of empiricism and positivism, the West believe that science is only one source, that is *sense perception*. Only sensory perceptions are considered valid as the source of knowledge because knowledge is a legitimate science so the source must be of a physical nature. Westerners doubted the intellect and intuition, for them the source of intellectual intuition is halusination. Therefore, it should be abandoned. Unlike the western tradition, in Islam source of knowledge is not only one. Islam admits the senses as a source of knowledge for the physical science. In addition to the senses, there are also other sources of knowledge, such as mind, heart, and some even add revelation as a source of knowledge. thus, there are three sources of legitimate knowledge in the scientific tradition of Islam. Allah has bestowed to us, the sense, it must be resourceful and among one and another are not replaceable. Sense may not be created, if not useless, as well as the heart and senses.<sup>20</sup>

Having different paradigm in determining source of knowledge between Islam and Western brought the effect to the different perception into the truth. The majority of Westerners more believe in the truth obtained by the senses through the scientific method to look for the truth. Truth must be physical and can be sensed and proven scientifically. From this, it can be seen why many westerners ignored religion, because the truth of religion is abstract which could not be sensed

<sup>19</sup> Yudian wahyudi, *Islam...*, page.7-8.

<sup>20</sup> Mulyadi Kartanegara dalam Saefuddin dkk., " *One Islamic Civilization*", *Menyalakan Kembali Lentera Peradaban Islam Yang Sempat Padam* (Semarang: UNISSULA Press, 2010), page.257.



because the source is revelation, for example, the presence of God, heaven, distraction, and angel are an abstract thing and can not be proven by scientific method so that they rejected them.

Moslem esteem that source of knowledge is not only based on the senses but also thought, heart, and revelation. Even in experience, it is not only sense of experience admitted but intellectual also and intuition or often called *religious experience*.<sup>21</sup> From that argument, the truth of Islam is not only from the sense but it can be achieved from logic, heart, truth of revelation (Al-Qur'an and Hadith)

## 5. Family Education Institution

If we see from the chronological human appearance, family education is the first phase and basis for human education. It is also nature education linked to each household.<sup>22</sup>

Vembriarto, regards family as like a small social community generally consists of father, mother, and children.<sup>23</sup>

Fajri Gaffar views from the perspective of Islamic sociology that family is a small of social structure linked by the strong affection legally from the marriage institution. The components are father (*zauj*), mother (*zaujiyah*), son (*ibn*), and daughter (*binti*).<sup>24</sup>

Meanwhile, Hammudah 'Abd Al'ati states that family is a special structure of each member in family which is connected whether it is through siblings or marriage. Its relationship brings about the influence of "*mutual expection*" based on the religion's precept which strengthen by the power of law and individually they have internal relationship.<sup>25</sup>

Observing the definitions above, we can conclude how importance of family where becomes the first and main environment for children. Creating a legal marriage based on Islamic value will achieve the aim of ideal marriage, which is *sakinah mawaddah wa rahmah*, as stated by God in surah Ar-Rum verse 21 as follows:

- a. Social function; family gives the prestige and status to the members.
- b. Educative function; family gives children and teen education.
- c. Religious function; family give religious experiences to its members.
- d. Affective function; family gives affection and births the generation.
- e. Recreative function; family is a center of recreation for the members.<sup>26</sup>

Besides, Hasbullah states that function and the role of family education are:<sup>27</sup>

- a. First experience for children phase

In the circle of family, children can know who they really are. This should be based and understood on each family that child is birthed in family environment to grow and develop until the child break away from the bonds of family.

- b. Grant children social life

The atmosphere in the family filled with love and sympathy are reasonable, safe and peaceful of atmosphere, an atmosphere of mutual trust. Through family education, emotional life or the need for compassion can be fulfilled or developed well, this is because a blood relationship

21 *Ibid.*, hlm. 261.

22 Kamruni Buseri, *Pendidikan Keluarga dalam Islam* (Yogyakarta: CV. Bina Usaha, 1990),page.3.

23 Vembriarto, *Sosiologi Pendidikan* (Yogyakarta: Yayasan Pendidikan Paramadina, 1984),page. 36.

24 Fajri Gaffar, *Membangun Keluarga Muslim*(Yogyakarta: PLP2M,1987),page.269.

25 Hammudah 'Abd Al 'ati, *The Family Structure in Islam*, (trj), (Surabaya: Bina Ilmu, 1984),page. 29

26 Jalaluddin Rahmat, *Islam Alternatif* (Bandung: Mizan, 1988), page.121.

27 Hasbullah, *Dasar-dasar ilmu pendidikan* (Bandung: Rajawali, 1999),page.39- 43.



between educator and students because parents are only facing a few protege and those things based on love and pure affection.

c. Instill basic moral education

In the family, it is also a major planting moral grounds for children which is usually reflected in the attitudes and behavior of parents as role models can be exemplified by child. In this relation, Ki Hajar Dewantara stated as quoted by Suwarno:

*love affection, a sense of unity and other feelings and state of mind which is generally very beneficial for ongoing education, especially moral education, there exist in the family living in the nature of strong and pure, so others can not be the mutual of them.*<sup>28</sup>

Usually a behavior, the way to act and speak will be followed by children. By those thought, it creates positive identification symptom which is equating ourselves with people who are imitated. This is crucial in the context of the formation of personality.

d. The foundations of religious.

Family as the first and foremost educational institution, in addition to a very decisive in installing mooral grounds, but not least is a big role in the process of internalization and transport of religious values into the children's personalities.

Childhood is the best time to absorb the basic of life in religious, in this case of course happens in the family. Children should participate accustomed to the mosque together, listen to religious sermons or lectures as this can convince the children's personality. Building family will be strong if all above functions work as it should. If the above functions are eliminated or ignored, there will have a critic in the family.

When we look to the conteporary era, that it seems we ought to question is the development of cience and technology, with all the applications and implications, which will be followed by the by the more rapid changes in the sducation structure of the family? This question is important to be explored. Did not the mutual question of this being quite basic which is far away is about the structure? Would not theoritically the structural change accompanied by the patterns of interraction of social actors.

According to Smith and Preston quoted by Abdullah Fadjar, they said that when social life could still be categorized as the traditional and practicing agrarian culture, its life is symbolized by the wide family connection which is called *extended family*. The structure family is not only a couple of husbands, wives and children of them but also a couple of grandfather and mother, brothers and sisters, uncle and aunt, and cousin. They live together in the same place, but live in the different place in geographically close.<sup>29</sup> Sometimes, wide family connection forms a village system and special kinship connection based on the cultures followed. The formulation based on this wide family connection not only occurs on the maintain of a permanent residence but also to the nomadism society as occured to the Escimo society.<sup>30</sup>

Interpersonal relationship in wide family relatifely staying to be a harmonic family. Controlling attitude is commited collectively by the supervision authority which geting confession and wide and full agreement so that feeling alienated is not almost occured by widely members. Similarly, the status of *inconsistency* can be prevented. Without alienation and inconsistency status in the family life –of course widely in society- paedagogically the atmosphere of family life is quite

28 Suwarno, *Pengantar Umum Pendidikan* (Jakarta: Aksara Baru, 1985), page.69

29 Abdullah Fadjar, *Al-Jami'ah*, No. 54 (Yogyakarta: IAIN Sunan Kalijaga, 1994),page.16.

30 *Ibid.*

conducive to form intact personalities. Interestingly, Briggs via Abdullah Fajar describes potret of depicting Eskimo family with the language: *Never in Anger*. Alienation and status of inconsistency is big potential for development of deviant behavior that leads to harmful and aggressive behavior.<sup>31</sup>

When the wave of civilization shifted from technology traditional, agrarian to industrial, structural change of family life arises. Most observers see that the revolution in technology and industry that certainly as a result of the development of science is a major cause of the emergence of nuclear family, *keluarga patih*. The emergence of industrial centers followed by a horizontal displacement motion (*physical mobility*), as seen in many parts of Indonesia today. With the transfer motion, the industrialization has reduced the number and closeness of contact between members of relatives. Industrialization is also followed by social mobility, so that changes in lifestyle and income reduce the sense of trust among members of kin. In the system of city life and any industrial needs and problems can be addressed immediately by diverse organizations or service agencies. This situation helps kinship ties become increasingly loose. The industrial life often changes the value system that allows people to experience success and reach capability without regardless of kinship network.

The structure of nuclear family that marks the industrial society oriented to the mass production described by Alvin Toffler via Abdullah Fajar as a family consisting of a husband-hunter of basic necessity life-, a wife-housekeeper, and a small number of children. This tendency is constantly changing. Future society will also be marked by the structure of the family without children. a family without children has become a "lifestyle" ("*Child-free*" *Life Style* or *Child-free culture*). In fact we will be able to see celibate lifestyle or the "*solos*" people who live alone outside the family.<sup>32</sup>

Generally, the presence of nuclear family in industrial society can be viewed as the big step in persons liberation from the bonds of tight wide network family. The emergence of nuclear family also fosters individualism and equal rights regardless of gender. It is therefore understandable that later appeared lifestyle where women wherewith wife's status as a public orientation, both in terms of employment or social activities. Not infrequently, for reasons of work, the husband and wife as well as a separate children's shelter.

The relationship of each personality certainly consisting of wide family is difficult to build. A structure of small family is theorized to be able to provide more through care and optimum. But that does not mean life in industrial nuclear family is without problems. Isolated personal feeling possibly occurs in the nuclear family. Family life is fragmented so that we can understand "survey" which reveals the truth of a number of women with "good" category having "another guy" as vice versa. No less interesting also notice about the children of primary school age in Hongkong to suicide because of mind set "lonely in a crowd" and "crowded loneliness" due to lack of affection from his parents. They are being fatherless prematurely. Some facts and analysis of this as a starting point can be assumed that the direction of the development of family education is partly determined by the structure of family live.

### C. CONCLUSION

From the discussion above, we can conclude that:

1. Islamic thought has given the spirit strongly so that the fact that the passengers study carefully the science from source of verses of *Qouliyah*, *Kauniyah* and *Alamiah*.

<sup>31</sup> *Ibid.*

<sup>32</sup> *Ibid.*, page.17.

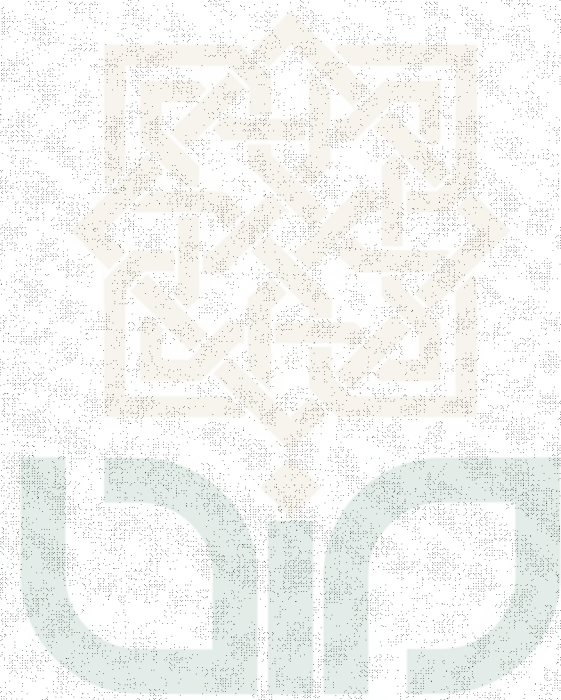
2. Educational Science and Technology can bring us to the humanity and dehumanity zone in the same relative time.
3. Ajaran Islam telah memberikan spirit yang sangat kuat agar umatnya senantiasa mempelajari ilmu pengetahuan yang bersumber dari ayat- ayat qouliyah, ayat- ayat kauniyah dan ayat- ayat alamiah.
4. The effect of presenting IPTEK also can cause on the family structure arrangement caused *alienation* and status *inkonsistensi* in the family.
5. Family institution has two critical points that is quite massive of amount of family in Indonesia where doe not have cultural preparation to face educational science and technology and to have economy preparation to achieve the role of “suplemental” in presenting human resource (HR)- Educational Science and Technology (IPTEK).

## REFERENCES

### *Al- Qur'an Word*

- Abdullah Fadjar, *Al- Jami'ah*, No.54, Yogyakarta: IAIN Sunan Kalijaga Yogyakarta, 1994.
- Abudin Nata, *Metodologi Studi Islam*, Jakarta: PT. Grafindo Persada, 2000.
- Achmad Baiquni, *Al- Qur'an Ilmu Pengetahuan dan Teknologi*, Jakarta: Dana Bhakti Wakaf.
- \_\_\_\_\_, *Al- Qur'an dan Ilmu Kealaman*, Jakarta: Dana Bhakti Prima Yasa, 1996.
- Fajri Gaffar, *Membangun Keluarga Muslim*, Yogyakarta: PLp2M, 1987.
- Hammudah 'Abd Al'ati, *The Family Structure in Islam*,(terj), Surabaya: Bina Ilmu, 1984.
- Hasbullah, *Dasar- Dasar Ilmu Pendidikan*, Bandung: Rajawali, 1999.
- Harun Nasution, *Islam Ditinjau Dari Berbagai Aspeknya*, Jakarta: UI- Press, 1985.
- Jalaluddin Rahmat, *Islam Alternatif*, Bandung: Mizan, 1988.
- Kamruni Buseri, *Pendidikan Keluarga dan Islam*, Yogyakarta: CV. Bina Usaha, 1990.
- Ki Supriyoko, *Pendidikan Nasional Sebagai Media Pengembang IPTEK*, materi kuliah Program Pasca sarjana UIN Sunan Kalijaga Yogyakarta, 2007.
- Mulyadi Kartanegara dalam Saefuddin dkk., “*On Islamic Civilization*”, *Menyalakan Kembali Lentera Peradaban Islam yang Sempat Padam*, Semarang: UNISSULA Press, 2010.
- Suwarno, *Pengantar Umum Pendidikan*, Jakarta: Aksara Baru, 1985.
- Vembriarto, *Sosiologi Pendidikan*, Yogyakarta: Yayasan paramita, 1984.
- Yudian Wahyudi, *Islam dan Nasionalisme Sebuah Pendekatan Maqashid Syari'ah*, Yogyakarta: UIN Suann Kalijaga,2006.
- Zuhal, *Visi IPTEK Memasuki Milenium III.*, Jakarta: UI- Press,2000.
- [http://id.wikipedia.org/wiki/Ilmu\\_alam](http://id.wikipedia.org/wiki/Ilmu_alam). (23 Mei 2012)





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