The Implementation of Unistaff Principles in the Teaching and Learning Process Training
(The Case at AKPRIND Institute of Science and Technology, Jogyakarta, Indonesia)

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Abstract

With regard to the teaching and learning process, one of the Unistaff principles emphasizes the concept of major shift in traditional practice of university teaching and learning. Teaching and learning in this era need to go beyond transfer of knowledge, to develop this great human potential in order to be able to cope with increasing productivity of technology. The objective of this paper is to discuss the impact of involving Unistaff principles in teaching and learning training program conducted in AKPRIND Institute of Science and Technology, Jogyakarta. The theoretical framework underlying the construction of training curriculum can be explained (1) the focus of the training was development of curriculum (therefore it requires tracer study, curriculum development and learning evaluation technique); (2) the need to shift from passive to active learning and (3) the implementation of a new paradigm of higher education. In conclusion, (1) Unistaff principles are relevant to be implemented in teaching and learning processes, (2) the most notable impact of introducing Unistaff principles is the emergence of motivation of ex-participants to learn more in teaching and learning methods and networking.

Introduction

According to the preamble of World Declaration on Higher Education for the 21st century, higher education faces a great challenge and difficulty related to diverse manners such as financing, staff development, skill-based training and employability of graduates. These obstacles have to be overcome by gradual reformation in educational system that fits the conditions of each respective country.

To anticipate global competition, there is a need for more focus activities directing towards quality achievement in higher education by many universities in Indonesia.. One of the programs related to quality improvement that should receive a widespread appreciation is the implementation of quality assurance. For this the Directorate General of Higher Education, Department of National Education has launched the Higher Education Long Term Strategy 2003-2010 (abrv. HELTS). In part 1 chapter

II, it is stated that: "In *order to contribute to the nation's competitiveness, national higher education has to be organizationally healthy, and the same requirement also applies to institutions. A structural adjustment in the existing system is, however, needed to meet this challenge. The structural adjustment aims, by the year of 2010, at a healthy higher education system, effectively coordinated and demonstrated by the following features: quality, access and equity, autonomy.* It means that universities have to prepare themselves in many aspects such as in increasing relevance, academic atmosphere, quality of internal management, efficient and productive, sustainability, leadership, accessibility and equity (abbr. RAISE ++). The final goal of good organization and management of higher education is to increase **prosperity, security and social welfare** of the nation. We believe that those three components are a product of high quality of higher education institution. One of the strategies to achieve those goals is the establishment of quality assurance system in higher education. Some of the quality components in a study program level are: study program curriculum, human resources, students, teaching and learning process, and academic atmosphere. Most of the components are discussed in the The Unistaff Program.

The The Unistaff Program is a dialogue and training program designed around the most urgent challenges with which universities are coping worldwide. The focuses of The Unistaff Program 2003 were teaching and learning process, curriculum development and evaluation. The Unistaff Program intends to further develop the individual potentials of the participants in order to strengthen their efficiency in coping with the urgent challenges of their universities.

In line with the Unistaff Program intention, the dissemination and implementation of the Unistaff principles become crucial in facing the challenges of higher education in Indonesia, which promotes a continuous quality improvement. In a healthy organization, a continuous quality improvement should become its primary concern. There are 2314 universities registered in Indonesia, 81 of them are public universities, and the rest are private universities with various qualities. Almost all of public and private universities have research and community service center, but only a few of them have an institution or center concern about the studies and development of education including human resources development.

The enhancement of human resources quality was applied in many universities under DGHE program, specifically under Quality Development of Human Resource Project. This project is a national project, concerned with the quality development of faculties in many universities in the aspects of quality assurance, teaching and learning process, curriculum design and evaluation including self-evaluation of the institution. For the less- developed universities, such as AKPRIND Institute of Science and Technology, located in Jogyakarta-Java, Indonesia must put its first priority to increase the quality of human resources. At the end of 2003, AKPRIND IST had an opportunity to organize the training in teaching and learning process development, and this university has requested Bogor Agricultural University (BAU) as a supervisor in human resource development. To execute the program BAU appointed its staff members who are the alumni of the Unistaff Program and latter one of the Unistaff Program from Brawijaya

University has also been involved in the program. The opportunity to develop curriculum in this training has been challenged enthusiastically by the alumni of Unistaff to implement the principles of Unistaff..

The objectives of this paper are

1) to discuss the impact of Unistaff principles in teaching and learning training design adopted in national level,
2) to demonstrate the networking among alumni in the original country for better job performance.

A glance at AKPRIND IST

AKPRIND IST was established in collaboration with Industrial Department of Indonesia named Industrial Academy of Jogyakarta in 1971,. In line with the needs of professionalism in science and technology to support industrial and engineering development, the Industrial Academy of Jogyakarta changed its name and became AKPRIND Institute of Science and Technology in 1989 and was permitted to carry out the S1 program, with the status of private university. The vision of AKPRIND IST is to be an outstanding university in teaching and learning process, research and public services, specifically in science and technology field for better human welfare. Nowadays, this university has 3 faculties: Faculty of Industrial Technology, Faculty of Applied Science and Faculty of Mineral Technology, and 7 departments. This university is chaired by a rector and 3 vice rectors for academic affairs, administrative affairs and student development affairs, respectively. There are 91 faculty members responsible for teaching and supervising more than 5000 students. Collaboration with stakeholders has been carried out to increase the quality and relevance of education and research, especially with more than 300 national industries. Teaching staff qualifications are mostly master degree (more than 80%), and the rest holds S1 degree. However, as private university, they do not have the regular or periodical training concerning education philosophy, teaching techniques and methods, as well as curriculum design. Therefore, the quality of human resource development is one of the crucial issues in this university, especially in teaching and learning process including curriculum design and evaluation.

A glance at Bogor Agricultural University

Bogor Agricultural University is one of the outstanding higher education institutions in Indonesia, especially in the education system development such as designing S1 program from 6 to 4 years length of study, initiation of postgraduate system establishment, new study program development, which color national level policy. It accommodates more than 25 000 students, that are served by 1350 faculty members covering 8 faculty and 36 departments. This university has many excellence human resources as indicated by the assignment of some university staff for a prestigious and strategic positions in the Central government and industry. One of the tasks related to the education development is in training process as training provider, training designer, and trainers. In the case of this program, the Unistaff alumni networking become more important in contributing and influencing activities.

Training concept

Regarding with teaching and learning processes, one of the Unistaff principles is to empahasize the concept of major shift in traditional practice of university teaching and learning. According to Wessler (1999) the shift are:

1) from teaching to learning,
2) from learning to know towards learning to do, learning to be, learning to live together,
3) from degree and examination-centered curricula towards short-cycle learning opportunities, oriented on developing personal competencies,
4) from person-centered teaching and learning settings towards a wider system,
5) from individual learning towards collective learning.

Teaching and learning in this era need to go beyond transfer of knowledge, to develop this great human potential in order to be able to cope with increasing productivity of technology. Processes of education change must take into account not only that the objectives to be achieved, but also of the perceptions and initial mental image that are typical of the actors in the educational process, as well as effectiveness of particular educational strategies, approaches and method.

Teaching and learning are connected with the RAISE++ concept: there is a concern to upgrade the quality and efficiency of public education, and increase access and equity.

At the end of the 20th century, it was recognized in most societies that curricula should be open, active, flexible and intercultural based. To adequately response to regional differences, socio-cultural and ethnic diversity, provision has to be made for localized or regionalized adaptations of a core curriculum issued at the national level. Decentralization of the curriculum development process should be an integral part of meaningful curricular change in the national level.

There is a new policy in National level concerning curricula development, from content-based to compenteuce-based curriculum, as stated in the Decree of National Education Ministry No 232/U/2002. It needs translation and socialization also internalization in each university. According to the Bloom's taxonomy, the teaching and learning process should accommodate the changing in cognitive, affective and psycho-motoric aspects. These can be realized only if teaching and learning are done in a healthy atmosphere including using head, hand and heart. Actually, it is in line with the goals of learning launched by UNESCO including: 1) learning to know, 2) learning to do, 3) learning to be, 4) learning to live together.

All parties should have a sense for formulating their competencies, how to measure them and what kind of standard should be refered. These are not easy to do without understanding and internalizing the meaning of competencies themselves. Even though this issue was announced 2 years ago, only a few of the universities have implemented the concept of CBC totally. In spite of some universities have carried out the CBC socialization, even internationalization and implementation, there are so many universities still behind.

Curriculum development was often seen as a one-time event during which there was an emphasis on training in techniques and skills to design and implement national curricula. However, it is now regarded as an on-going process aimed at organizing better learning opportunities, and focusing on actual interactions in the classroom.

New curricula, with the mass training of teachers, were essential components of this program. The reforms were undertaken in an effort to improve the quality of education, focusing on the development of higher-order thinking and communication skills, and the development of values and practical skills, for better prepare students both for the world of work and for higher education.

In this training the course emphasized strong participant involvement and interaction. Participants have

a) to present the main organization and mechanisms involved in curriculum development;
b) to discuss the main problems/challenges facing the teaching and learning process development and
c) to indicate successful factors of reform.

Training courses

The title of the training is "Teaching and Learning Process Development" which involves many aspects and courses in basic knowledge, such as (1) Higher Education Quality Development, and (2) Education Phsycology.

The specific courses include:

(1) A Concept of Tracer Study in Higher Education,
(2) Competence-based Curriculum Internationalization and Development,
(3) Innovative Teaching and Learning,
(4) Participative Learning,
(5) Teaching and Learning Evaluation.

In addition to that the supporting material, student motivation, was also delivered. The new paradigm is based on the concept of RAISE++, and the training material and courses should holistically cover the concept for the future of the institution and human resources.

Looking back to the RAISE++, if input-process-output (IPO) is applied in quality development, the input such as students, staff, facilities and fund are absolutely necessary. The teaching and learning process is affected by the quality of actors, material, curriculum design, quality of the students, facilities and internal management, especially leadership of the leader. In the case of teaching and learning process, the aspects of efficiency and productivity will take into account. The most efficient and the productive activities are the better performance of the education institution, however, they have to be appeared in balance. In teaching and learning process, the most desire and difficult at once, is how to create the innovation of teaching to share knowledge and skills with the students in order to get the better attitude. Some of the techniques such as participatory learning and how to motivate the students are necessary and important to attract the students and make them enjoy learning science and technology. The most important thing is how to induce the attitude and behavior to the courses in order to get better personal competencies, such as honesty, integrated, team-work, hard-work, faithful, friendly, good-willingness, adaptable, communicative and tolerant. This issue has been taken into account in curriculum design and material delivering in innovative teaching and participative learning. The goal of the good teaching and learning process is a group of qualified graduates, especially when they perform the good performance in the workplace. By using a tracer study activity, the institution will be acquainted by how well and relevance the teaching and learning process with the needs of users. This feedback will assist the institution in curriculum design for the next future to keep the sustainability of the education development. The diagram of the cycle of the new paradigm of RAISE++ is shown in Figure 1.

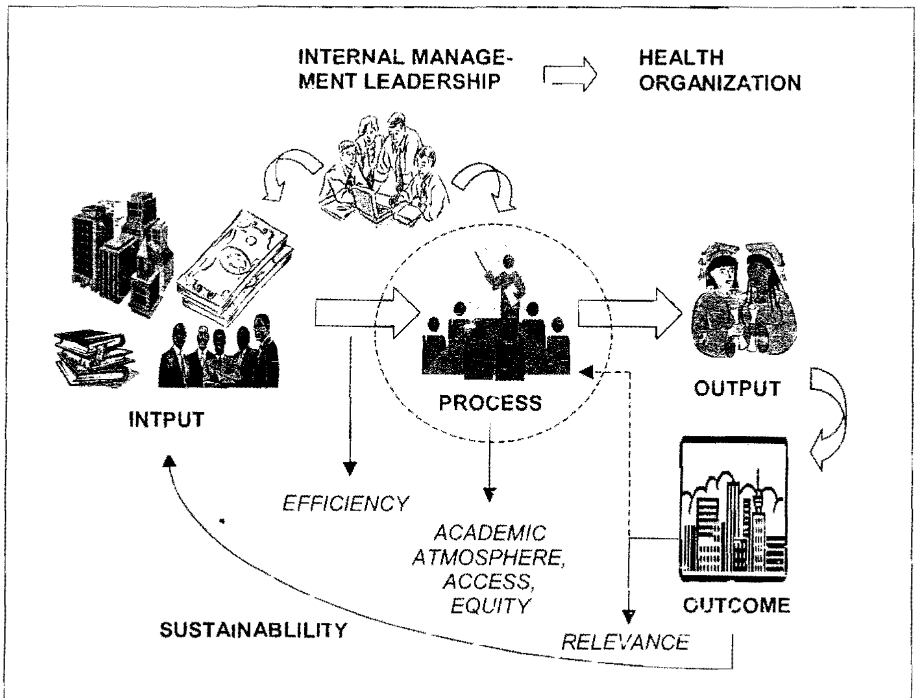

Figure 1. The New Paradigm of RAISE++

Training implementation

The specific objectives of this training were:

1) awareness on the quality of higher education related to the nation competitiveness,
2) internalization of competence-based curriculum development,
3) enrichment of teaching techniques and methods,
4) enhancing knowledge and skills in collecting and receiving feedback from the stakeholders through tracer study and student evaluation.

The training was carried out for 4 days (40 hours effectively). The training applied an adult education approach, where the participants were proactive to learn and the instructor acted as facilitator. The participants were 80 persons, who were 94% have fully attended the training. The courses were delivered through lecturing, more discussion, group discussion and personal task. The specific task is designing a draft of the lecture planning including formulating competencies, competencies measurement and standard for each course teach by each participant.
The training needs assessment (TNA) was carried out by listing the training programs organized by AKPRIND IST, and in-depth interviews of the organizer and the leader of university. The results of TNA were formulated and communicated with the instructors, and the results then submitted to the steering committee.
The awareness of higher education quality consisted of (1) the introduction to quality in general, (2) the needs of quality increasing in university, (3) quality indicators. It was fruitful to deliver the course materials in order to be focused on the quality, standard, quality policy, quality objectives, quality assurance and the strategy to achieve the quality. On the specific courses, CBC development was one of the important materials to be internalized to the participant. The definition of competency, competency standard, competence performance, and how to formulate competencies for each subject are necessary to discuss. It was not easy to adopt the new system since the awareness and the readiness to change was low. Regarding with planning of subject delivering is very crucial in lecture plan, designing lecture points and units (abrv GBPP and SAP) were provided in this training. In this subject, participants were asked to design their own subject planning, even though these were as a draft.

To increase knowledge of subject delivering system planning, innovation teaching and participation learning should be explored. These two courses are new and show that classical work and transfer of knowledge are not enough to give the student good competencies. On the other hand, the technique of delivery alone was not enough . "Teaching is helping to help emotional behavior" was one of the Unistaff principles applied in this training. Seven steps to motivate the student as one of Unistaff principles are also shared. The area of motivation such as content, methods and media, personal relations (feedback question) and context (field practice, guest lecturers) were delivered. A new development for this university was a tracer study subject, so a concept of tracer study in higher education was provided in this training.

This tracer study concept can be implemented to identify a market signal. Most universities believe in the market signals, but Unistaff principles stated that the market signal derived from the tracer study results are not the only ones that can be considered as improving the curricula. It has to be combined with the scientific vision that steers the market. Last but not least was the evaluation of teaching and learning process from the lectures to the students, or from the students to the lecturers. Both results can be considered as a fruitful feed back for the next teaching and learning process. The results have to be seen in a positive angle, as long as we believe to the tool designed for evaluation.

At the end of the training the participants were asked to evaluate the performance of the training. Based on the Likert system in evaluation, they said that the curricula of the training was very satisfying them, due to the interest of the courses. The performance and the suitability of the courses were evaluated by average score of 4,30 (4,07-4,63) -(see Fig.2a). The components of the training evaluation in general include: (1) the benefit of the course in the workplace, (2) trainers skills in delivering courses, (3) illustration given by the trainers, (4) time allocation for discussion and (5) duration suitability of each subjects (see Fig.2b). The participants dominantly stated that the participative learning and innovative teaching were the most excellent and important subjects in teaching and learning process development.

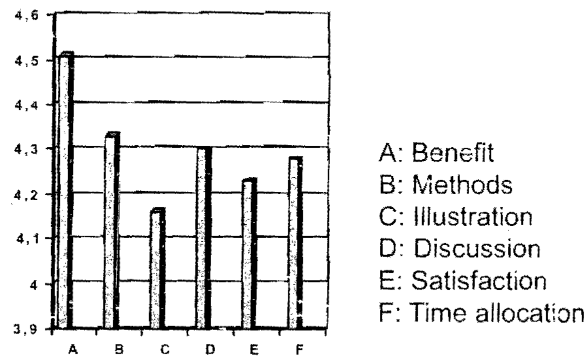

Figure 2. The evaluation results for each course (a) and the training performance (b)

The participants suggested more opportunity with more time allocation for CBC development training, innovative teaching and participative learning, tracer study strategies, and module writing for CBC development. Following up the teaching and learning process development, there was one of the training carried out in 2004, i.e. designing subject content (GBPP and SAP) which has a list of the material for each week, formulating detail competencies. In this training, conducted in February 2004, there was more than 2/3 part of total subjects collected during the training. This lecture planning is a must in higher education system in Indonesia in order to be accredited by National Accreditation Board. The other training on module development will be organized next October.

Conclusion

The implementation of Unistaff principles has been done in one of the private university of AKPRIND IST Jogyakarta. To implement the principles in the training program one should first know the characteristic of the university and its staff and assess the needs of the training. When the opportunity was available, the first challenge was how to make alumni networking work together.

In teaching and learning process development, some of the Unistaff principles were relevant to be implemented in human resources development in higher education in Indonesia. The basic principle is how to share the experience when there is a change of the system. Management of change should play an important role in many aspects. The first change is always culture changed and one of the initial condition is through the training.

The most notable impact of introducing Unistaff principles is the emergence of motivation of alumni to learn more in teaching and learning methods as indicated by the forwarded request for the follow up training by the director of AKPRIND IST to Bogor Agricultural University/ This implies that the dissemination of Unistaff principles warrant a further response by the Unistaff alumni. By organizing the network confference, it is possible to widen the network broadly,in organizing a grateful activity for better quality of the nation in Indonesia. This case is only one first case conducted in the training program; some training has been designed and implemented in national level such as quality assurance system development, total quality management, and self-evaluation in another university.

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