



## Increasing the Readiness of Vocational School Teachers for Competition in the Industry 4.0 Era by Strengthening Practical and Transferable Skills

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### ABSTRAK

This research aims to improve the competency and expertise of Vocational School (VS) teachers majoring in Sharia Banking by strengthening their practical and soft skills. This program has two primary outcomes: first, an increase in vocational teachers' knowledge and practical skills, and second, sending four participants to obtain professional competency certification at basic career levels. Such programs for educators need to be further developed in the future so that VSs can generate graduates who are ready to compete in the Industry 4.0 era.

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## **INTRODUCTION**

Digitalization, automation, the transition to a low-carbon economy, and the COVID-19 pandemic have all had a significant impact on the skills that industrial entities need. This has been equally evident in vocational education. Global industrial phenomena such as Industrial Revolution 4.0, for example, require different skills than in previous years. Technical skills are no longer the central pillar of industry, having been taken over by technology. Automation is replacing the technical roles conventionally produced by vocational schools (VS). VS teachers must consider this problem seriously and be able to provide and equip students with skills beyond the technical skills—especially transferable skills. Machines and technology will not replace such skills, and thus they will remain useful in the future. Nevertheless, not all VS teachers are ready to face these requirements. The development of Sharia banking and the increased need for human resources offer opportunities for VS to play an active role in creating ready-to-use output with special skills in the field of Sharia banking.

Based on Law of the Republic of Indonesia No. 20 of 2003 concerning the National Education System, VS refers to formal vocational education at the senior high school level that prepares students to work in specific fields. VS graduates are required to have work readiness by having a balanced ability between hard skills and soft skills. Compared to teachers in general school programs, VS teachers require multiple experiences and skills (OECD, 2020). In general, VS teachers are not only required to have pedagogical knowledge and experience but also practical skills. As such, vocational teachers have been identified as having a "dual profession" (Greatbatch & Tate, 2018). In vocational education, teachers not only equip learners with skills needed by the world of work but also prepare transferable skills, skills that can be used in various life and work situations. The term transferable refers to the way these skills can cross different tasks and job roles (Greatbatch & Tate, 2018). These transferable skills include competency elements such as critical thinking, creativity, initiative, problem-solving, risk assessment, decision-making, and communication (Terzieva et al., 2015). Despite widespread automation and digitalization, not all banking jobs can be replaced by technology. Take, for example, the skill of communicating effectively, which is essential for handling complaints (also part of banking services).

As the skills required by industry change, VSs must continuously evolve and adapt to new business ecosystems. Vocational teachers must continuously update their knowledge, practices, and current approaches in the learning process. They must also be aware of and involved in technological developments for professional sustainability (Zhongming et al., 2021). However, not all vocational teachers are ready to face these changes and dynamics. This problem is faced by many teachers at VSs, including teachers who are members of the MGPbs (Sharia Banking Teachers Association) in Semarang City. None of the members of MGPbs Semarang City have a background as practitioners; they thus require more access to the latest practical knowledge of the banking industry. Furthermore, due to a lack of access,

networks, and funding, MGPbs members still require professional certification in the field of Sharia banking services. Strengthening knowledge of the basics of Sharia banking, Islamic banking accounting, and banking services will improve the skills of vocational school teachers majoring in Sharia banking.

The results of initial discussions with MGPbs members indicated that most members also still have limitations in this area and, thus, need to strengthen their soft skills. As an effort to help solve the problems of these teachers, who are partners of the Financial Analysis Study Program, we propose organizing workshops aimed at increasing their knowledge and practical skills in Islamic banking services while also strengthening the transferable skills that are needed in the Industry 4.0 era. Specifically, this project aims to improve the competence and expertise of these teachers by strengthening their practical and soft skills in Islamic banking: 1) Improving the knowledge and practical skills of MGPbs members by training them in the basics of Islamic banking and Islamic banking accounting; 2) Improving teacher expertise and professionalism through training and professional certification in Islamic banking service; 3) Strengthening transferable skills through training in communication and complaint handling.

Increasing vocational teachers' access to and participation in training programs for professional development requires collaboration and coordination with various stakeholders at various levels. Vocational institutions, teachers, school networks, industries, universities, and other relevant associations play different but crucial roles. Each institution has a role in providing access, encouragement, and professional development opportunities for vocational teachers. As a vocational higher education institution, the Financial Analysis Study Program aims to help solve the problems faced by teachers in vocational schools. This outreach program is urgent for two reasons. First, the main problem faced by MGPbs members is the need for more knowledge, skills, and practical experience in Islamic banking. Access to updated information on the issues and practices in the banking industry is likewise limited among teachers. In addition, none of the members of MGPbs are professionally certified in banking services. The project proposal team are academics with extensive experience as Sharia banking practitioners and thus have relevant competencies to support MGPbs teachers in improving their skills. Second, apart from limited practical banking skills, another challenge for MGPbs members is the lack of transferable skills, which are very critical in the Industry 4.0 era. The increasing demand for soft skills, especially communication skills, problem-solving, and complaint handling, suggests that vocational school teachers must increase emphasis on transferable skills.

## **IMPLEMENTATION AND METHODS**

The target beneficiaries of this program were members of MGPbs in Semarang City, as partners of the Financial Analysis Study Program. Activity began with initial coordination with the Baiturrahman Islamic Center Vocational School, Semarang, which included representative members of MGPbs. This was intended to discuss the technical implementation of the proposed project. The discussion was held online on February 27, 2023. At this stage, the team also carried out an exploration process and mapped beneficiaries' problems and needs. Based on the findings, the team proposed a series of training activities to improve the readiness of the VS teachers of the Sharia Banking Department in facing competition in the Industry 4.0 era by strengthening their Sharia banking and transferable skills. Activity implementation involved the following stages:

1. Training on the Basics of Islamic Banking
2. Islamic Banking Accounting Training
3. Islamic Banking Service Training (customer service, teller)
4. Communication and Complaint Handling Training
5. Assistance and implementation of teacher competency certification through the Professional Certification Agency.

The final stage of this program involved an analysis of the program's success based on several indicators, including project report documents, evaluations, and suggestions for teams with similar topics in the next period. All of the stages mentioned above, along with the indicators for each stage, are summarized in the following flow diagram:

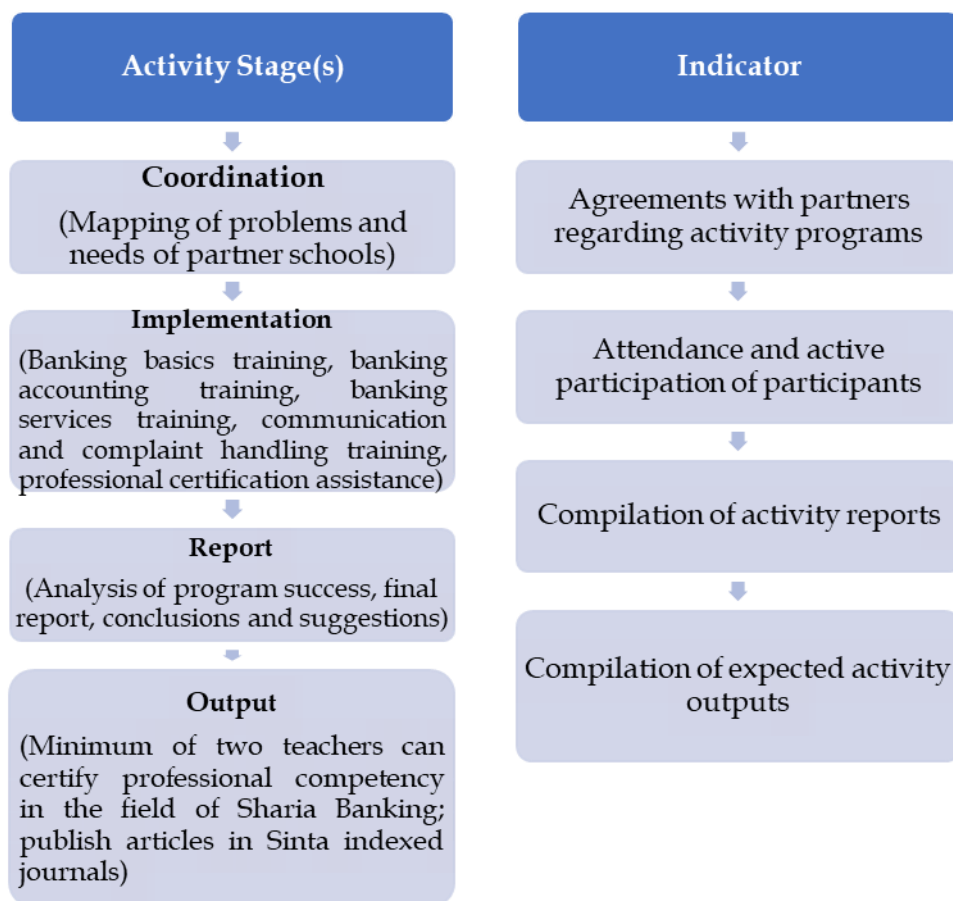


Figure 1: Flowchart of community service

## RESULTS AND DISCUSSION

Professional development programs are critical to improving teacher competence (Apriliyanti, 2020). However, efforts to improve the professional competence of vocational teachers face various challenges. First, competency improvement programs, such as workshops and seminars, are limited in the areas where they live. Second, teachers receive limited support from their institutions. Third, there is a lack of facilities and infrastructure for developing teachers' professional competencies (Prawiro, 2019). A similar situation is faced by the vocational teachers who are members of MGPbs Semarang. In addition to these issues, MGPbs teachers lack an academic background in Islamic banking and finance, making efforts to gain professional competence in these areas more difficult. To improve the professional competence of MGPbs teachers, training in and certification of basic Islamic banking competencies is essential. As stated by Herlina (2011), training programs are the main feature of competency development.

Training activities were conducted offline at the Baiturrahman Islamic Center Vocational School, Semarang, on May 8, 2023. Meanwhile, assistance for preparation for the certification exam was provided online via Zoom on July 17 and 18, 2023. Finally, a competency certification exam was conducted offline at the Baiturrahman Islamic Center Vocational School. Semarang on July 31 2023.

### **1. Training in Islamic Banking Fundamentals**

Training in the basics of Sharia banking was held on May 8, 2023, with resource persons from the Financial Analysis Study Program, Faculty of Business and Economics, Islamic University of Indonesia. This workshop was designed to increase participants' knowledge of Sharia banking products and contracts as well as provide an understanding of the fundamental differences between Sharia banks and conventional banks. The training involved several approaches, including presentations, discussions, case studies, and evaluations, all of which were conducted systematically, integratively, and focused. Apart from that, this program also enabled participants to receive updates regarding the latest Sharia banking issues and developments. The growth of Islamic banks in Indonesia has not been accompanied by Human Resources (HR) competencies that meet professional qualifications (Muhammad & Nugraheni, 2022). The development of Islamic banking has increased the demand for human resources who are competent in Sharia economics, Sharia banking, and finance. The limited availability of human resources with such competencies is a severe challenge for the development of this sector (Amalia, 2014; Huda et al., 2016).

The growth of Islamic banking and finance requires considerable human resources, not only in terms of raw numbers but also competencies that meet the needs of the Sharia industry. According to the Association of Indonesian Sharia Commercial Banks (Asbisindo), Sharia banks require 11,000 workers every year. At the same time, universities are only able to provide around 4,000 workers with a background in Sharia economics. This means that 7,000 potential positions in Islamic banks go unfilled (Rozalinda, 2014). This is a great opportunity for educational institutions, including vocational schools with a concentration in the Sharia banking sector, to meet the needs of the Sharia financial industry.

### **2. Training in Islamic Banking Accounting**

The following program was training in Sharia banking accounting, which was also conducted on May 8, 2023, by resource persons from Bank Syariah Indonesia, Semarang Branch Office. The rapid development of Sharia banking in Indonesia has increased the demand for financial information, especially in the field of Sharia accounting. This training aimed to provide VS teachers with an understanding of the practice and implementation of Sharia accounting in Islamic banking. The material presented includes accounting practices in transactions, sale, and purchase agreements (such as murabahah, salam, and istishna). Also included is training in profit-sharing contracts such as mudharabah and musyarakah, as well as accounting for rental contracts (for example, ijarah and ijarah muntahiya bittamlik). This training also allowed participants to identify the gap between theory and practice. Murabahah sale and purchase transactions, for instance, often use additional instruments in the form of wakalah contracts—provisions for representation in the process of purchasing goods. The difference between theory and practice has implications for the statement of accounts. Furthermore, this workshop provided an essential reference for VS when and if they design and develop a Sharia

accounting curriculum that aligns with industry needs. This encourages the creation of links and matches between educational institutions and the Sharia financial industry. This will have positive effects, enabling the Sharia financial industry to maximally absorb the human resources produced by educational institutions (Muhammad & Nugraheni, 2022).

### **3. Training in Islamic Banking Services**

In the final session of the offline workshop, participants received training in banking services from lecturers at the Financial Analysis Study Program with backgrounds as banking practitioners. This training included customer service and teller services. The training was designed to increase VS teachers' knowledge and practical experience in matters of customer service and tellership. It was hoped that, after attending the training, participants would be able to transfer knowledge to students using roleplay practices that follow the service standards set by Marketing Research Indonesia, the primary reference for assessing the banking industry's ultimate service standards.

In training, learning involved modules and showed videos depicting ultimate service standards. Customer service material, including savings product information services, account opening services, e-channel services, and account closing services, was used to sequence the aforementioned services from the beginning through the end. Meanwhile, tellership materials included customer deposit services, money exchange services, and money withdrawal services. Tellership service likewise involved three different service stages. Training also equipped participants with knowledge about banking ethics, marketing of banking products and services, grooming standards, and service appearance standards. The material provided was complemented by practical activities (roleplay), wherein participants took turns playing the roles of bank officers and clients; it was hoped that this would provide participants with a comprehensive understanding. During this activity, participants had the opportunity to carry out a Q and A session, which ended with an assessment, evaluation, and improvement session.

### **4. Training in Communication and Effective Complaint Handling**

After participating in three offline programs, participants partook in online communication and complaint-handling training sessions. Service failure in the banking industry harms service quality and decreases customer loyalty (Siddiqui & Tripathi, 2010). There is thus an increased need for effective communication and complaint handling. Such training is important, given that Sharia banking teachers' knowledge and skills for dealing with customer complaints must still be improved. This skills-enrichment program was intended to strengthen their knowledge, improve school learning, and increase output quality. As such, vocational school graduates who enter the banking industry could be better prepared to develop paradigms, positive attitudes, and self-confidence in handling customers' complaints, identifying types and basic characteristics of customer complaints, understanding complaint handling techniques, providing customers with appropriate solutions, and being able to

develop skills. They will further be able to establish good relationships with customers for 'service recovery' and 'cross-sell' opportunities. Furthermore, the ability to handle customer complaints requires skills in communication, initiative, and problem-solving, all of which are transferable skills necessary to compete in the Industry 4.0 era.

### **5. Competence Certification for Vocational Teachers**

After following the above four stages of training, all participants participated in an evaluation program (post-test). The aim was to identify participants' level of knowledge regarding the training material that has been provided. Based on the post-test results, the four participants with the best scores were selected to take part in a basic-level career competency certification program. This certification evaluated their ability to apply banking ethics, carry out customer fund and credit administration processes, carry out accounting processes, comply with legal principles, and market products and services.

Before taking the certification exam, the project team debriefed selected participants via Zoom for two days (July 17 and 18, 2023). The debriefing process began with a pre-test, followed by the presentation of course material. It ended with a post-test to measure participants' readiness to take the competency certification exam. During the briefing process, the team used a discussion and question-and-answer approach to ensure that participants understood the material provided. On July 31, 2023, participants took the basic-level competency certification exam held by the Professional Certification Institute for Management Services (LSP JPK Pratama). Meanwhile, professional competency certificates were issued by the National Professional Certification Agency (BNSP). Based on the exam results, the four participants obtained basic-level career competency certification.





Figure 2. Program's activities

## CONCLUSIONS AND RECOMMENDATIONS

In general, this community service program aims to improve the competency and expertise of teachers majoring in Sharia banking by strengthening their practical and soft skills in Sharia banking. This was accomplished through training in the basics of Sharia banking and banking accounting, as well as involving selected teachers in professional certification programs. Meanwhile, to encourage the strengthening of soft skills, communication and complaint-handling training was carried out. The output of this activity was an increase in participants' knowledge and practical skills, as demonstrated by the post-test results. Apart from that, this activity also succeeded in assisting four teachers in obtaining professional competency certification at basic career levels. In the future, empowerment programs involving teachers need to be developed so that VS can produce graduates who are ready to compete in the Industry 4.0 era.

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