



10 Characteristics of SMK Teachers In The Industrial Era 4.0 (Case Study at SMK Bina Profesi Bogor)

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Abstrak

Artikel ini membahas 10 Karakteristik Guru SMK Di Era Industri 4.0. Tujuan utama dari penelitian ini adalah untuk mengetahui apa karakteristik guru sekolah menengah yang diinginkan oleh siswa. Dalam hal ini peneliti menggunakan pendekatan kualitatif yang mengumpulkan data menggunakan observasi, wawancara, dan dokumentasi. Hasil penelitian ini menemukan 10 karakteristik yang harus dimiliki oleh seorang guru siswa sekolah menengah. Alat presentasi di kelas, beragam metode pengajaran, kiat dan trik untuk mendapatkan pekerjaan, Keterampilan Berkomunikasi, Identifikasi Masalah, Deskripsi, dan Solusi, mengingatkan siswa untuk berdoa tepat waktu, Menggunakan Media Sosial, Mengetahui, Menguasai, dan menerapkan materi sebagai diajarkan, didisiplinkan dan Diberikan gambaran kompetisi.

Kata kunci: *Sekolah Menengah Kejuruan, Guru, Era Industri 4.0*

Abstract

This article discusses 10 Characteristics Of SMK Teachers In The Industrial Era 4.0. The main purpose of this study is to find out what the characteristics of high school teachers are desired by students. In this case the researchers used qualitative approaches collected the data using observation, interviews, and documentation. The results of this study found 10 characteristics that must be possessed by a teacher of high school students. Presentation tools in the classroom, varied teaching methods, tips and tricks for getting a job, Communication Skills, Identification of Problems, Descriptions, and Solutions, reminds students to pray on time, Use Social Media, Knowing, Mastering, and applying the material being taught, discipline and Provided an overview of competition.

Keywords: *Vocational High School, Teachers, The Industrial Era 4.0*

Introduction

We are now in the industrial era 4.0, all settings and lifestyles have changed, this also has an impact on the realm of education. All fields of life experience movement and change very quickly. Starting from social, economic, and working world and habits of the people. If we go back to the 90s or before, if we go to school we only bring books, bags, stationery and maybe an English dictionary in the bag. These things make us calm to learn. However, in this era we will be calm to learn if there is a gadget or cellphone. Yes very true, digital era is very closely related to technology, and technology is inseparable from a gadget.

In this era also resulted in several fields of work lost and replaced with an application, for example travel agents, in the 90s or before travel agents were very numerous and easy to find to book plane and hotel tickets. But now, all of that has been replaced by an application on mobile phones.

In an easy and practical way we can order airplane tickets, hotels and more in an application. After that we transfer the amount of money listed according to the application. Our transaction is complete, there is no need for further process. From the explanation above we can conclude in a word, namely practicality. Because at this time needed an ease to do something.

But today there are a number of new fields of employment available. Bhima Yudhistira (2018) There are some jobs that have emerged and can actually survive in the digital age, such as those who work in the field of communication technology, creative industries, professionals, health services, and there are several others. According to Marr (2018) the fourth industrial revolution will take what was started in the third with the adoption of computers and automation and enhance it with smart and autonomous systems fueled by data and machine learning.

In addition, the methods and curriculum of the lesson must be adapted to the changing times. In fact in this era, teachers and students in Vocational High Schools still do not understand what needs to be adapted to this era. Most teachers are preoccupied with administration every month just to redeem teacher certification. What about the students, they seem to be more interested in playing online games for hours rather than learning the knowledge that they can get easily from the gadget. However, more importantly there is the participation of parents. This is the most important factor in the world of education.

However, we must not forget that even though we are already in the digital age, there is one factor that we should not forget, namely the characteristics of teachers in the digital age desired by students in vocational high schools. There are at least fourteen characteristics of a teacher who is liked by his students. Patient, full of affection, attention, friendly, tolerance to children, empathy, full of warmth, accepting what we are, fair, understanding children's feelings, forgiving, respecting and understanding the child, giving freedom to children, and creating a close relationship with children. Those are some of the characteristics of teachers who are liked by students in the class taken from several sources. However, this research emphasizes 10 Characteristics Of Vocational High School Teachers In The Industrial Era 4.0.

Literature Review

Teacher Characteristics

Actually, what is called the characteristics of the teacher, or what are the characteristics that must be owned by a teacher. Rice and King (2003) This literature review outlines five measurable, policy-relevant teacher characteristics that reflect teacher quality: teacher experience, teacher preparation programs and degrees, type of teacher certification, specific

coursework taken in preparation for the profession, and teachers' own test scores.

Then according to Young (1990) identified the following characteristics as being those of an effective teacher: the ability to plan and execute lessons, monitor student learning and behavior, conduct interesting and focused lessons based on a variety of methods, and maintain rapport with students and peers.

According to McClain and Horner (1988), certain personality types are more successful as teachers with the most effective teachers being those with personality types that are not strongly and clearly defined – that is, not extremes on the Myers-Briggs scales.

From the above statement it can be concluded that many of the characteristics of a teacher are explained by experts. However, not all the characteristics are from a teacher. What is certain, in my opinion, the main characteristics that must be possessed by a teacher is that they can implement the knowledge gained while studying on campus in daily learning activities in the classroom. In addition, a teacher in this day and age must continue to update technological developments in the field of learning, lest a teacher feel enough of the knowledge he can get while on campus.

Vocational High School

The government is currently actively promoting vocational high schools, because in this school students are prepared to work when they graduate. But, there are also graduates from vocational high schools continuing their studies. But what was graduated with a vocational high school. From some experts and according to the Law. According to Rupert Evans (1978), vocational education is part of the education system that prepares someone to be more able to work in one occupational group or one occupation than other fields of work. According to the explanation of Law Number 20 Year 2003 Article 15, vocational education is secondary

education that prepares students, especially to work in certain fields. Vocational education consists of Vocational High Schools, and Aliyah Vocational Madrasahs.

Characteristics of vocational education according to Djojonegoro (1998: 37) include vocational education preparing students ready for work; vocational education emphasizes the mastery of knowledge, skills, attitudes and values in the world of work; the relationship between vocational education and the world of work is very close; Vocational education requires cutting-edge facilities for practicum.

Industrial Era 4.0

The term industrial revolution is related to some fundamental changes that occur in the industrial field, ranging from industry 1.0, 2.0, 3.0, to industry 4.0. The focus of the industrial revolution was humanity's major changes in the process of producing goods. Industry Revolution 4.0 then comes to replace the industry 3.0 which is characterized by physical cyber and manufacturing collaboration (Hermann et al, 2016).

The term Industrial Revolution 4.0 started from the German government to promote computerization of manufacturing. According to Lee et al (2013, in Yahya, 2018) explains, this industry is characterized by an increase in digitalization of manufacturing which is driven by four factors: 1) an increase in data volume, computing power, and connectivity; 2) the emergence of analysis, ability and business intelligence; 3) the occurrence of new forms of interaction between humans and machines; and 4) digital transfer instructions to the physical world, such as robotics and 3D printing.

Then, what is the impact of the 4.0 Industrial Revolution on Education in Indonesia? In this era, information and technology greatly influence the activities of students at school. New information and knowledge spread easily and accessible to

anyone who needs it. The difference with the 90s was in taking information and knowledge, in the 90s when we wanted to retrieve information we relied on books, newspapers or magazines, but now students just need to open the gadget and type in any information they are looking for. The role of the teacher who has been the sole provider of knowledge has more or less shifted away. In the future, the role and presence of teachers in the classroom will be increasingly challenging and require very high creativity. In essence, the teacher must have the right character for this era.

Methods

The approach used in this study was a qualitative approach to describe and analyze phenomena, events, social activities, and perceptions of a person or group and obtained a description of the object of research that is about 10 Characteristics Of Vocational High School Teachers In The Industrial Era 4.0. In this case the researcher collected the data using observation, interview, and documentation.

Results and Discussion

There are some findings from this research concerning 10 Characteristics Of Vocational High School Teachers In The Industrial Era 4.0 desired by students in SMK Bina Profesi Bogor.

A. The teacher uses presentation tools in the classroom.

From some of the answers students answer in the questionnaire, it is found that the answers that emerge a lot are teachers who use presentation tools in the teaching and learning process in the classroom. What is a presentation tool? Then, what is called the presentation tools, at IGI-GLOBAL presentation tools, are the Web-based tools that enable students to post work for viewing by the learning community. So, in my opinion, the presentation tools can make the learning

atmosphere inside or outside the classroom more relaxed but serious.

B. Teachers who have varied teaching methods.

The second characteristic is that teachers have varied teaching methods. What we know is that a teacher must have a variety of teaching methods, the main goal of the teacher must have a variety of methods that are varied so that students in the class are not bored in accepting toeri from the teacher.

C. The teacher gives tips and tricks for getting a job.

As we know, the main goal of students seeking knowledge in vocational high schools is to make it easy to get a job when they graduate. However, they realize that good grades in report cards are not enough, there must be tips and tricks in finding a job after they graduate. This is where the main role of a vocational teacher, namely being able to provide life experience on how to find work.

D. Communication Skills

Communication skills here are to understand, manage, and create effective communication in various forms and contents both verbally, in writing, to students, principals, peers, and of course parents of students. In my opinion, the biggest challenge right now for a teacher is how to communicate appropriately, well-directed and well to parents. The current condition is that parents use sentences that are not ethical when complaining about what they think is lacking.

E. Identification of Problems, Descriptions, and Solutions

The problem is certainly a lot in learning activities inside or outside. But here a teacher must have four things in dealing with problems. What a teacher must have in solving problems. Namely compile, reveal, analyze, and solve problems properly. In this case, when

facing a smart student but he lacks confidence. Here, the role of a teacher must be to find the best solution.

F. The teacher who always reminds the students to pray on time

There are two compelling reasons for students to answer this, firstly, they need a teacher who reminds them to pray in time, as it is known that when the call to prayer, they do not necessarily immediately start the prayer. Second, if they postpone the prayer on time, they may not be able to pray. This is where the role of a teacher to remind prayer on time to students.

G. Use Social Media to collect assignments

In the process of learning activities in the classroom there must be a complete or some incomplete, said complete when all the material delivered at that time was finished all from opening to closing, there is a pleasant interaction between students and teachers, and the last students understand all material that the teacher delivers to them. However, if learning is said to be incomplete, if there is material delivered there are still many students who do not understand and need repetition, the form of repetition here can be like homework. In fact, students are happy if their homework is sent via email or whatsapp application. Students just need to send their homework in the form of a word file or something.

H. Knowing, Mastering, and applying the material being taught

The lesson is a series of material taught by the teacher in class, this lesson is very important for students to get information, so a teacher must know, master and apply all the subject matter he conveyed to students. If the teacher does not know, master and apply the material he is conveying, the delivery of material or information is ineffective or does not go into the teacher.

I. Has discipline in the broadest sense

A teacher should have discipline in carrying out his duties as an educator, the discipline referred to here ie. time discipline, a teacher must arrive on time when doing his work, for example coming on time starting and ending lessons in class, so that the discipline done for educators can be an example that can be followed for students.

J. Provides an overview of competition in the industrial era 4.0

One of the keywords in the industrial era 4.0 is competition. This is where the role of a teacher must be able to provide an overview, challenges, and how to deal with competition in this era. The main thing that must be conveyed to students is how to follow and have a strategy to follow the competition in this era. However, in essence, one thing that must be conveyed to students is to continue learning to upgrade knowledge to face this era.

Conclusion

From the results of the discussion above we can conclude in general and specifically, in general from the answers of students are (1) Students can explain the teacher characteristics that students need to deal with the industrial revolution 4.0. (2) Their personal opinion is that they must be ready in facing all the challenges of the times including the industrial revolution 4.0. (3) Besides the rapid development of technology in this era, there is one character that must be possessed by a teacher, namely the spiritual side, such as reminding his students to pray on time. (4) There is one statement that they are very good, namely a teacher must give tips and tricks on how to find work in this era.

Specifically we can draw the conclusion that a teacher must be able to utilize information technology to improve the quality of the teaching and learning process at every level of education. This

effort was made in order to be able to prepare superior human resources with global competence and be able to adapt to the existing era, even though information technology is developing so fast and learning resources are so easily obtained, the role of teachers as educators cannot be replaced by advances in technology when it is able adapt. But do not forget also other factors that must be possessed by a teacher such as discipline, communication procedures, managing existing problems, and the teacher must have a variety of teaching methods.

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