

## Indonesian Undergraduate Instructional Reform Towards A World Class University Graduates

(Presenter: Firdaus L.N.)

Author's:

**Firdaus L.N., Aras Mulyadi, Yanuar Hamzah, and Kennedy**

*Riau University Education Development Center (RUEDC), Pekanbaru 28293, Riau, Indonesia*

Phone/fax: +62761567092; E-mail: firdausln@yahoo.com

### Abstract

The qualities of human resources in Indonesia have not been appropriate with the national hope, and tend to decline, and it is far away from the international human resources quality. Internationally, the rank of Indonesia Competitiveness is decreasing. Among 60 countries in the world, Indonesia is at the 59<sup>th</sup> position in 2005. 83.27% of Indonesia university graduates were working as unskilled labour. The quality of Indonesian human resources are significantly determined the economic development, law, politics, and social of this country. The qualified human resources will succeed in the world competitions, whereas for those who are not qualified will lose in the competition. The competition in the globalization era is the competition of human resources quality that is provided by education institutes. Therefore, the efforts to improve the undergraduates' education quality become the programs which have to be supported by all parties, including the educational implementers in central, districts, schools, and community in Indonesia. This paper is aim to discuss for the urgency of instructional reform in Indonesia Undergraduate Education systems. It was based on the thesis that changing curriculum is not adequate. We must change what teacher's does in the classroom. There will be no educational reform until we have instructional reform, i.e. changes in what teacher does in the classroom to create an environment where learning takes place. We explore An Integrated Holistic Model's of Student-centered Learning Paradigm by integrating the Soft Skills Attributes for undergraduate education reform should take into account towards a world class university graduates. Finally, the transformational academic leadership of lecturer is a crucial element in term of quality improvement in teaching and learning in higher education system.

**Keywords:** competency-based curriculum, graduates soft skills, students-centered learning paradigm, university instructional reform, world class university graduates

### Introduction

Education is always given a prominent position in lists of development goals. Globalization has turned a piercing spotlight onto each country's higher education systems and institutions. The process of globalization is making higher education more important than ever before. It exerts new pressures on higher education, so that making reform essential even several contradictions. The policy community spends an inordinate amount of time coming up with clever ideas for reform, but very little time working out how to implement the policies effectively (Bloom, 2002).

Higher education is a great national asset. Its contribution to the economic and social well-being of the nation is of vital importance. In a fast-changing and increasingly competitive world, the role of higher education in equipping the labour force with appropriate and relevant skills, in stimulating innovation and supporting productivity and in enriching the quality of life is central. Today's world requires problem-solving skills and flexibility, many of today's developing country universities focus on rote learning, where memory, and not creativity and curiosity. Equally important is the failure of curricula to encompass the knowledge, skills, and perspectives students need to know, learning to do, learning to be, and learning to live together. In this perspective, the urgent action to expand the quantity and improve the quality of higher education in developing countries such as Indonesia should be a top development priority (Cameron, 2001; Beerkens, 2002).

The Indonesian National Education functions to develop the capability, character, and civilization of the nation for enhancing its intellectual capacity, and is aimed at developing learners' potentials so that they become imbued with human values who are faithful and pious to one and only God; who possess morals and noble character; who are healthy, knowledgeable, competent, creative, independent; and as citizens, are democratic and responsible (Act of The Republic of Indonesia Number 20, Year 2003). Since independence, higher education has experienced dramatic growth, particularly after the Education Act in 1961 was enacted. In 1950, there were 10 institutions of higher learning, with a total of 6,500 students. In 1970, there were 450 private and state institutions enrolling 237,000 students, and by 1990 this had grown to 900 institutions with nearly 1,486,000 students. In 1995, there were 853,000 students in 52 public universities, 1,450,000 in 1,228 private universities, and 279,000 in public and 68,000 in private Islamic institutions of higher education. Over the 1990-1996 period, total enrolment in public universities doubled, while enrolments in private universities rose by one third. (Quality Education for All Young People, 2004). Currently, the higher education system in Indonesia comprises close to 2,600 higher education institutions including 82 public institutions. (Djanali, 2005)

Unfortunately, the qualities of Indonesian higher education graduates have not been appropriate with the national hope and it is far away from the international human resources quality (Cameron, 2001). The percentage of unemployed for undergraduates (Bachelor/S1) and Diplome (D3) are 3.15% and 3.61% respectively. Approximately 83.27% of Indonesian graduates were working as unskilled labour (National Welfare Statistics 2003). Facing this challenge, the improvement of higher education graduates with technological and professional skills is needed for economic recovery and global competitiveness. According to the World Competitiveness Year Book 2005, Indonesia is at the 59<sup>th</sup> rank among 60 countries in the world (IMB, 2005).

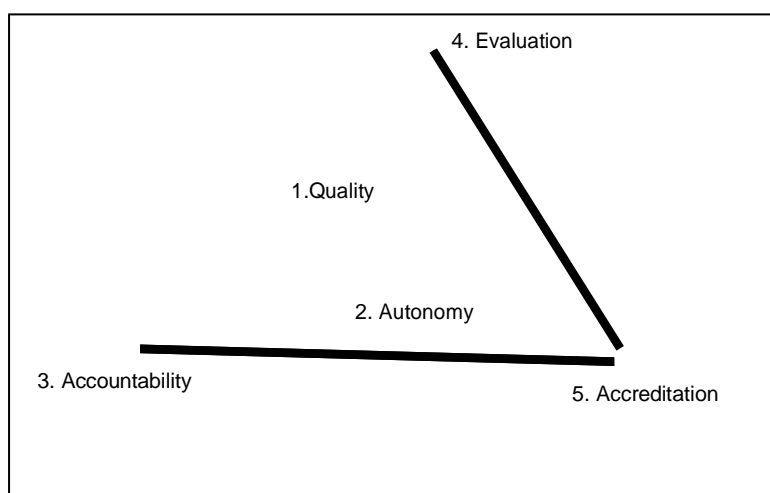
In the near future, Indonesian graduates are also facing the tight competition with foreign graduates for getting jobs in the local markets. Therefore, the efforts to improve the undergraduates' education quality become the programs which have to be supported by all parties, including the educational implementers in central, districts, schools, and community in Indonesia. This paper is aimed to discuss for the urgency of instructional reform in Indonesia Undergraduate Education systems. It was based on the thesis that changing curriculum is not adequate. We must change what teacher's does in the classroom. There will be no educational reform until we have instructional reform, i.e. changes in what teacher does in the classroom to create an environment where learning takes place.

## Evolution of Indonesian Higher Education Paradigm

Higher education in Indonesia does not have a long history, since it was just started at the end of the 19<sup>th</sup> century, particularly after the Education Act in 1961 was enacted. In 1975 the first initiative to develop a national higher education policy was launched by developing the first Higher Education Long Term Strategy for the period of 1975 – 1985. The national system, comprising public and private sectors, emphasized on the aspect of relevance by recognizing the need to establish strong linkages with the regional and national development. In addition to the introduction of a dual system, consisting of academic and professional streams, 3 program levels in higher education were introduced, i.e. Diploma, Sarjana and Graduate programs. The organizational and management aspects were given serious attention through the introduction of credit system, student academic evaluation, student load, and staff promotion system.

In 1986 – 1995, the development was focused to consolidate previous achievement and improvement of quality. The economic crisis caused by the sudden drop of oil price had prevented the student enrollment for further expansion. An early attempt to introduce reform in higher education by issuing a new Government Regulation No. 30/1990 did not achieve the expected outcome due to inadequate public and political supports. In the early of 1995 Department of Education and Culture of Indonesia, through Directorate General of Higher Education (DGHE) introduced a new concept of planning and development of higher education in this country, The third Higher Education Long Term Strategy 1996 – 2005.

In order to meet the future needs and demands, three major issues are identified, namely the need of a more dynamic management mode in higher education to cope with the dynamic changes, the need to take quality and relevance as the basic reference for higher education development (**Figure 1**), and the need for enhancing social mobility and equity through higher education development.

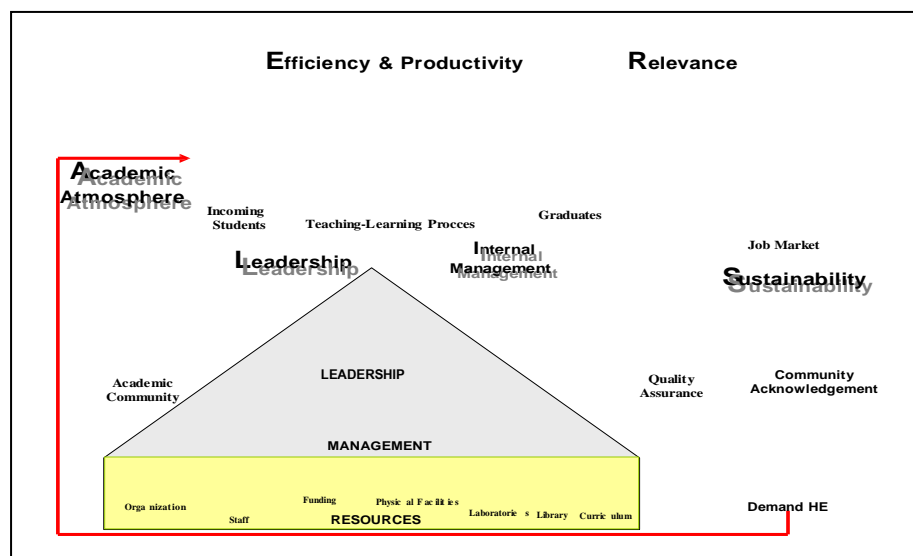


**Figure 1.** The third Indonesian Higher Education Long Term Strategy 1996 – 2005

The paradigm was also very concerned on some aspects: autonomy, bottom up planning, self-evaluation and strategic plan. These elements help the implementation of the higher education reform directed toward achievement of RAISE++ (Relevance, Academic Atmosphere,

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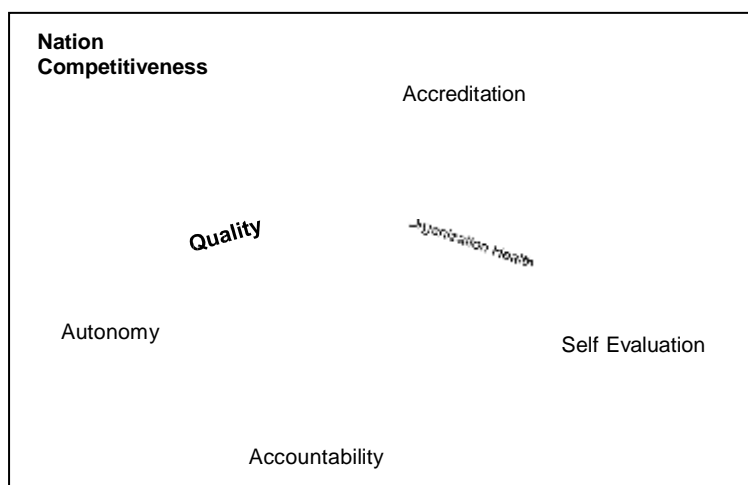
Institutional Management and Organization, Sustainability, Efficiency and Productivity), and ++ Leadership, Accessibility and Equity) as illustrated in **Figure 2**.



**Figure 2 RAISE approach** in third Indonesian Higher Education Long Term Strategy 1996-2005.

After the 1997 crisis in which created contracted economic growth and after the fall of the authoritarian government in 1998 which created euphoria in almost every sector, then the centralistic approach taken by the third long term strategy immediately becomes obsolete and cannot cope with these new types of challenges.

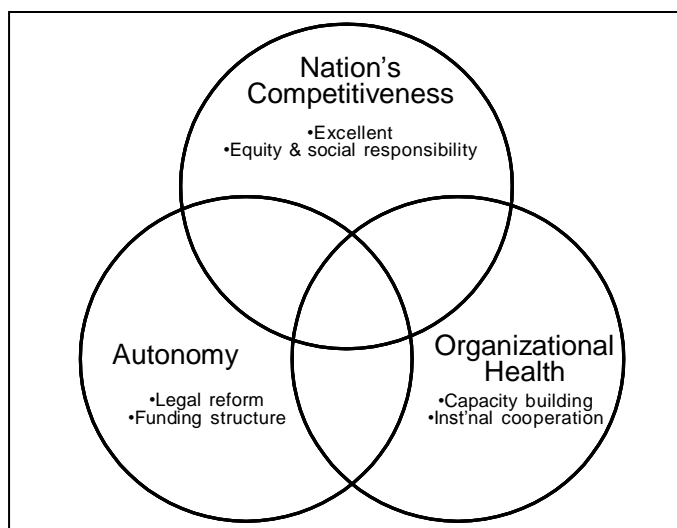
In 2003 the Indonesian government, represented by the Direktorat General of Higher Education(DGHE), Ministry of National Education, has launched its fourth long term strategy called Higher Education Long Term Strategy (HELTS) for the period of 2003-2010 (**Figure 3**).



**Figure 3.** The fourth Indonesian Higher Education Long Term Strategy 1996 – 2005

The main direction in this strategy is reflected by the 3 main pillars of development, as in the **Figure 4**. The recently launched government strategy in higher education (HELTS 2003 -

2010) stipulated three major strategic issues namely, the Nation's competitiveness, organizational health, and decentralization/autonomy.



**Figure 4.** Indonesian Higher Education Long-Term Strategy 2003-2010 stipulated three basic policies, i.e. the Nation's competitiveness, organizational health, and decentralization/autonomy.

The DGHE's role is particularly critical in preparing a coherent infrastructure to impose implementation of the new policy. For example, institutional framework and legal infrastructures are two essential aspects to be prepared, in addition to expansion of the implementation of the new paradigm concept. The improved legal infrastructure is supposed to include Higher Education Law, necessary Government Regulations, Ministerial decrees, etc., whereas institutional framework should include adjustment of the current structure (including the legal status) and responsibility of DGHE, Board of Higher Education (BHE), National Accreditation Board (NAB), as well as the universities.

Finally, Indonesian national education system has been established by Law of The Republic Of Indonesia Number 20, Year 2003 that ensure equal opportunity, improvement of quality and relevance and efficiency in management to meet various challenges in the wake of changes of local, national and global lives; therefore it requires a well-planned, well-directed, and sustainable education reform. It is necessary that all parties involved in the development of higher education take part in the implementation strategy to achieve the above mentioned targets.

### **Undergraduate Reform in Indonesian Higher Education**

The government of Indonesia realises that the quality of most university graduates in this country is still one of the higher education problems. The paradigm shift requires a more action oriented reform within the university governance, as well as the central government. There are several programs conducted in Indonesia namely University Research for Graduate Education (URGE), Development of Undergraduate Education (DUE), Quality of Undergraduate Education (QUE) and Technological and Professional Skills Development (TPSD), and the latest was called "Indonesia: Managing Higher Education for Relevance and Efficiency (I-MHERE)".

Development for Undergraduate Education (DUE) Project was designed by DGHE to support target or less developed universities in Indonesia for sustainable development of undergraduate education (S1). The main objective of the project was to develop the undergraduate education through increasing the quality, efficiency and relevance of teaching and learning process. The investment includes civil works, procurement of books and scientific journals, research grants, teaching grants, and technical assistants (Anonymous, 1995).

After the experience in DUE Project, the same team began the preparation activities for QUE (Quality for Undergraduate Education). It is basically a free competition and offered to all study programs, including those in the private institutions. In the private sector, only programs in mechanical engineering, chemical engineering, civil engineering, electrical engineering, biology, mathematics, chemistry, physics are eligible to compete. Since the QUE is a free competition, only the best will be selected and merit is taken as the most important criteria. Although the QUE is targeted to the best population, proposal development in many cases is still a crucial problem. Years of input based investment projects have considerably affected the ability to focus on outputs and outcome. The capacity to conduct proper self-assessment and draw an appropriate conclusion from it, and develop a program to remedy the weaknesses is in most cases lacking.

In the fiscal year of 1999/2000 the government is introducing a similar scheme to a fully funded government project by opening a tiered competition for a fraction of the government budget, under a project called "DUE-Like". In order to have an acceptable fairness of competition, public universities are grouped in 6 groups. The vertical grouping is done based on the institution's stage of development and previous level of investment, whereas horizontal grouping is done based on their specific disciplines.

In the fiscal year of 2001 the government initiates a similar scheme to the Asian Development Bank assisted project called Technological and Professional Skill Development (TPSD), which is conducted through a tiered competition. In order to have a fair competition, then public and private universities are in the separate group and also the universities with the most level of previous investment are excluded in the competition. Grouping is done also with regard to geographical locations and educational streams (vocational and academic). One additional feature is significant in this project, i.e. sustainability, in which it is compulsory for the winning institution to provide counterpart fund from its own revenue.

Recognizing the importance of higher education in developing the nation's competitiveness and cognizant of the fact that the system is currently besotted with various shortcomings and weaknesses, the DGHE took the initiative to launch a new development project called "Indonesia: Managing Higher Education for Relevance and Efficiency (I-MHERE)". The project is supported by the World Bank and has the development objective of, *to enhance managerial capacities and financing mechanisms within the Ministry of National Education and higher education institutions to improve the efficiency, relevance, quality and equity of Indonesian higher education.*

Upon the completion of this project, it is expected that improvement will be made in, a) *organizational health*, particularly the DGHE capacity to manage and develop the higher education sector; b) *capacity to implement autonomy*: particularly the overall management

quality amongst the recipients institutions; and c) *enhancing the capacity to contribute to the nation's competitiveness*: the HEIs are more responsive to local, national, as well as global needs, and improving access to higher education for the under privileged is improved.

This project consists of two components namely: (1) capacity building for the reform and oversight of the higher education system and (2) grants to improve academic quality and institutional performance. The activities and investments in this project represent a more comprehensive approach to reform than has been taken in the past. They focus on constructing an enabling environment at the central level while supporting institutional capacity building and innovation to improve performance and results.

The future goal of those programs focus on improving the quality and efficiency of higher education are enhancing the international competitiveness of Indonesian higher Education graduates (Figure 5).

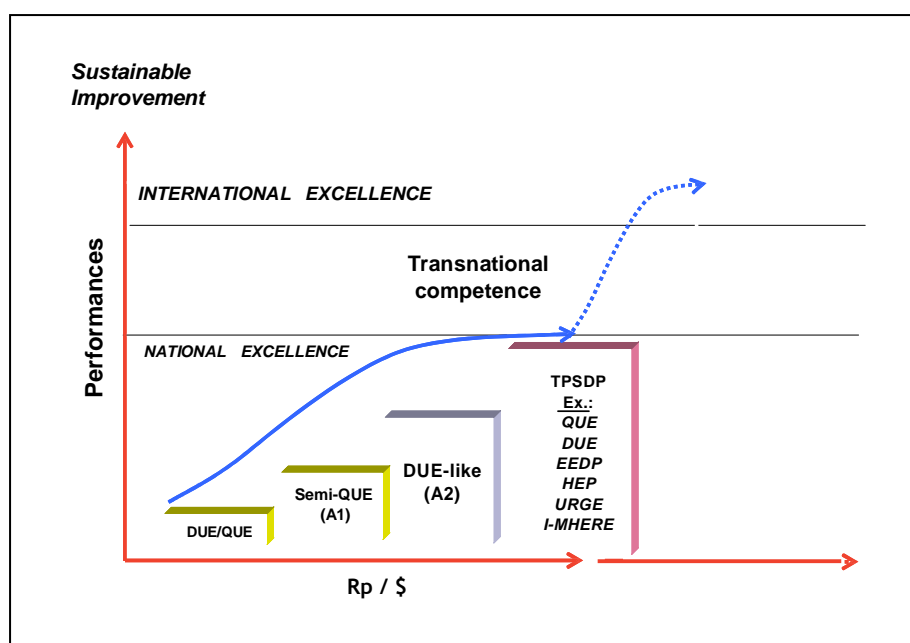


Figure 5. The future goal of Indonesian higher education reform programmes

The package of higher education policy reforms was already have an accelerating effect on the reforms. Increasing university autonomy was in line with the IMF reform packages and increasing accountability and transparency clearly fitted the call for reformasi. Furthermore, the country's major universities are also expected to play an important role in the strengthening of the economy and in the empowerment of the regions (that are also becoming increasingly autonomous). The new autonomous universities are thus expected to produce better-qualified graduates in a more efficient and transparent way.

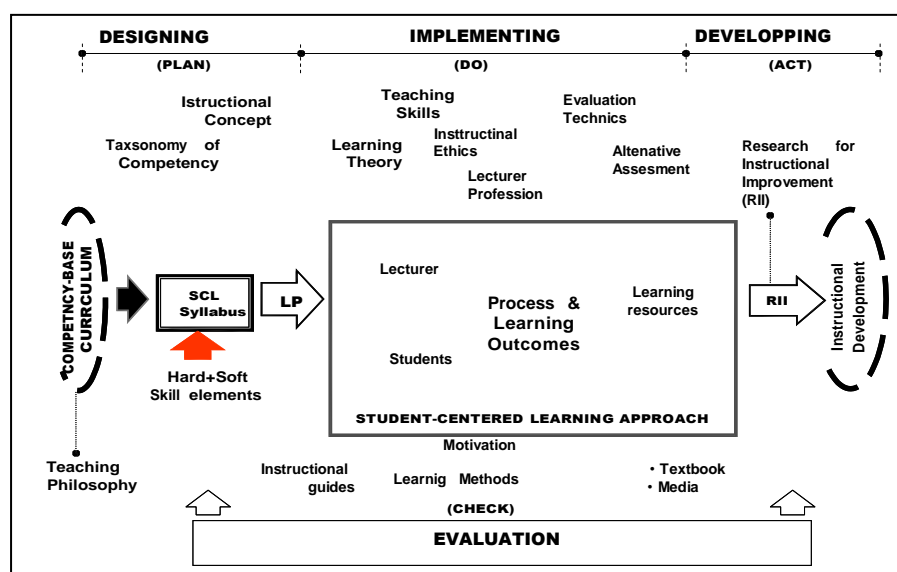
### From curriculum to Instructional Reform

Marketplaces require higher education undergraduates have a general competency, meanwhile the content of the courses offered are quite deep and specific. Regarding this government issues, Indonesian higher education stating the changes in curriculum, from Content-based Curriculum (CBC) to Competency-based Curriculum (CBE). Before the year 2000, undergraduate programme has implemented National Curricula basen on Decree of

056/U/1994. This Decree contains 60% of national curriculum determined by DGHE and 40% institutional curricula. In line with the job market needs, the Ministry of National Education published Decree No.232/U/2000, starting that education system has to change from CBC to CBE. In other words, competency and skills to the standards of performance required in the workplace. It means that the students have to learn in order to have personal competences as well as professional competencies, reflecting in a curriculum design. This new curriculum is currently considered to be suitable for the need of work places.

In Indonesia higher education, the basic frameworks and curriculum structure of higher education institution shall be determined by higher education institution concerned, taking into consideration national standards of education for each program of study. The improvement is not merely in grouping the subjects but the more importance in designing curricula which will make it more convenient for the staff to do the tasks, more freedom for the students to choose the competence, and more efficient for the university to manage the education programs. Consequently, the approach for teaching should be change. The lecturer paradigm on teaching have to shift a way from “*What I want to Teach to What I want my students to Learn*”.

In order to develop our students professional skills, we must change what teacher’s does in the classroom to change the approach from Teacher-Centered Learning (TCL) to Student-Centered Learning (SCL) through accommodating the needs to balance between academic excellence and fitness for quality purpose (Wessler, 1999; Ball & Pelco, 2006). Without this transformation, there will be no real instructional reform in the classroom to create an environment where learning takes place (Fallows, 2003). An Integrated Holistic Model’s of Student-centered Learning Paradigm by integrating the Soft Skills Attributes for undergraduate education reform proposed to take into account (**Figure 6**).



**Figure 6.** An Integrated Holistic Model’s of Student-centered Learning Paradigm by integrating the Soft Skills Attributes for undergraduate education reform should take into account towards a world class university graduates

SCL approach has been introduced to the 600 higher educations in Indonesia for period 2003-2006. This program will be expanded to 800 universities in 2007. There were 80 universities



participated in training of trainer for CBC and 40 universities for SCL (Allah Saillah, personal communication). National targets for this program will reach 30% of higher education institution in Indonesia by the year 2010. DGHE will play a role as facilitating, empowering and enabling for the successful of this program rather than as a regulator as usual.

Parallel to the undergraduates instructional reform, lecturer competency-based curriculum has been improved through several national workshops (2003-2006) coordinated by PPAI Open University as a National Coordinator of 41 P3AI (Center for Enhancement and Development of Instructional Activities). These institutes for Educational Studies and Development were established throughout public universities in Indonesia since 1998 to support the implementation of higher education reform by carrying out to the improvement of instructional, academic and professional education.

In general, the major weaknesses in the quality of undergraduates i.e. they lack in (1) technological skills, (2) communication skills, (3) leadership, (4) creativity, and (5) problem solving skills. These can be attributed to the existing condition of teaching and learning process in most study program in Indonesian higher education. To develop the technological and professional skills of undergraduate students, it requires improvement of educational system that ensures competent graduate output in (a) technical knowledge, (b) contextual knowledge, (c) intellectual skills, (d) interpersonal skills, (e) technical skills, and (f) managerial/entrepreneurship skills.

Instructional undergraduates' reform from TCL to SCL is a driven force to improve the teaching and learning process in higher education towards a world class university graduates Firdaus L.N. (2006a,b,c). The rationale is in this learning condition, the student has come into prominence to construct knowledge through gathering and synthesizing information and integrating it with the general skills of inquiry, communication, critical thinking, and problem solving (Trigwell & Prosser, 1991). Teachers who embrace student centered learning (SCL) encourage students to: take responsibility for their own learning, involve students directly in the discovery of knowledge, use materials that challenge students to use their prior knowledge to create new and deeper understandings of concepts, embrace the concept that learning is enhanced through social activities such as cooperative learning, problem based learning, etc., use school, work, home, and community as resources for collaborative learning, involve all constituents in contributing to student learning (faculty, students, staff, alumni, employers, family, and others), and use activities beyond the classroom to enhance the learning experience. Specific learning approaches that have strong student centered components are: Cooperative Learning, Collaborative Learning, Learning Communities, Problem-based Learning, Project-based Learning, Service Learning, Case Method Peer Based Learning Paired or Grouped Courses, Experiential Learning Constructivist Learning.

## **Conclusion and Perspectives**

Finally, instructional reform will have to develop a learning system which can help graduates learn beyond their skills and expertise. The system must balance between the short-term needs of the labor market for specialized experts and the long term benefit from "soft skills" as a future investment. The transformational academic leadership of lecturer is a crucial element in term of quality improvement in teaching and learning in higher education system. In addition to the present emphasis on cognitive ability, in facing with future demands, a creative capacity to deal with uncertainty must be given an important place in instructional design. It

has to bring into the classrooms not only factual knowledge or “hard skills”, but also “soft skills” derived from experiential knowledge, which can help students to familiarize with the tension of innovation and emotional difficulties during his/her interaction with global society.

### **Acknowledgment**

The financial support by The Government of Riau Province is highly acknowledged.

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