



RESEARCH ARTICLE

THE DEVELOPMENT OF CRITICAL THINKING SKILLS BASED OF PATRAP TRILOKA'S KI HADJAR DEWANTARA

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ABSTRACT

Ki Hadjar Dewantara is a figure of Indonesian education who provides significant educational concepts which are rooted in the nation's culture. According to Ki Hadjar Dewantara, a good education is an education that is rooted and reflected the culture of the nation itself. One of the concepts suggested is the concept of leadership trilogy known as *Patrap Triloka*. This concept shows the three roles and positions of teachers (leaders) as contained in the three proverbs "*ing ngarsa sung tuladha*", "*ing madya mangun karsa*" and "*tut wuri handayani*". This study is intended to demonstrate the implementation of the concept of *Patrap Triloka* which contains three methods of education as an integral strategy in guidance services to improve students' critical thinking skills. This study was an experimental study with pre-test post-test one group design. The data were analyzed using the Wilcoxon test. The results showed that z-count (2.536) is greater than z-table (0.0054) and the value of *Asymp. Sig* is 0.011 (<0.05). The results indicated that the critical thinking based on *Patrap Triloka* of Ki Hadjar Dewantara is effective for improving critical thinking skills of junior high school students.

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INTRODUCTION

Globalization era is an ongoing process, which every individual need to keep up with the changing in order not to be left behind. The rapid changes experienced by the society due to the rapid development of information technology bring numerous impacts to human life, in general, both positive and negative. To accompany this rapid progress, education is expected to assist and sustain the changing social life of society. The responsibility of schools in entering the era of globalization is to prepare students to face all challenges that massively change in society. In a recent competition, being a smart person is not enough. In order to be able to face competition in the future, needed a person who is able to think critically. Advances in information and knowledge technology can have both negative and positive impacts. Hence, students must be equipped with critical thinking skills in order to anticipate the negative impact.

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With the ability to think critically, individuals can choose and sort out information or activities that are good and appropriate for themselves and their life. Conversely, individuals who are not able to think critically tend to be passive, careless, and even become parasites for others around him. Students as part of the global community, require life skills to face challenges and solve complex problems. One of the skills that students need to provide is critical thinking skills thus they can be cautious in drawing conclusions, patient and meticulous in examining evidence or facts, tolerant of new perspectives and acknowledging the advantages of others' viewpoints or opinions. The importance of critical thinking for students also expressed by Peter (2012: 39) arguing that Student who Able to think critically are Able to solve problems Effectively. Critical thinking skill is one of the soft skills that determine academic achievement. In addition, critical thinking skill is also required by individuals to achieve success in living their lives. As noted by McGarvey (2010), critical thinking is a competitive advantage needed to achieve success. In line with the above-mentioned opinion, Facione (2011: 21) also states

that critical thinking skill needs to be learned for success in work and improve academic achievement. Counseling and guidance services facilitate students to develop their potential or achieve their developmental tasks (concerning on physical, emotional, intellectual, social, and moral-spiritual aspects). Students as individuals who are in the process of developing or being (on becoming) are developing towards maturity or independence stage of the individual. To achieve this maturity, students need guidance since they still lack the understanding or insight about themselves and the environment, as well as the experience in determining the direction of life. Besides, it is realized that the process of child development does not always take place evenly, or free from problems. Several strategies are available for school counselor in service provision. Guidance programs to improve students' critical thinking skills can also be developed through a variety of service strategies. In providing services, school counselor will take a role as models, assisting and simultaneously providing student support in behaving and constructing appropriate attitude. This is consistent with the concept of *Patrap Triloka* of Ki Hadjar Dewantara consisting of three watchwords which *ing ngarso sung tuladha, ing madya mangun karsa, tut wuri handayani*. According to Ki Hadjar Dewantara, a good education is defined as an education that is rooted in the culture of the nation itself.

RESULTS

Patrap Triloka Concept of Ki Hadjar Dewantara

Ki Hadjar Dewantara is a national education figure who was also the founding father of national education of Indonesia. The concept of national education is rooted in the culture of Indonesia. In the educational concept of Ki Hadjar Dewantara, there are two things that distinguish the system of "teaching" and "education" that must synergize each other (MLPTS, 1977: 20). Teaching is liberating human beings from the aspects of outer life (poverty and ignorance). While education, it is defined as a means to liberate the individual from the aspect of inner life (autonomy of thinking and decision making, dignity, democratic mentality). Ki Hadjar Dewantara's perspective on human beings as a virtuous being in accordance with the view of the humanistic flow that aims to form human beings who can be responsible as individuals and responsible to the surrounding community. Human beings are the subject or person who has the creativity, taste, and intention which understand and aware of his or her existence and able to manage, regulate, and control herself, has a mind and will, have the urge to develop his or her personal to be better and more perfect.

Within the concept of Ki Hadjar Dewantara, *cipta* or thought is defined as an ability to find the truth by comparing the situation with one another in order to obtain or difference equations and rules of right and wrong. It requires experience or knowledge to determine right or wrong. Thoughts or *cipta* has an active and subjective strength. As for the feeling or *rasa*, defined as careful individual movements caused the emergence of a sense of happy or sad, sad or happy, shy or proud, satisfied or disappointed, brave or fearful, and others. According to Ki Hadjar, the feeling is merely passive, unlike the mind, it can appear suddenly. While the intention or *karsa* is an inner power of the human soul which appears as if as a result of the mind (*cipta*) or feeling (*rasa*). The intention is the beginning of all actions and attitude taken by the individuals.

The unity of thoughts, feelings, and intention construct the complete elements of human beings. Thus, the entire three elements above are an absolute requirement to manifest moral or cultivated human beings who are virtuous and civilized (MLPTS, 1977: 451-452). Ki Hadjar Dewantara suggests the concept of balance which states that education should be able to develop intelligence (*intellectually*) and personality in balance portion. Intelligence without the balance of personality makes the individual becomes smart but it does not make he or she qualifies as good person; Otherwise, unbalanced personality might generate a good person but it does not guarantee he or she is qualified intellectually. According to Ki Hadjar Dewantara, the development of the individual's soul depends on two aspects, they are the basic aspects and aspects of teaching. The basic aspect is the gift of God Almighty to each child like talent and self-potential. While teaching aspect deals with education and training for children. If the child has a positive basis and teach in a positive approach then the development of his or her personality will be positive, and vice versa.

Patrap Triloka is a term that indicates the three watchwords of leadership roles (teacher) which are suggested by Ki Hadjar Dewantara. The meaning of the term can be known from the origin of the words. *Patrap Triloka* is derived from the Sanskrit language. The word *patrap* mean attitude or action, while the word *tri* meaning three, while *loka* means the place (Purwadi & Purnomo, 2015). Thus, if it is viewed from the origin of the word, the term *Patrap Triloka* has a meaning attitude or action leaders (teachers) in three positions, namely when those in leading, when those positioned in the middle, and when those standing behind. Ki Hadjar Dewantara sees different leadership or teacher roles in these three places or positions. Within educational situation or context, three proverbs in *Patrap Triloka* expose the role of the teacher in three different synergic positions.

Ing ngarso sung tuladha

In the Javanese language, *ing ngarso* means to be in front or leading, while *sung tuladha* means to give an example. This teaching illustrates that a teacher not only walks ahead or leading but can be an example or role model for those who follow the teacher. Therefore, the teacher as a central figure for the students should be an example for his or her students.

Ing madya mangun karsa

In literal meaning, *ing madya* means becoming in the middle, *Mangun* means to generate, and *karsa* is defined as the willingness or intention. Thus, the *ing madya mangun karsa* implies that when the teacher is in the middle of the student, he or she should be able to motivate all students in order to achieve common goals. This teaching contains the meaning of togetherness, cohesiveness, and cooperation. Teachers act as a friend or partner for the students that are expected to actively cooperate in achieving educational goals.

Tut wuri handayani

Tut wuri means to follow from behind, and *Handayani* means giving moral support or encouragement. Thus, *Tut wuri Handayani* means that teachers encourage students to demonstrate their abilities. It contains the principle of freedom, in which teachers provide opportunities for students to express their potential in various activities to achieve educational goals.

Teacher standing behind continue to provide care and responsibility without authoritative nature, possessive, protective and permissive arbitrary to give freedom or opportunity that allows students to show initiative and experience it yourself. Principally, the expected education pursuant to the concept of Ki Hadjar Dewantara is not merely the transfer of knowledge from the teacher to the students, but also facilitates the students to grow and develop according to their nature. The development of children includes aspects of thought, feeling, and intention. In education, teachers who are leaders for the students, takes a role as an example for children, encouraging and providing support to students, so that students will make the process of learning through *niteni* (observed), *nirokake* (imitation), and *nambahi* (modification) of what the teacher did.

The Nature of Critical Thinking Skills

Conceptually, critical thinking is expressed in diverse definitions. The paradigm of critical thinking has been introduced in instructional activities or learning, although the traditional learning paradigm still exists. Learning paradigms shaping critical thinking students are able to perform self-guided, self-discipline and promote the ability to construct a good argument. Critical thinking individuals consistently strive for rational and empathy, instead of egocentric perspective.

Critical thinking is a process that occurs in the cognition (mind) of the individual. Thus the process that occurs out of sight as the real behavior (*observable*), but indicated through a statement expressed by the individual as a result of the processing that occurs in the mind or cognition. Paul and Elder (2006: 21) explain that critical thinking skills will appear in the application of the ability to express questions and opinions, assuming, conveying information, drafting, formulating goals or making decisions.

While Marrapodi (2003) in his research reveals that the critical thinking skills demonstrated by the ability of individuals to make a clarification, probing Assumptions, probing reasons and evidence, viewpoints and perspectives, probing implications and consequences, and questions about questions. The experts agree that critical thinking skills need to be taught on a regular basis to develop intellectual or intelligence. Numerous experts provide a various definition and description regarding critical thinking skills. Kennedy et al (2009: 4) argue that critical thinking is an intellectually active process and skilled in conceptualizing, implementing, analyzing, synthesizing, and/or evaluating information gathered from, or generated by observation, reflection, experience, reasoning, or communication, as a guide for beliefs and actions.

In addition, Paul and Elder (2006: 4) describe critical thinking as an art to analyze and evaluate thought in regard to recover the initial thought possessed. In regard to activity in critical thinking, Moon (2008: 30) suggests that critical thinking is the ability to consider various Information attained from a variety of sources, to process this information in a way that Creative and logical, challenging, analyzing and to make a conclusion that could be maintained and justified and not based on prejudice that is subjective. According to Moon, critical thinking skills are needed to develop an argument, deconstructed ideas or synthesize various ideas related to complicated issues. In consideration as a skill, critical thinking needs to be trained continually. Johnson & Siegel (2010: 191)

argue that training for critical thinkers is as important as practicing for tennis players and musicians. Critical thinking skills can be identified from the listening and reading ability of the students. This is in accordance with the opinion of Browne and Keeley (2007: 2) opine that listening and reading critically is to give a reaction or response according to the evaluation systematically for what has been heard and read. To be able to perform listening and reading activities critically, skills and attitude regarding critical thinking are necessary to be set. Critical thinking is defined as skills and attitude that construct a series related to critical questions. Critical questions give stimulus and direction for critical thinking, which will lead to search, continuous and sustainable encouragement in making and issuing questions, decisions or better judgment. According to Beck et al. (2011: 9), people who have critical thinking skills tend to provide valid evidence and reason to support their opinions. For that reason, critical thinking skills should be developed on every individual, including students.

Through learning activities, teachers can guide students' critical thinking skills. Two academic activities that need to be considered by the teacher to facilitate the development of critical thinking of the students are reflection and argumentation (Moon, 2008: 128-129). According to Moon, think critically involves reflection, and vice versa, the reflection itself involves some of its activities called critical thinking. Reflective learning is considered as a form of complex problems cognitive processing when the materials are already known by the students. As well as reflection, arguing is part of the critical thinking process. The argument presented is the result of critical thinking that has been accomplished. Thus, arguing is also an activity that involves critical thinking.

Critical Thinking Guidance Based on *Patrap Triloka*

The process of education, learning, and teaching, in school is directed to the goal in which the students could be optimally developed and growth. The development in the entire aspects of the students will influence and determine how the students to go through their life in an effective way. Guidance and counseling activity takes a role as an integral part of the learning process in school. It takes a part in directing the development of the students. The provision of guidance and counseling is not only for curative approach when the students to be guided, but also it serves as a preventive-development approach within students necessity. The determination that encourages individuals (students) in becoming critical is required to be supported through the school program, both learning and guidance activities which are coordinated by school counselors to encourage students in possessing higher order thinking skills (HOTS). Higher-order thinking skills involve complex learning skills such as critical thinking and problem-solving.

The attempt to develop and enhance students' critical inking ability does not belong only to subject teacher through learning activities in the classroom. Additionally, school counselor also takes a prominent part and is required to arrange guidance and counseling provision which direct the students to think critically. Critical guidance and counseling provision lie on the assumption that students' ability to think critically is required to be enhanced and developed since it will be beneficent for students' life, particularly on the successful of the learning process.

The implementation of *Patrap Triloka* in critical guidance and counseling provision is presented in the following Figure 1.

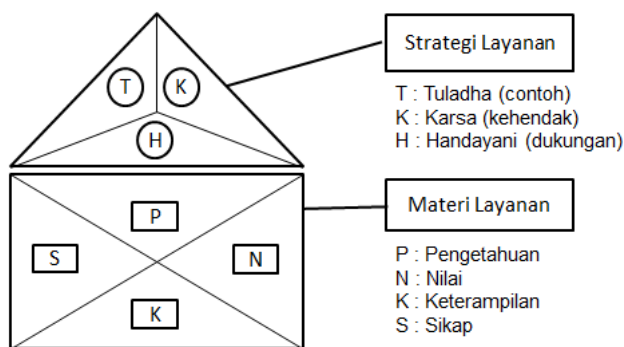


Figure 1. The Implementation of Patrap Triloka in Guidance and Counseling Provision

Patrap Triloka concept implies that a school counselor provides guidance and counseling services through example or modeling (*tuladha* in Javanese), establishing the intention of learners, and provide reinforcement or support (*Handayani*) hence the learners can apply the services provided. In addition, the service materials presented need to be designed in such a way that through the mentoring services learners to obtain new insights or knowledge, possess certain skills presented and understand the values and attitudes that accompany them. By applying these concepts to develop students' critical thinking skills, Counseling and Guidance counselors or school counselors need to provide examples or examples to solve a critical problem, develop the ability and willingness to solve problems critically, and provide support for each student's efforts to use Logic or critical thinking ability in solving every problem faced.

METHODS

The research conducted was an experimental study with the *one-group pretest-posttest design*. The subjects of the study were 16 VIII Graders (Second grade in Junior High School) in a Junior High School who were members of the group guidance. Critical guidance service based on *Patrap Triloka* was done in six meetings. Group guidance is carried out to train students to ask questions and respond critically to reading, movie or video shows, and games. The data analysis of this stud was used Wilcoxon testing by comparing the results of pre-test and post-test. The results of pre-test and post-test are presented in the follwing Table 1.

Table 1. The Results of Critical Thinking Ability

Subject	Pre-test	Post-test
A	6	12
B	5	11
C	5	12
D	3	9
E	7	10
F	4	11
G	6	11
H	4	13
I	5	11
J	3	12
K	4	9
L	3	9
M	5	10
N	5	10
O	3	9
P	4	8

The above-mentioned results of pre-test and post-test, then, examined using Wilcoxon testing and it is presented in the following Table 2.

Table 2. Test Statistics

	Posttest - Pretest
Z	-2,546 ^b
Asymp. Sig. (2-tailed)	,011

From Table 2 obtained the result of z-count of 2.546 greater than z-table (0,005). It means that it reject the null hypothesis (H_0). In other words, it can be said that there are differences in the critical thinking skills of students between before and after intervention with critical counseling services based on *Patrap Triloka* of Ki Hadjar Dewantara. For the significant value of p-value reached 0.011 (<0.05), which means the two groups were confirmed that the critical guidance service based on *Patrap Triloka* of Ki Hadjar Dewantara is effective to improve the critical thinking skills of students in junior high.

DISCUSSION

School counselor or school counselor serves as psycho-educator. In other words, it means that they take a role as an entity to develop students' psychological aspects. Therefore, it is important for counselor or advisor to arrange and establish a service that concern on the development of the students in addition to providing a curative service. Based on Ki Hadjar Dewantara's principle that good education is an education that lies on the national spirit and fundamental, guidance and counseling program as an integral part of the educational program at school can also implement educational concepts from Ki Hadjar Dewantara. Thus, it can be done the development of guidance and counseling programs in schools by modifying the services that integrate the nation's own culture. One of the educational concepts of Ki Hadjar Dewantara that can be implemented in guidance and counseling services is a trilogy of leadership, known as *Patrap Triloka* covering *ing ngarso sung tuladha*, *ing madya mangun karsa*, and *tut wuri handayani*.

Ing ngarso sung tuladha is derived from the Javanese language in which *ing ngarso* means that the teacher is leading on the front, while *sung tulodo* means that the teacher is to give an example. In regard to the above-mentioned principle, the counselor is indeed always being paid attention by student or counselee. As the person leading in the front, the counselor must show the appropriate and suitable actions or behaviors. Hence, a school counselor or counselor as a central figure should be an example for students or counselees. Inevitably every greeting, action, deed, manner of dressing and his or her behavior is always being noticed and can be emulated by the students. This means that the counselor or counselor as the leader standing in front must be able to take a role as a model for the students. Therefore, the counselor is a model that will be imitated by students. *Ing madya mangun karsa* implies that school or counselor as a leader should be able to develop interests, desire, and willingness of the student or counselee to be creative and work hard individually. When in the middle of a student, counselor or counselor should be able to arouse the spirit and motivate students or counselee to perform actions or activities that support its development. Counselors or counselors are required to be able to assist and actively cooperate with students in an effort to help them develop their

potential or psychological aspects for the purpose of counseling and guidance services. *Tutwuri Handayani* comprising of the word *tutwuri* which means to follow behind with attentive and full responsibility based on love and affection that is free from self-interest and far from being authoritative, possessive, protective and permissive arbitrary. While *Handayani* means freedom, opportunity with attention and guidance that enable the students on their own initiative and their own experience, hence they develop along the lines of personal nature. The implementation of the proposition that the counselor or supervisor should always support and supervise what is done or happened to the student or counselee so that in the end they can be independent and confident in acting. Guidance service which aims to develop students' critical thinking skills is one of guidance and counseling services that are considered as a preventive-development function. Through this service program, school counselors or school counselors develop students' potentials hence they have the skills required to be employed to go through their life in an appropriate approach and effective. Critical thinking skills development program can be designed using *Patrap Triloka* of Ki Hadjar Dewantara. Three leadership role in *Patrap Triloka* performing school counselors or counselors in providing services to students, namely as a model, companion and at the same time for their supporters. It is also related to student learning process. In the process of learning, a child will perform stages activities such as *trina* concept of Ki Hadjar Dewantara namely *niteni*, *niroke*, and *nambahi*. This concept states that to learn everything can be reached by way of "recognizing and remembering" something learned (*niteni*), imitating something that the students learned (*niroke*), as well as developing something that the students learned (*nambahi*). In accordance with the three propositions within *Patrap Triloka*, therefore, the role of advisor or school counselor in providing guidance on the development of students' critical thinking ability is described as follows:

Advisor as a role model for students: This role is in line with one of the proposition within *Patrap Triloka* stating *ing ngarso sung tuladha*. It describes that advisor or school counselor is expected to be an ideal role model for the students or counselee. In the context of guidance and counseling, an ideal role model for students or counselee is related to how the advisors or school counselor become a core of modeling technique. Therefore, within the provision of critical guidance and counseling service, the advisor or school counselor is required to expose an appropriate way and means how to think critically through a critical attitude and behavior.

Advisor as a students' assistant: This role is reflected on the second principle stating *ing madya mangun karsa*. It describes that the advisor or school counselor is required to be able to give motivation to the students the moment they interact with their students. The advisor or school counselor is expected to provide and give some assistance needed by the students or counselee and hence at the end of the day, the students or counselee will be felt motivated. Several approaches and techniques in guidance and counseling could be employed to motivate and encourage the students to think critically.

Advisor as a supporter: This role is reflected on the third principle within *Patrap Triloka* which states *tutwuri handayani*. It describes advisor or school counselor takes a role as a supporter of students or counselee. It supports the students or counselee in taking any action and means critically

and independently. Advisor or school counselor shall provide an opportunity to the students or counselee in exposing and delivering their argumentation, opinion, response critically. The thing that we need to remember is, within this principle, the role of advisor or school counselor also directs the students or counselee the moment they identify an inappropriate action taken by the students or counselee.

Conclusion

Critical thinking is one of the characters in the aspect of thought that needs to be developed within the student. Additionally, education is the responsibility of all entities related. School counselor or school counselor is also responsible for the development of students' critical thinking ability. Hence, it is necessary to design a service program oriented to critical thinking ability development. A school counselor or school counselor should create a conducive climate for the student and facilitate the development of critical thinking ability. The service activities provided should be designed to encourage students and ensure the comfortable feeling and self-confidence of the students. Critical thinking ability within the students is required to be developed since it is a part of students' soft skill that supports academic achievement as well as the better life in the long-run.

Patrap Triloka concept of Ki Hadjar Dewantara can be used in the implementation of guidance for the development of students' critical thinking ability. The implementation of the concept shows the various roles of advisors or counselors in helping students to develop their critical thinking ability. *Patrap Triloka* is composed of three proverbs stating *ing ngarso sung tuladha* which mean those leading in the front should be able to expose a good example, *ing madya mangun karsa* which means those stay in the middle provide a good help, and *tutwuri handayani* which mean those stay behind should be able to be a supporter. By implementing the concept of *Patrap Triloka* in the provision of critical guidance and counseling to develop students' critical thinking ability, the school counselor or school counselor should provide an example in solving a problem critically. In addition, the school counselor or school counselor should develop the ability and willingness of the students to solve problems critically and provide support to every effort taken by the students as well as encouraging the students to use their logic or critical thinking ability in solving every problem faced. The efforts to develop the students' critical thinking skills can be designed by, the school counselor or school counselor using guidance and counseling provision which is based on Ki Hadjar Dewantara's principle of *Patrap Triloka*.

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