

## Evaluation of Education System with Action Research

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### Abstract

This paper aims to inform, that the evaluation of the education system at all levels of education can be done with action research, more precisely with classroom action research. The author already experienced in classroom action research for various levels of education, both secondary education, higher education and even, in undergraduate and postgraduate programs. The author had experience in conducting research with classroom action research in the beginning undergraduate level since the end of the Twentieth Century. It Began by evaluating student learning outcomes in the four skills of German language learning, and since then until the twenty-first century, several studies related to author's lectures in strata one and two, as well as a variety of requests from school teachers in secondary education has been done. The results are an increase of in the level of learning for the system under study, and Because of continuing education each other the author concluded that the way of classroom action research study went from micro to macro scale. This mean classroom action research can also be used to evaluate the education system.

**Keywords:** evaluation, classroom action research, enhance, study result, education

### INTRODUCTION

Educational evaluation should be done by every manager in the education system, because the evaluation is the process of conducting a value judgment about the activities, performance, process, or other procedures that lead to a decision. In this case is the evaluation of learning outcomes. Assessment is commonly used as evaluation. While the assessment is the process of obtaining information that can be used in the evaluation. Assessment requires measurement method, which is defined as the provision of figures to a certain result or characteristic possessed by the rules of a particular object or a particular formula. In general, the measurement is done through exams and or surveys.

The purpose of this exams ranged from selection, placement, success, to remedial, and every test has a specific characteristics. For teachers, this test is to measure the success of learning in the classroom. In the class, exams might be formative or summative. Formative exams is to determine the development of learners, for example, with quizzes, UTS (midterms), whereas summative test is to determine the overall outcome of learning, namely the UAS (final exams). While the area of language mastery was measured with four language skills, ie, speaking, listening, reading, writing, also grammar and vocabulary.

To perform the measurement and evaluation, this paper will use action research that is applied in various levels of education. Action research is used according to John Elliot, 1981 (quoted by Altrichter & Posch, 2007:13) "*Aktionsforschung ist die systematische Untersuchung beruflicher Situationen, die von Lehrern und Lehrerinnen selbst durchgeführt wird, in der Absicht, diese zu verbessern*" (=action research is a systematic study on teacher performance, conducted by teachers themselves in order to improve performance). Means that in order to evaluate the education system one should use action research. The performance of education management and learning outcomes of learners can be improved with action research. This paper is related to problems in education evaluation system that can be assisted by applying action research.

### DISCUSSION

As has been stated, that the evaluation of education needs to be done, in addition to maintaining the quality of education constancy, also improving the quality of education at all educational levels. Assessment is used as a process of acquiring information that is based on a measurement for evaluation. Thus the need to process the collection and use of information by the teacher through a number of evidence to make decisions about the learner's achievement of competencies. It means that the purpose of classroom assessment is to assess the ability of the individual through the bill and certain tasks, meant to help and encourage learners to learn, and to help and encourage teachers to teach better, also determine the learning strategies, institutional accountability, and improve the quality of education.

For that characterize classroom assessments should refer to the following, among others: (1) study completed, meaning that learners allowed to work or go on to the next matter after being unable to resolve the matter prior to the procedure well. (2) Authentic ratings, is the assessment and learning using a variety of criteria in a holistic way and to reflect on the knowledge, skills and attitudes. (3) continuous assessment, which is to monitor the process, progress and results of continuous improvement in the form of quizzes, UTS and UAS. (4) Assessment criteria based on reference / benchmark, meaning that no learner achievement compared to the performance of the group, but with his ability earlier in accordance with established standards. (5) The use of various methods and assessment tools, using a variety of assessment, such as written, oral, portfolio, product, performance, project, observation, and self-assessment. (Adapted from Sastrawijaya, 2013).

Thus the evaluation principles should also be applied, among other things: exams / questions should be valid, meaning that the assessment should be based on test data compiled by the correct procedure. Objective criteria should be clear procedures. Fair, assessment should not only beneficial or detrimental to a group of learners. Integrated, social component related with learning activities. Terbuka, assessment procedures can be known by the interested. Menyeluruh and sustainable, meaning that covers all aspects to monitor the development of learner abilities. Systematic, referring to the standard measures. Beracuan criteria, the assessment is based on the size of the set. Akuntabel, valuation can be justified. In addition to the principles of the assessment, the test must also meet various requirements: the substance, meaning that should be represent. This gener competencies being assessed. Konstruksi, meaning that meet the technical requirements; language also must use proper grammar and correct. There indikator items, as well as the test grating. All this is necessary, because the benefits of the assessment results are as diagnostik, as well as the improvement of programs and activities.

To support this paper needs to be elaborated little on action research. At first action research was introduced by Kurt Lewin in 1946 (in Kurt Lewin, 1990:41) to address social problems in America. But in its development Jürgen Habermas, Hilda Taba, Michael Foster, John Elliot, Stephen Kemmis, Robin McTaggart, Werner Stangl also use action research to improve the quality of teacher performance in the classroom.

Way is through a four-step approach: plan, act, monitor and evaluation. Then each of the last four steps, will always rise to form a spiral. It means that planning is influenced both by pergoodness in the first round. For that Stephen Kemmis and Robin McTaggart did some modifications to define action research as a form of collective self-reflection activities undertaken by the participants of social situations, in order to improve the rationality and their assessment of the social practices or education, according to their demands and conditions situation in which the practice is done. This definition by Hardjodipuro (1997) clarified become: 'participants' who among other teacher (teachers), students, principals, parents, or community members.

Mean that action research is an approach to improve education through changes, by encouraging teachers to have their own teaching practice, and that teachers become critical of their teaching practice and want to change it. He also explained also that action research is not just teaching. This action research has the meaning of conscious and critical of the teaching, and the use of critical awareness of self-teaching yourself to be ready to face the process of change and improvement of teaching. Action research encourages teachers to dare to act and think critically in developing the theory and rationale for their own, as well as responsible for the execution of their duties in a professional manner.

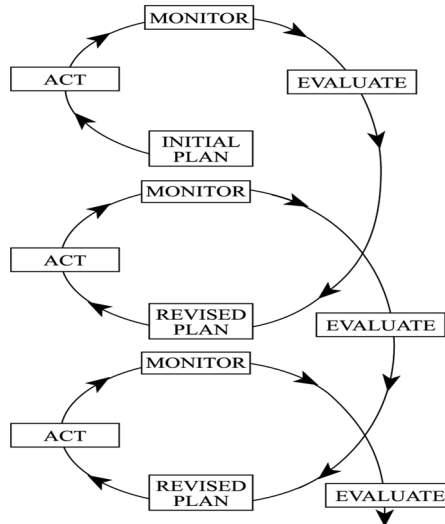
From the above, it turns out that action research needs to be done to improve their own self-teaching, "the first self-evaluation, reflection and thinking about ways to improve it in a professional manner. It required two phenomena, the first teacher must develop their own theory that will be used based on own practice in accordance with the problems that arise. Second, action research is a unique case which is based on certain assumptions in accordance with the teaching of the choice of methods and means of solving problems. Means that improvements will be done before it needs to be designed so that it can function effectively, both for themselves as well as for teaching learners, because the end of a learning activity is the acquisition of learning outcomes. Thus in the process of learning to think about how to improve the quality, both in terms of language skills, cultural knowledge and especially the flow of thought learner.

Teachers who undertake action research, in accordance with the above description are also researchers. In improvement to the quality of teaching and learning, teachers need to continually improve themselves by acting critically, systematically but rational. It is necessary to control their research and teaching.

Action research contains the following six principles: (1) Reflective Critique: the criticisms raised in the context of program evaluation. with this principle changes and improvements can be made. (2) dialectical critique: namely how to understand the relationship between the phenomena under study. (3) Collaborative: namely the cooperation between members who have different views as a contribution to understanding the situation. (4) Disturbance at risk, when an interruption in the research process, researchers are expected to be willing to obey, and to make changes or improvements. (5) Structure plural: although researchers are single researcher, but the researcher should be subject to the principle of one to four. (6) The internalization theory and practice: theory and practice are two different things but mutually supportive.

According Hardjodipuro (1997) action research has following characteristics: (1) action research is a way of self-reflection which is characterized by a set of planned activities to improve the quality of education. (2) action research is to identify the criteria and activities to make improvements in the program of self-reflection. (3) participatory action research and collaborative because it involves other people as part of a study whose results can be shared.

Kurt Lewin as initiators of action research, he uses action research to improve the relations between social groups through a four-step approach, namely "a) Planning (*planning*), b) the action (*acting*), c) monitor (*monitoring*) and d) evaluation (*evaluation*). Then each of the last four steps, would form a spiral, so that both are affected by the plan repaired a first round. Lewin continuation of the model, is a model of Kemmis.



Source: Kemmis (1983)

As in spiral Kurt Lewin, still using spiral Kemmis, so the spiral circle is equal to one cycle. Below are the Models Werner Stangl (in EK.Trijanto, 2001).



Werner Stangl models in principle the same as the previous model, only in its action plan for understanding or *verstehen* more highlighted through the dialogical principles: participation (*Partizipation*), communication (*Kommunikation*), and interaction (*Interaktion*). The next cycle will be done when there are changes and improvements. This is in accordance with the principles of *the Renaissance* (born again) after reflection. Thus the *Renaissance* is the reorganization of the cycle in accordance with the conditions proposed.

Descriptions that have been described above, it seems cannot be digested and taken over by various colleagues authors. Therefore, some understanding will be sought to be clarified here.

Action Research is a means to understand the problems that *verstehen*, and *erneuern* means trying to treat problems Renew and parse it. And how action research can be used to develop the quality of my teaching? For that needs to be repeated quote John Elliot who adapted Altrichter and Posch (2007) the following: "*Aktionsforschung ist die systematische Untersuchung beruflicher Situationen, die von Lehrern und Lehrerinnen selbst durchgeführt wird, in der Absicht, diese zu verbessern*" (= action research is systematic study on teacher performance, conducted by teachers themselves in order to improve performance). Means that the action research implemented if teachers do research on their own practice or performance, with the intention: to do development, then the problem will be better understood, as well as how to parse the issue.

To clarify, in the *action*, people or teachers will be in a system that should be developed and given himself his own understanding. Meanwhile, *researcher* study, are the things or issues that need to be solved alone systematically and critically, and then the results should be described in the open.

Therefore, it is necessary to build a variety of working patterns and developed her professional innovations. It required a desire to improve the quality and conditions of employment in the field of teaching and learning appropriate education.

The short is that action research should be able to help, either individually or in groups teaching, because in solving a problem in practice, need to be tried alone innovation discovery. So at first the teacher needs to be aware that he was doing research, second he should change his perspective of practitioners to researchers, and to coordinate with other scientists. The third study uses logic; fourth as professional and to develop concrete education system in schools and learning in the classroom is linked to scientific discourse.

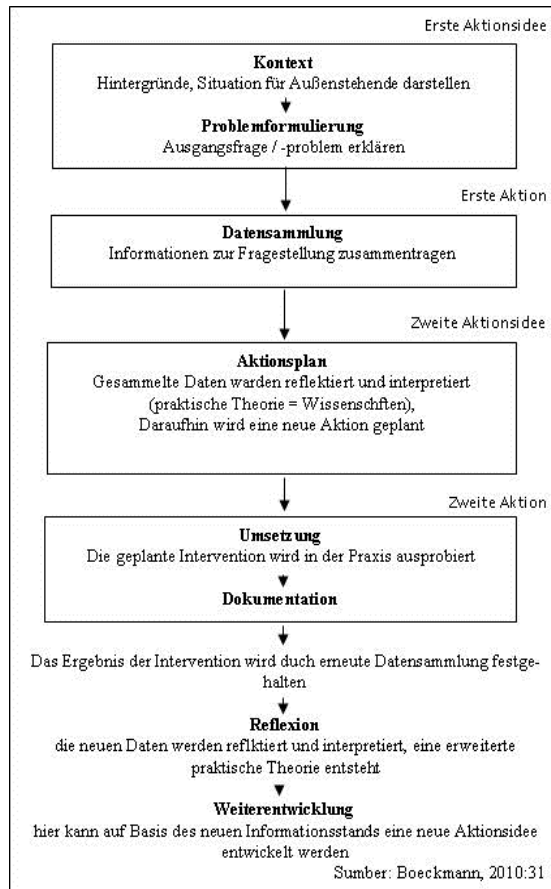
This means that the activity has a certain characteristic signs, namely, (1) directly related to research on the actors/ teachers. (2) All research questions derived from practice, especially the performance of teachers. (3) There is a relationship between the action and reflection. (4) Cycle long standing research and development. (5) There is a confrontation of different perspectives. (6) Shifting individual research into research professional societies. (7) There is cooperation between the ethical rules. (8) Openness practitioners. (9) The emergence of valuable aspects of the educational activity. (10) The objective is the introduction and development activities.

To achieve the objectives of the activity consisted of the introduction of the existing problems required the following questions, which is what is actually happening with my performance? Is my personal professional really satisfied with my performance? Do I apply the material and other forms of right exercise? How learners think about this situation? And whether learners are motivated enough and have benefited from my teaching? Why does this problem occur? While the question of development, that is what needs to be fixed? How to realize the idea that the problems are parsed?

As already described on page 4 of this paper, as stated by Hardjodipuro (1997) that action research has the following characteristics: (1) action research is a way of self-reflection which is characterized by a set of planned activities to improve the quality of education. (2) action research is to identify the criteria and activities to make improvements in the program of self-reflection. (3) participatory action research and collaborative because it involves other people as part of a study whose results can be shared. Or according to other experts in action research should be planning, acting, monitoring and evaluating.

It means that the acting (action) that need to be observed, and the results of observations matched with practical theories, so that new ideas will be applied to the next action, or in the next cycle. So systematic reflection should be anticipated. This means that after one cycle in evaluate stage besides i have a test or exercise to measure the success of learning, there is also a section called reflection, that learners write down his impressions of the performance of teachers.

Means that the rational self-reflection has technical nature, and thus the complexity of teaching jobs are also being increased. Compulsory education as well as add a variety of activities for its personnel, including the obligation to make a self-evaluation and constructive ways of working to improve performance. Here is the plan of action research by Boeckmann et al (2010)



In the first act of the idea, there is no context to discuss the background of the action, along with exposure to the initial situation. For the formulated problem, the initial question. Then the first act done right.

In the first act of the contents of the data collected and the information related to the research questions. The following column is the idea of the second act, which is no action plan / action plan. For that all the data collected needs to be reflected, interpreted and adapted to practical scientific theory, with it then the second action is planned.

In the second act, there is a change, in accordance with the planned intervention, then tested and practiced. For that needs to be documented. Results of interventions are used as data collection. After that is done reflection. Data is then reflected, interpreted, and was raised new practical theory.

After that no further development. With a standard based on the basis of the new information will be developed a new idea that action anyway.

As has been the authors point out, that the author has several times guide and read the work of AR colleagues, both from secondary education would also of higher education. It is not easy to recognize my own shortcomings, then fix it, and openly discuss and report everything. However, in order to improve the quality of performance can be achieved, need awareness make improvements done.

The following examples will be reported early implementers action research. Title: Improved learning outcomes in second-year German language. For the **Context** → □ problems learning outcomes become less good, because too many students are involved in activities outside the lecture. So how what needs to be done so that the engagement activity also does not make students miss class.

**Formulation of the problem** → how to make students still have activity, but still a good learning outcomes? The problem then is broken down again to keep doing activities with the use of four German language skills.

**Data collection** → (1) assess the students in a particular classroom activity. (2) to record activity in the semester in progress. (3) assess student work to be done. (4) to record the activities that use the German language, (5) data on the results of evaluation and reflection.

**Action plan**→□(1) planning of learning - teaching the four language skills.(2) Adjust the theme in the teaching-learning activities of the semester. (3) to form small groups (3-4 students), there is his head that monitors three interacting in German.

**Changes**→□change the atmosphere of the class into small groups working alone, The role of the chairman and members of the group can exchange.

**Data**→**reflection**of the changes obtained were then collected. Students return to the classroom and make a reflection. Reflections were collected and discussed. Of the results and existing data plans are a new activity or a new cycle.

The above example can be more complicated still further the implementation of the actions, as well as equipment of data, not just the data manually, and also digital-video movies. Likewise collaborators can be pursued higher authority, so the action research activities are also being educational programs and activities involving the entire organization in the educational institutions.

In addition it is important to note about the components that build action research. (1) There is a systematic collection of data to describe the problem. (2) How to document the data, because in this event the most need is the whole process of the research and development process. (3) Dissemination of results, both for the environment and the broader limited.

Action research means not only implementing engineering improvements, but the main thing is a good process. For the various feedback needs to be addressed: (1) for a personal tutor, the implementation of these activities has been providing superior information is achieved, so that (2) for the learners, other teachers, parents learners, as well as schools / educational institutions, this information is very valuable, because it has raised the quality of education.

## CONCLUSION

Evaluation of the educational system that utilizes action research is a very brave decision and is highly recommended, because by understanding their own deficiencies, the institution will learn to unravel their own problems and trying with all his might to make innovations, improvements, and then develop. In addition, the results obtained should also be widely disseminated, so it can be used as a quality improvement tool, especially as a measurement tool for evaluation by the institution.

Thus the effects posed action research are: (1) teachers become more sensible, associated with teaching and learning activities. (2) Teachers become more proactive in all aspects in the teaching difficult. (3) They will be more sensitive in advanced research projects, and (4) linkages will be established to develop a more active student learning.

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