The Inhibiting Factors of 2013 Curriculum Implementation in Vocational High Schools

(Case Study of Public and Private Vocational High Schools, Surakarta, Indonesia)

Surya Jatmika
Accounting Education Department
Universitas Muhammadiyah Surakarta
Surakarta, Indonesia
sj795@ums.ac.id

Lia Setyawati
Accounting Education Department
Universitas Muhammadiyah Surakarta
Surakarta, Indonesia
liasetya310@gmail.com

Esti Pramita
Accounting Education Department
Universitas Muhammadiyah Surakarta
Surakarta, Indonesia
estipramita02@yahoo.co.id

Sabar Narimo
Accounting Education Department
Universitas Muhammadiyah Surakarta
Surakarta, Indonesia
sn124@ums.ac.id

Abstract—Based on several previous studies that examined the 2013 curriculum implementation in vocational high schools in Surakarta, Central Java, Indonesia, most of them solely focused on its implementation in public schools but not on the inhibiting factors for its implementation in private schools. The purpose of this study is to find out the inhibiting factors for the 2013 curriculum implementation in both public and private vocational high schools in Surakarta and propose solutions. This research is a case study with a qualitative approach. The subject consisted of six deputy principals in the curriculum department. The data collection technique is interview techniques and literature review. Qualitative data analysis techniques involve the process of data reduction, data analysis, and conclusions. The results of this study reveal the internal inhibiting factors related to the lack of infrastructure, teacher’s knowledge; the habit of students; the structure of the school bureaucracy; principals; the cost of curriculum development. Meanwhile, the external inhibiting factors include the revision of curriculum by the government, non-systematic learning material; curriculum synchronization with the “special” curriculum in private schools; the change in teaching hour; and community participation in curriculum development. This research presents solutions to overcome the factors that inhibit the implementation of the 2013 curriculum in public and private vocational schools in Surakarta are divided into two, namely: solutions to overcome internal inhibiting factors and solutions to overcome external inhibiting factors.

Keywords: inhibiting factors, the 2013 curriculum, vocational high school, solutions

I. INTRODUCTION

Curriculum and learning process plays an important role in the implementation of education; they are interrelated components in this field. Curriculum relates to the materials conveyed by teachers and acquired by students. Meanwhile, the learning process emphasizes more on methods or techniques used to convey the curriculum overall. Currently, the national curriculum is dominated by the implementation of the 2013 curriculum or best-known as "Kurtilas or K-13". Despite its established implementation, the 2013 curriculum has undergone several revisions. The latest revision is the 2013 curriculum 2017/2018 edition in which Regulation of the Minister of Education and Culture No. 24/2016 on Core Competencies and Basic Competencies in 2013 was amended [1]. The revision is the result of monitoring and evaluating the implementation of the 2013 curriculum in Indonesia, including at the level of vocational high school (SMK).

The implementation of the 2013 curriculum in vocational high schools (SMK) is carried out [2]. This regulation stipulates the changes in the structure of the 2013 curriculum, including the spectrum of basic skills of the graduates in accordance with the expertise. This revision has an impact on the curriculum implemented at schools. Nevertheless, all parties should realize that this revision is an effort to anticipate the development of a more advanced society [3].

In fact, the current implementation of the 2013 curriculum at the vocational high school is perceived to be indecisive and unprepared, which is indicated by the lack of facilities and infrastructure (e.g., the provision of textbooks and modules), pros and cons of changes in teaching hours, and teacher’s unpreparedness to embody the curriculum in learning activities. Previous studies have explicited the constraints caused by several factors, namely: teacher’s insufficient understanding about the curriculum implementation (i.e., planning, learning methods, and learning evaluation), constraint from students whose schools have not implemented the 2013 curriculum, constraints from the availability of learning resources and learning time [4-11].

The 2013 curriculum has been implemented in vocational schools in Surakarta since 2014, yet on-going review and evaluation is still relevant. Several studies have been carried out from 2014—2017, and the reports have been published. Previous studies carried out by [5, 8, 10], focused on the
implementation of the 2013 curriculum in public vocational high schools (SMK Negeri) in Surakarta and negated the inhibiting factors for the implementation of this curriculum. Therefore, the present study attempts to investigate and examine the factors that inhibit the implementation of the 2013 curriculum in both public and private vocational high schools in Surakarta. Furthermore, solutions will be formulated based on the findings. Eventually, it is expected that this study can be a reference for the evaluation of the 2013 curriculum, especially at the scope of public and private vocational high schools in Surakarta.

II. RESEARCH METHOD

A. Research Design

The present research is a case study with a qualitative approach. It was conducted at six vocational high schools in Surakarta, namely: SMK Wijaya Kusuma Surakarta, SMK Batik 2 Surakarta, SMK Muhammadiyah 1 Surakarta, SMK Negeri 3 Surakarta, SMK Negeri 4 Surakarta, and SMK Negeri 7 Surakarta, from May to August 2018.

B. Research Subject

As many as six deputy principals in the curriculum department became the subjects or respondents. The subjects were intentionally selected in relation to their duties, including the preparation of learning programs until learning evaluation, the determination of learning quality policies, educational administration, and monitoring and evaluation of curriculum implementation and learning process. Briefly, they were suitable for resource persons regarding the implementation of the 2013 curriculum. The object of this research is the identification of the inhibiting factors in the implementation of the 2013 curriculum.

C. Data Collection Technique & Research Validity

For the technique of data collection, an in-depth interview was selected. It was done to explore information about the inhibiting factors in the implementation of the 2013 curriculum in public and private vocational schools in Surakarta. The literature review was used to collect data for formulating solutions to overcome inhibiting factors in the implementation of the 2013 curriculum in public and private vocational schools in Surakarta. A validity test was done by using the method of peer debriefing [12]. This method requires the session of question and answer between colleagues in order to review and discuss the interpretation of research data.

D. Research Procedure & Data Analysis Technique

The procedure of this study consists of three stages. First, the preparation of research instruments was a set of tools or instruments are prepared to collect data, including interview guideline. Second, the collection of data where the data are obtained and retrieved through in-depth interviews and literature review. In the present study, six subjects involved in the interview stage. Third, the analysis of qualitative data, namely the results of the interview carried out from previous stages. It is done based on by Miles and Huberman’s interactive model [13], which consists of three interrelated sub-processes: data reduction, data display, and conclusion.

In the present study, the data reduction process involved several activities: summarizing the results of the interview transcript and literature review, particularly to sort out and focus significant data (answering questions during the interview) and discard irrelevant data. Subsequently, in the process of data analysis, the collected data that consisted of transcripts and relevant documents were analyzed. Finally, the analyzed data was summarized in the form of a research report.

III. RESULTS AND DISCUSSION

A. Inhibiting Factors in the Implementation of the 2013 Curriculum

The factors that inhibit the implementation of the 2013 curriculum in public and private vocational high schools in Surakarta have been formulated based on the results of the interview that involved six deputy principals of the curriculum department. The factors are detailed in the table below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Schools</th>
<th>Inhibiting Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SMK Wijaya Kusuma Surakarta</td>
<td>1. The lack of facilities (e.g., LCD), while many teachers are less experienced in utilizing such facilities. 2. The lack of books/literature or other resources to broaden the students’ insight. 3. The students’ middle-low socioeconomic background discourages them from having high achievement.</td>
</tr>
<tr>
<td>2</td>
<td>SMK Muh. 1 Surakarta</td>
<td>1. The school has to keep update and synchronize the trend in the industrial sectors for its curriculum. 2. The school has to combine the national curriculum standard and the Muhammadiyah curriculum.</td>
</tr>
<tr>
<td>3</td>
<td>SMK Batik 2 Surakarta</td>
<td>1. The materials in the 2013 curriculum are considered to be less systematic. It needs further review and analysis since it differs from the 2006 School-based Curriculum (KTSP)—which is more methodical and systematic. 2. The teachers do not update the latest information technology (IT).</td>
</tr>
<tr>
<td>4</td>
<td>SMK Negeri 4 Surakarta</td>
<td>1. Curriculum revision made in 2017 and 2018 has altered the spectrum; hence adjustment is required. 2. Students whose previous schools implement the School-based Curriculum (KTSP) curriculum tend to face difficulty in learning with the 2013 curriculum. 3. Teachers have to adapt to new teaching hours due to the change in curriculum/spectrum.</td>
</tr>
<tr>
<td>5</td>
<td>SMK Negeri 7 Surakarta</td>
<td>1. The students are familiar with the conventional method. 2. Most teachers carry out teacher-centered activities due to inadequate knowledge about the 2013 curriculum method. 3. Unpunctual availability of books or the limited number of books.</td>
</tr>
<tr>
<td>6</td>
<td>SMK Negeri 3 Surakarta</td>
<td>1. The lack of teacher’s participation in</td>
</tr>
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</table>
Table 1 shows the inhibiting factors that have been identified and categorized into two groups: internal factors and external factors. The internal factors are linked to the situation at school, namely: First, the lack of facilities and infrastructure, i.e., LCDs and books or other resources for both teachers and students, which are required for the implementation of the 2013 curriculum; Second, the lack of teacher’s knowledge and understanding about the implementation of the 2013 curriculum as indicated by relatively low implementation of IT, monotonous instructional learning method, and low participation in curriculum development; Third, students are accustomed to the teacher-centered method applied in previous education level, and the social-economic background of students from middle-low socioeconomic background hence they have limited access of information and education and eventually are less motivated to achieve higher education; Fourth, the structure of the school bureaucracy is rigid in establishing relationships among stakeholders (supervisors and education offices), parents, community leaders, and staff in the school; Fifth, principals tend to have insufficient understanding about the theory and practice of the curriculum development; and Sixth, the cost of curriculum development through content and systems experiments is relatively high.

Furthermore, the external inhibiting factors are: First, the revision of the curriculum from in 2017 and 2018 has an effect on the spectrum of the curriculum thus readjustment is required; Second, the content of the 2013 curriculum is non-systematic thus further review and analysis on the structure is required; Third, schools must always monitor and synchronize the curriculum with the trend in the industrial world as well as the synchronization of the curriculum with special attributes owned by private schools; Fourth, the change in teacher teaching hours due to the changes in curriculum/spectrum (e.g., reduction in physical education teacher’s teaching hours), Fifth, the lack of community involvement in curriculum development, in terms of financing and feedback.

The results of this study reinforce and complement the results of previous studies carried out by [5, 8, 10]. Previous studies have explicated the constraints caused by several factors, namely: teacher’s insufficient understanding about the curriculum implementation (i.e., planning, learning methods, and learning evaluation), constraint from students whose schools have not implemented the 2013 curriculum, constraints from the availability of learning resources and learning time [4-11].

B. Solutions for the Inhibiting Factors in the Implementation of the 2013 Curriculum

The proposed solutions to overcome the factors that inhibit the implementation of the 2013 curriculum in public and private vocational schools in Surakarta are divided into two, namely: 1) solutions to overcome internal inhibiting factors, and 2) solutions to overcome external inhibiting factors. The solutions are explained as follows.

C. Solutions to Overcome Internal Inhibiting Factors

First, the lack of facilities and infrastructure, i.e., LCDs and textbooks for both teacher and student in accordance with the 2013 curriculum. To solve issues related to the lack of LCD and laboratories, the schools can collaborate with governmental agencies, SMEs, banks, and other related parties for assisting the procurement of laboratories, LCDs, joint production business units, and so forth to support the implementation of the 2013 curriculum based on the expertise of respective vocational schools. Moreover, there is access to corporate social responsibility (CSR) owned by the business and industrial world. To overcome the problems of limited books, teachers, and instructors from the company and industry can collaborate to compose books or other resources in accordance with the characteristics of the 2013 curriculum. In the preparation process, they can be accompanied by school supervisors and experts in learning materials from higher education institutions.

Second, teachers’ lack of understanding on the implementation of 2013. Teachers are less motivated in updating the developments of Information Technology; they still practice monotonous teacher-centered methods and do not participate in curriculum development. As a solution for such problems, initiation to collaborate with the education office or school supervisor is essential. The collaboration can be in the form of organizing education and training programs (training) as well as technical guidance regarding the implementation of the 2013 curriculum in learning activities and the use of information technology as learning media. Teacher competency development through Teacher working Group (KKG), Subject Teacher Forum (MGMP), Subject Teacher Working Group (MGBS), and Teacher Association of the Republic of Indonesia (PGRI) must be [14]. As a strategy, the MGMP that is done twice a month can be more intensified into 3-4 times with a focus on the implementation of education and training programs related to the mastery of the latest IT and instructional models/methods according to the 21st-century competencies.

An alternative solution to overcome the lack of teacher’s knowledge and understanding of the 2013 curriculum is the collaboration with the faculty of teacher training and education of universities. This collaboration shall entail the guidance to habilitate teachers to technology, particularly in learning technologies, i.e., PowerPoint media (PPT), learning
management services (e.g., Schoology) for the development of blended learning, and technologies for the long-distance learning program (PPJ). It aims to enable teachers to apply IT in their instructional strategies. Moreover, the principal can issue policies to improve the professionalism of teachers as well as in the design of the learning implementation plan (RPP), at least in half a semester where the teacher must use a different learning model/method at each meeting based on the 2013 curriculum.

Third, the students are accustomed to the conventional method since their previous junior high schools have not implemented the 2013 curriculum. Moreover, the students come from a middle-low socioeconomic background; thus, they have limited access to information and higher education. Consequently, most students are less motivated to attain higher education achievements. To solve these problems, schools can organize special learning with the 2013 curriculum as the topic. Such training will emphasize student-centered learning through activities integrated with the student orientation (MOS). If the MOS is usually carried out for three days, it can be extended to seven days by including the student training. In the first three days, the schedule is the debriefing about school activities, while in the next four days, the schedule is the training and simulations about the implementation of the 2013 curriculum with the teachers.

The 2013 curriculum promotes student-centered learning by underlining the use of contextual learning resources in the real world. Teachers can take advantage of learning resources from the community to make it easier for students to understand the subject matter [15-17]. Moreover, teachers shall introduce the business and industrial world as a manifestation of the use of contextual and meaningful learning resources for students. The participation of community leaders or successful alumni to share their experiences is expected to encourage the students.

Fourth, the rigid, non-flexible school bureaucracy becomes a barrier in the relationships among stakeholders, including supervisors and education offices, parents, community leaders, and school staff. [18] suggested good school management entails openness of communication, togetherness in making decisions, attention to teachers’ needs, attention to students’ needs, selection of teacher role model, and integration between school and community. To realize good management, a flexible bureaucracy is needed by establishing good relationships between school managers, staff, teachers, parents, communities, students, and related stakeholders. One element was accountable for the structural changes in the leadership of the principal. The principal must be able to initiate breakthroughs in the interaction process in the school environment by making changes or adjusting goals, objectives, configurations, procedures, inputs, processes, and outputs of a school-based on the demands of the development era [19]. The implementation of the school-based management principles equipped with the latest IT will assist the process of effective communication among stakeholders. For instance, communication can be done through the WhatsApp group, website-based forums, and e-mail.

Fifth, the lack of principal’s knowledge and understanding about the theory and practice of curriculum development. [20] suggested the quality of education in Indonesia is characterized by the level of principal’s professionalism since the principal is the manager at the field level. For this reason, the recruitment of principals must be done properly. Prior leadership training for headmaster candidates is also important. The training shall cover how to arrange effective time management; to build relationships between teachers and staffs in relation with the practice of open discussion in curriculum development, respectful relationships with students, and good interaction with parents, communities, and stakeholders; and to create accountable management reports [21]. Furthermore, principals’ self-development can be carried out through the principal’s working group (MKKS) as a medium to exchange views and experiences. In addition, a continuous professional development program is significant in order to improve the principal’s competency in managing curriculum implementation.

Sixth, the cost of curriculum development through content and system experiments is relatively high. Sponsorship from our collaboration with other parties/institutions can be an endeavor to develop a curriculum. [22] asserted three alternative sources of funds to develop programs for educational institutions, namely: 1) other governmental agencies, including ministries and other institutions that have the same level as the government as the main sponsor and the local government; (2) organized private agencies through Corporate Social Responsibility (CSR) of companies, both large and small industries, professional and community associations, and social foundations; (3) general income of educational institutions, including business units of educational institutions in the service sectors, products, alumni assistance fund, and patent licensing royalty. These sources can be accessed and allocated for the procurement of laboratories and libraries as well as facilities to support successful teaching and learning activities.

D. Solutions for External Factors

Several solutions are proposed to solve the external inhibiting factors in the implementation of the 2013 curriculum. First, the revision of the 2013 curriculum in 2017 and 2018 has influenced the change in the spectrum of the curriculum; hence readjustment is required. The Education Office is responsible for socializing the revision of the spectrum in the vocational expertise by utilizing the latest IT, i.e., website, Facebook, Instagram, and Twitter, to disseminate the program policies to parents and community in general. In fact, the Ministry of Education and Culture has devised an official website for vocational education programs: https://psmk.kemdikbud.go.id/, which contains articles, news, and other resources related to the implementation of the 2013 curriculum in vocational education programs, as well as forum for teachers and the general public to share experiences and discuss with the experts.

Second, the learning material in the 2013 curriculum is less systematic; hence further review and structured analysis are required. To solve this problem, joint monitoring and evaluation activities related to the contents of the vocational
curriculum that involve the education office, business/industry, and experts from universities can be a solution. Such activities shall focus on reviewing and analyzing the materials to be adapted based on the referred theory, student conditions, level of difficulties, time allocation, continuity of materials, and human resources (educators/instructors). The outcomes of monitoring and evaluation can be a reference for improving the implementation of the 2013 curriculum in the respective school.

Third, schools must conduct continuous monitoring and synchronization between the 2013 curriculum and the trend in the industrial sectors as well as between the 2013 curriculum and special curriculum set by private schools. One of the vocational school programs is “link and match” the curriculum with competencies based on the needs of graduate users. This program affects the quality of graduates since they are required to possess qualifications based on the business and industrial sectors. Nevertheless, most schools face shortcomings in terms of time and costs in carrying out this program, particularly due to the strategies to synchronize the curriculum with the demand from the business and industrial sectors. Basically, there are two methods of synchronization, namely by inviting representatives of the company and industry and by delegating teachers to a relevant apprenticeship.

In addition to the synchronization process, the Government has issued Core Competencies and Basic Competencies through the Regulation of the Directorate General of Primary and Secondary Education No. 330/D.DS/KEP/KR/2017 [23]. As a result, synchronization between the school and the business and industrial sectors has to be re-synchronized with the government regulations. It becomes another problem to simultaneously adjust the school curriculum based on the Core Competencies/Basic Competencies and the demands from the industrial sectors [24]. It is a more complicated problem for private vocational schools since they have to align the curriculum with their special subjects (e.g., Muhammadiyah subject, muamalah, history, and aqeedah). As a result, significant changes are made for the time allocation of the established curriculum standards/policies. Therefore, it is important for the government to include the requirements of both public and private schools in formulating policies related to the curriculum, including the time allocation for each subject. Particularly for vocational high schools, the government should be more flexible by giving authority to modifying the 2013 curriculum in accordance with their respective characteristics as well as the trend in the business and industrial sectors.

Fourth, there is a change in teacher teaching hours due to the changes in curriculum/spectrum, for instance, the reduced teaching hours of physical education teachers. It has an impact on the concerned teachers in relation to the requirements for obtaining teacher certification allowances. Nevertheless, the government has provided a solution by issuing the Regulation of the Minister of Education and Culture No. 15/2018 on the Fulfillment of Principals’, Teachers’ and School Supervisors’ Workload [25]. It stipulates the additional assignments for teachers who have less teaching hours. Such assignments can be in the form of being deputy head of the education unit, head of the expertise program, head of the library, or special guidance. Other additional tasks for teachers also include the assignment as homeroom teacher, supervisor of Intra-School Student Organization (OSIS), extracurricular instructor, coordinator of Continuing Professional Development (PKB) or Teacher’s Performance Assessment (PKG) or Special Job Fair (BKK), on-duty teacher, coordinator of Fist Party Professional Certification (LSP-P1), coordinator of teacher professional organizations/associations, and tutors in the long-distance learning program. As an example, the additional assignment will be given to physical education teachers whose teaching hour is affected by the curriculum changes in order to increase teaching hours. However, the assignments must be in accordance with the applicable rules, namely Regulation No. 15/2018. Thus the rights for physical education teacher certification allowances can be accepted.

Fifth, the lack of community involvement in curriculum development, both financing and feedback. As a solution, the schools can establish parent/guardian associations at the classroom level as a reinforcement of parental participation in school activities. This association can maximize the role and function of all parents/guardians in educational activities in vocational schools. Moreover, it can be a medium for socializing school programs and activities for all parents/guardians; thus, they will understand and be encouraged to participate in students’ educational activities [26] actively.

In addition, the schools can organize assorted parenting programs, e.g., inviting professional source persons or experts on a regular, continuing basis according to the agreement between the schools and the parents/community. These programs are expected to raise the awareness on the significant roles of parents/community, namely: (a) to provide support and motivation to students, (b) to help and check the student’s homework, (c) to attend parent-teacher association programs and parent-school committee meetings, and (d) to have parent-children conversation about the school activities [27-29].

IV. CONCLUSION

Study on the factors that inhibit the implementation of the 2013 curriculum in several vocational schools in Surakarta has been carried out. Based on the results and discussion, the internal inhibiting factors consist of: the lack of facilities and infrastructure owned by the school; the lack of teacher knowledge of the implementation of the 2013 curriculum; the students’ difficulty in adapting to new learning method; the school’s rigid structure bureaucracy; the lack of principal’s knowledge about the theory and practice of the 2013 curriculum; and the costly curriculum development. Furthermore, the external inhibiting factors for the implementation of the 2013 curriculum in vocational schools are the revision of the curriculum by the government; non-systematic learning materials in the 2013 curriculum; the synchronization of school curriculum with the 2013 curriculum and the special curriculum in private schools; the changes in teacher teaching hours; and the lack of community participation in curriculum development.

Both public and private vocational high schools in Surakarta face similar constraints in implementing the 2013
curriculum. The only difference is related to the synchronization of curriculum that should be made by private schools in which they have to synchronize the 2013 curriculum with both the trend in business and industrial sectors as well as the special programs of respective private schools. To overcome the existing inhibiting factors, internal improvements are recommended for vocational schools, in terms of school’s bureaucratic structure, curriculum development and resource management, and the interaction between stakeholders. Additionally, it is important for vocational high schools to improve and optimize the prospective collaboration between the schools and other agencies, including the education office, parents, communities, universities, alumni association, and the business and industrial sectors. Good internal management and good relationship with external agencies will completely resolve the inhibiting factors in the implementation of the 2013 curriculum, in which it also requires continued evaluation as an effort to improve the quality of the curriculum in accordance with the needs of the era.

REFERENCES