

Conference Paper

The Fundamental Strategy for Competence Improvement Model on Administration's Teacher Toward Industrial Revolution 4.0

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Abstract

Today Industrial Revolution has reach its peak where technology become the basis of human life. There are so many effort that have been done by the government to increase the contribution of the educational sector. Teacher competence become one of the important thing in the educatioal improvement. This study aim to build the fundamental strategy for competence improvement model on administration's teacher toward Industrial Revolution 4.0. This research done by training and data collection techniques used in this study are documentation, questionnaires, interviews, and test to responden. The result of this research are first, 76% of teachers understood the criteria for office administration programs that were able to face challenges in the industrial revolution era 4.0. In this case, it is able to mention a digital-based office administration program to answer the needs of industry 4.0 in the form of services. Secondly, 79% of teachers know the output of office administration programs from productive, creative and entrepreneurial (PKK) subjects that can be commercialized, including: typing services and event organizers. Based on the result it can be conclude that 2. This program is able to foster entrepreneurship (entrepreneurship) among the Office Administration Teachers in SMK 1 Boyolangu. 5. This program provides insight and provision for Tulungagung Regency Office Administration teachers who are able to provide guidance for students to live independently and skillfully now and in the future.

Keywords: Competence, Industrial Revolution 4.0, Productive, Creative, Entrepreneur Subject.

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1. Background

In line with the proposed models suggested by Syamsul (2005) above, a model that requires transformative science and technology programs for the community need to be done with two basic ingredients, namely (1) Entrepreneurship, to foster entrepreneurial spirit in the Office Administration Teacher in the school, planning a business, to marketing products, (2) Designing and making business independence.

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Given the average ability of the Office Administration Teacher to equip students in everyday life, to arrive at a financially professionally financially incapable business.

Experience shows that when a school office administration teacher is not well prepared to be able to live independently in the community through a number of skills for life and entrepreneurial growth among Office Administration Teachers at school, then later after leaving school they remain unemployed, given the employment provided the government and the private sector is still very limited. In fact, what makes it sad is that some of the Office Administration Teachers at school, will return to being Teachers who will only make them not have additional expertise. Therefore it is necessary for the role of universities as part of the community component which is seen by the community as having the ability to help prepare the Office Administration Teacher to be able to make their students live better lives.

Based on the results of a preliminary survey, the challenges of the times that necessitated an industrial revolution 4.0, required that every teacher must prepare their students to face the era of all-digital development, and renewal in the creation of productive, creative and entrepreneurial subjects. Teachers are also expected to contribute greatly to overcoming the problems faced by students after finishing school. Students must have digital-based skills according to the challenges of the industrial revolution 4.0.

The need for Office Administration Teachers for Tulungagung Regency has not been met by the local Teachers, because in improving the ability of the Office Administration teacher there are many obstacles that must be faced by schools, one of which is the problem of professionalism in teaching. Tulungagung Regency as a city in East Java currently also faces the problem of handling Office Administration Teachers. The results of the authors' observations in 2015 are shown in Table 1.

TABLE 1: Observation Results Problems of Office Administration Teachers.

No	Problems	Percentage
1.	The teacher is still constrained in the ability of the media or teaching tools and special expertise	38%
2.	Teachers are still limited by time or just trial and error	29%
3.	Teachers teach only subjects that are of interest	18%
4.	The teacher claimed that the development of self competence was still relatively lacking	21%

Source: Data processed by researchers, 2019

Teachers consist of ASN Teachers and Honorary Teachers, so most of them are teachers who have problems. What is meant by the problematic teacher here is because he is not yet a professional in the field of business with the profession of life being a

teacher and making a figure who can set an example to emulate. The norm system that they profess is also not quite right, both religious norms and social norms. They never think about their future. Therefore they do need a touch from outside parties to help the Office Administration Teachers in schools to change their way of thinking, the need for a transformation of the value system and norms that they profess including including equipping the Tulungagung District Education Ministry to be able to carry out a transformation of the value system school teacher. There were also many complaints made by the Tulungagung District Education Agency that they were rather overwhelmed in educating the teachers of this school, this complaint arises because the Tulungagung District Education Ministry also has scientific limitations in educating this Teacher. Many Tulungagung District Education Offices in schools were appointed not because of their professionalism abilities but rather because of the spirit of sincerity of Tulungagung

1.1. District Education Departments

From the qualitative data as well as the quantitative data above, it can be concluded that in the Regency of Tulungagung there are quite a lot of Office Administration Teachers with various problems. Not to mention if added by the honorary teacher, which has not been reached by government maintenance. Therefore there needs to be serious thought to empower these Teachers so that they have a better future.

If the spirit of entrepreneurship has grown among the Office Administration Teachers, a number of skills for life are still needed. One of the skills for life that we offer in this program is to design and create the independence of Office Administration Teachers in the Regency of Tulungagung to be able to teach with competence based on the industrial revolution 4.0.

The skill to make independence is a skill that can be learned by anyone who is interested, of course with sufficient perseverance, diligence, and patience. The skills in making Tulungagung Regency Office Administration teachers are important given to teachers in schools, because: First, they have never received entrepreneurship training. Secondly, without having this competence it will be difficult to take the material to make low-level Office Administration teachers become skilled level. So the skills to make the Office Administration teachers of Tulungagung regency important are given first to the Office Administration teachers. The Tulungagung District Education Ministry technique used is directed technique according to need, while the material includes: making entrepreneurship, utilizing Office Administration teachers to increase teaching values and making marketing business results more advanced.

Tulungagung district education office makes a pattern that is still shaped in accordance with the needs of science, has not been modified / has not been developed in accordance with the design or what is referred to by the term "education district Tulungagung directed". The purpose of studying the education sector of the Tulungagung regency is to be able to realize the Office Administration Teachers in accordance with their needs (Heny: 2018).

2. Literature Study

2.1. Administration

According to Handayani in Mediatara (2015a: 1) said, "Administration in the narrow sense comes from the word administratie (Dutch) which includes the activities of note-taking, correspondence, light bookkeeping, typing, the agenda is technical administration ". According to Gie in Mediatara (2015b: 1) said, broad administration is "A series of activities carried out by a group of people in a collaboration to achieve certain goals".

According to Gie in Karyana et al (2008a: 6) said, administration is "The whole series of activities structuring the main work carried out by a group of people in cooperation to achieve certain goals". According to Thoha in Karyana et al (2008b: 7) said, "Every compilation of information systematically and recorded in writing with a view to obtaining an overview of the statements in its entirety and in relation to each other".

The importance of the role of administration resulted in the emergence of a view which says that in fact the present century is the age of administration, because all decisions in the political, economic, socio-cultural, defense and security fields and various other fields will only have meaning if they are implemented efficiently and effectively. It is the implementation of various decisions that actually forms the main basis for the existence of an administrative system. It has been seen above that administration as a work process has existed since time immemorial because administration arose together with the growth and development of human civilization. If the history of development is studied carefully, it will be seen that in every stage of human civilization, whatever its purpose, whatever its form, administration already exists. Administrative development is influenced by human and community dynamics, on the contrary it can be ensured that human and community dynamics are also influenced by administrative practices.

2.2. Industrial Revolution 4.0

A famous German economist who is also the founder and chairman of the Executive World Economic Forum (WEF) was the one who introduced the concept of the Industrial Revolution 4.0. In his book entitled "The Fourth Industrial Revolution" explains that the Industrial Revolution 4.0 has fundamentally changed human life and work. The Industrial Revolution 4.0 was different from the previous Industrial Revolution phase, because in the Industrial Revolution 4.0 it had a wider scale, scope, and complexity. The technological advances that took place in the Industrial Revolution 4.0 integrate the physical, digital and biological worlds that affect all disciplines, economics, industry and government. According to Klaus Schwab (2016) the industrial revolution has four phases that have occurred since the beginning of the 18th century until now. Today the Industrial Revolution phase reached its peak which was marked by the existence of massive impact of internet technology that was directly related to millions of people throughout the world. Not only that, technology has also become the basis for online trade and transportation transactions. The emergence of the online transportation business. This situation illustrates that the industrial revolution 4.0 has occurred Klaus Schwab (2016).

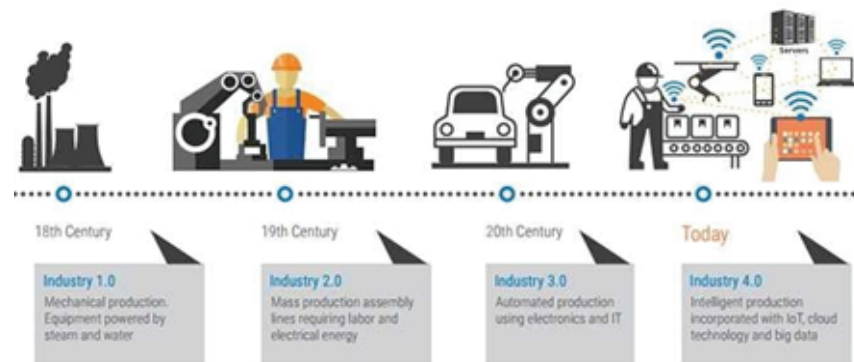


Figure 1: The Industrial Revolution 4.0 (Source: www.kompasiana.com).

3. Research Methods

The methods to support the realization of the programs offered are as follows: Training on:

1. Entrepreneurship (Growing entrepreneurial spirit, business planning, simple book-keeping, product marketing) in the form of theories and practices based on the industrial revolution 4.0.

2. Designing and Making Office Administration of the revolution era 4.0 for teachers of Office Administration revolution era 4.0 of Tulungagung Regency in the form of Theory and Practice
3. Introduction to the development of productive subjects in the Office Administration based on industrial revolution 4.0.
4. Manufacture of products from the Office Administration (candy Office Administration) based on the industrial revolution 4.0

3.1. Science and Technology Description

3.1.1. Overview of the Application of Science and Technology

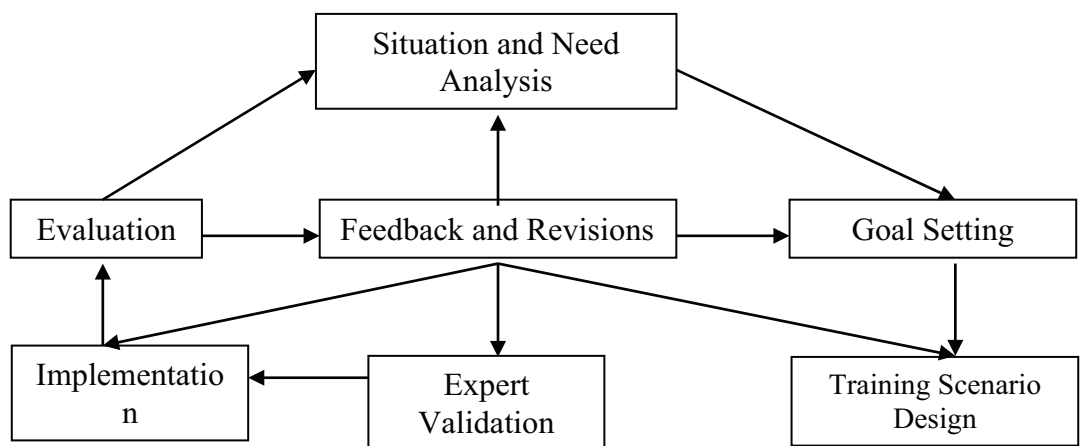


Figure 2: Series of Training Activities.

Figure 2 Explains that the series of training activities is as follows.

1. Analyze the situation and needs (partner problems)
2. After analyzing the situation and the needs (partner problems), the next goal is to set goals to overcome partner problems.
3. Design the training scenario
4. Implementasi/pelaksanaan pelatihan
5. Evaluation of planning, implementation of training

3.2. Program Implementation

The implementation of this activity is aimed at Office Administration teachers in schools in Tulungagung Regency. There are three training materials, namely: (1) Training on Office Administration design and products for Office Administration teachers in Tulungagung district schools, (2) Entrepreneurship training. With these two main activities it is hoped that the Office Administration teachers in the schools will have the skills to live independently, and be successful in the future, (3) Training in planting Organic Office Administration.

3.3. Data Collection Techniques and Research Procedures

Data collection techniques used in this study are documentation, questionnaires, interviews, and test to responden. This research was preceded by conducting initial observations aimed at obtaining data on learning activities that will take place in the classroom. The stages of classroom action research are carried out in two cycles, where in one cycle there are two meetings. Each cycle consists of four stages, as for the stages, namely the planning stage (planning), the stage of action (action), the stage of observation (observation) and the stage of reflection (reflection).

4. Result and Discussion

4.1. Implementation of Office Administration in PKK Subjects in the Industrial Revolution 4.0

The industrial revolution 4.0 provides a challenge for teachers to prepare students before facing the development of the digital age. The things that need to be prepared are the independence and skills of students through entrepreneurship. This is in line with the transformative approach model according to Syamsul (2005) for improving science and technology with entrepreneurial material. Among the Office Administration Teachers of SMK 1 Boyolangu have not grown entrepreneurial spirit (entrepreneurship).

The Office Administration Program is different from other subjects which can easily follow the development of the Industrial Revolution 4.0 era. In the phase of the Industrial Revolution 4.0 where technology has become the basis in human life, this has increasingly encouraged businesses to thrive in Indonesia. Implementation of Office Administration in PKK subjects in the form of online typing services, English translation services, to become an Event Organizer that regulates office and state activities.

Boyolangu Vocational School 1 Tulungagung Regency has become one of the schools that has great potential in commercialization by graduates of the Office Administration program as the output of PKK subjects.

The Industrial Revolution Era 4.0 certainly changed the pattern of business that developed in society. This is the main emphasis on this socialization. The existence of this socialization becomes the main provision of teachers in implementing Office Administration to their students through PKK subjects. This will later increase the competency of Office Administration teachers in PKK subjects as an effort to deal with the Industrial Revolution 4.0 era.

4.2. Analysis of Problem Solving in Office Administration Teachers On SMK 1 Boyolangu

Based on the questionnaire given to teachers at SMK 1 Boyolangu, several things were known. First, regarding the importance of entrepreneurship material, 87% of teachers stated that entrepreneurship socialization was very important, while 13% stated it was important to do. Secondly, an understanding of entrepreneurship as much as 83% of teachers know the characteristics of entrepreneurs through inspiring shops of entrepreneurs, reading business opportunities, and types of office administration businesses that are profit relevant to the industrial revolution 4.0. Third, understanding of business planning and simple bookkeeping for Productive, Creative and Entrepreneurship (PKK) subjects 86% of teachers can take business examples related to office administration and make a list of simple business plans along with cost calculations included in bookkeeping.

The socialization of the Implementation of Office Administration in PKK Subjects in the Industrial Revolution 4.0 aims to make teachers aware that office administration programs have considerable potential in facing challenges in the era of the industrial revolution 4.0. Based on the questionnaire given to teachers at SMK 1 Boyolangu at the socialization, several things were known. First, 76% of teachers understood the criteria for office administration programs that were able to face challenges in the industrial revolution era 4.0. In this case, it is able to mention a digital-based office administration program to answer the needs of industry 4.0 in the form of services. Secondly, 79% of teachers know the output of office administration programs from productive, creative and entrepreneurial (PKK) subjects that can be commercialized, including: typing services and event organizers.

The existence of entrepreneurship socialization and implementation of office administration programs in accordance with the industrial revolution 4.0 made the Office Administration teachers in SMK 1 Boyolangu Tulungagung have knowledge, attitudes and skills in designing and producing output of Office Administration programs that are potential to answer the challenges of the industrial revolution 4.0 in Productive subjects, Productive subjects, Creative, and Entrepreneurship (PKK). The output in question is the commercialization of typing services and Even Organizer. Therefore, Tulungagung Regency Office Administration teachers are able to provide guidance for students to live independently and skillfully now and in the future.

5. Penutup

5.1. Conclusion

Based on the results and discussion above, several things can be concluded as follows.

1. The problem of partners in Office Administration teachers in SMK 1 Boyolangu is overcome by giving: 1) socialization about entrepreneurship based on the industrial revolution 4.0 which aims to foster entrepreneurial spirit (entrepreneurship). 2) Socialization of Office Administration Implementation in PKK Subjects in the Industrial Revolution 4.0 for teachers that the Office Administration program has considerable potential in facing challenges in the Industrial Revolution 4.0 era.
2. This program is able to foster entrepreneurship (entrepreneurship) among the Office Administration Teachers in SMK 1 Boyolangu.
3. Office Administration Teachers at SMK 1 Boyolangu have knowledge, attitudes and skills about business planning, simple bookkeeping for Productive, Creative, and Entrepreneurship (PKK) subjects.
4. Office Administration teachers have the knowledge, attitudes and skills in designing and creating added value Office Administration based on the industrial revolution 4.0 in SMK 1 Boyolangu, Tulungagung regency.
5. This program provides insight and provision for Tulungagung Regency Office Administration teachers who are able to provide guidance for students to live independently and skillfully now and in the future.

5.2. Suggestion

Based on the service program "Development of Office Administration Teacher Competency in Professional, Entrepreneurship, and Entrepreneurship (PKK) Subjects in the Industrial Revolution Era 4.0". The following are suggestions that can be done are as follows.

1. Support Tulungagung Education Office for this service program in order to increase the competence of the Office Administration teacher in Tulungagung
2. The participation of the Office of Education and the local Government so that this service program can be felt by the teachers of Office Administration more broadly.

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