Guided Demonstration Method to Improve Students' Skills in Processing Banana

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Abstract. This research describes the training process and results of banana processing through the demonstration method at MAN 2 Madiun. This research aims 1) to know the instructor's activities, 2) to find out the participants' activities, 3) to determine student learning outcomes, and 4) to find out the participants' responses to the training. This study used an experimental method with a pre-experimental research design model of a one-shot case study, observation as data collection techniques, and knowledge and skill tests. The process is documented. The research results are as follows: 1) The instructor's activities cover three aspects, namely the preliminary activity aspect, the core activity aspect, and the closing activity aspect, with a percentage result of 95%, which is included in the "very good" category. 2) The participants' activities cover three aspects, namely aspects of preliminary activities, aspects of core activities, and aspects of closing activities, with a percentage of 90.5%, which is the "very good" category. 3) The results of learning in applying demonstration methods in training make banana products fall into the "very good" category, with a percentage reaching 100%. 4) The response of the training participants includes three aspects, namely the instructor aspect, the material aspect, and the activity aspect, with the results being 91% in the "very good" category.

Keywords: Guided demonstration method, cooking banana, MAN 2 Madiun student.

INTRODUCTION

Madrasah Aliyah (MA) is equivalent to Senior High School (SMA). MA, like SMA, requires more cognitive learning compared to psychomotor, so skills are not taught as provisions after graduation. According to Minister of Religion Regulation No. 60 of 2015 concerning Madrasah Education, madrasah is divided into three categories: academic, religious, and skills madrasah.

MAN 2 Madiun is a Madrasah Aliyah plus Skills located in Madiun district. It has an interest in religion, social sciences, and natural sciences. In addition to this specialization, it also provides skills including Culinary, Fashion Design, Makeup, and Multimedia. A skills training activity was carried out through collaboration with the Culinary Education Study Program, Universitas Negeri Surabaya. The skills training activity is an introduction to a job (Bernadin & Russel, 2003; Kraiger, 2002) and refers to planned efforts to master skills (Wexley et al., 2005). It is intended to complement skills in doing work (Sutrisno, 2019). The activity was carried out using regional potential. Based on the results of regional surveys and teacher interviews at MAN 2 Madiun. The most potential food ingredient to be developed is Pisang Raja Nangka (Musa X paradisiaca), which has a sweet and sour taste and a strong aroma.

The skills training taught to students at MAN 2 Madiun includes making fermented bananas, banana jam, mongso banana honey, mochi, and bakpao. The menu selection is based on the availability of raw materials and tools that are
easy to find in the school environment to move the people's economy and facilitate the production process. The skills improvement activities carried out include direct training (Widodo, 2023; Hill & Lent, 2006; Satterfield & Hughes, 2007; Syahputra & Tanjung, 2020) to increase individual skills in the short term (Widodo, 2023). The guided demonstration method is used, where the instructor gives examples of making products that participants follow, and some companions assist in the training process (Taylor, 1988; Shakhashiri, 1985). Before providing training, the instructor needs a training design to facilitate the process of training activities (Hanim & Rachmi, 2022; Ghale, 2018). The training design consists of three stages: planning, implementation, and evaluation.

**TABLE 1. Guided demonstration method syntax.**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Trainer's role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: Planning Stage</td>
<td>The trainer creates a training plan, beginning with training objectives, training materials, time allocation, training outputs, and demonstration products.</td>
</tr>
<tr>
<td>Stage 2: Implementation Stage</td>
<td>The trainer then provides motivation, apperception, and reminders of the main points of the training. The trainer coherently demonstrates the material, and the participants follow what the trainer guides.</td>
</tr>
<tr>
<td>Stage 3: Assessment and Evaluation Stage</td>
<td>The trainer checks the participants' understanding, provides guidance, and evaluates the results.</td>
</tr>
</tbody>
</table>

In this case, research will be conducted on applying the guided demonstration method to banana processing training at MAN 2 Madiun. The guided demonstration method was chosen because it was deemed efficient and appropriate for the training due to time constraints. MAN 2 Madiun was chosen as the research location because there was a request for training from MAN 2 Madiun and an agreement with the Culinary Education Study Program. This research will discuss:

1. The activities of the training instructor in applying the guided demonstration method;
2. the activities of the trainees in applying the guided demonstration method;
3. the results of the training on the application of the guided demonstration method; and
4. the response of the training participants in applying the demonstration method.

This study aims to find out the activities of the instructors, to know the activities of the trainees, to find out the results of the training, and to find out the trainees' responses in applying the guided demonstration method to the training on making banana products.

**METHODS**

This type of research is a quantitative pre-experimental design using the one-shot case study model. The one-shot case study is conducted by providing treatment and observing the results (Kazdin & Tuma, 1982; Kratochwill et al., 2010). This research was conducted at MAN 2 Madiun.

The research population is 11th-grade students who participated in cooking extracurriculars, with 25 students as a sample. Data collection techniques were observation, knowledge and skills assessment, and documentary. Instruments used to obtain information in the research were a training design, an assessment instrument, handouts, worksheets for trainees, an observation sheet of training activities, and a questionnaire for training participants.

**RESULTS AND DISCUSSION**

This study aims to determine the trainees' training activities, training results, and responses by applying the guided demonstration method to train on making banana products at MAN 2 Madiun.

**Trainers' Activities in Applying the Guided Demonstration Method**

The activities of the trainers in the training were observed using observation sheets that assessed three aspects: preliminary activities, core activities, and closing activities. The activity observation sheets of the training participants were assessed by two observers, who were teachers from MAN 2 Madiun. The trainers' activity assessment results can be seen in **FIGURE 1**.
FIGURE 1 shows that the success rate of the trainer in applying the guided demonstration method to training in making processed bananas at MAN 2 Madiun reaches an average value of 95.6%, which can be explained as the trainer's activity is in the “very good” category, as they were able to apply the guided demonstration method according to the stages that had been prepared. The results of the research instrument validation prove that it has “very feasible” outcome criteria. The non-achievement that occurred during the implementation of the activity was 11% on the preliminary aspect and 2% on the core activity aspect. When the preliminary activities began, the trainer was not fully able to manage the training class during the opening activities, resulting in the situation in the training class being noisy, making the participants less able to catch the apperception by the instructor, thus making the instructor's presentation less than optimal in relating what the trainees knew or experienced with what they were learning. Furthermore, the participants' delivery of the material could have been more enthusiastic in the core activity aspect because the media only used simple modules to read, leading to less active discussion or two-way communication between trainers and participants.

Participants’ Activities in the Training Using the Guided Demonstration Method

The activities of the training participants were observed using an observation sheet that assessed three aspects: the preliminary activity, the core activity, and the closing activity. Two fellow instructors evaluated the training participants' activity observation sheets. The results of evaluating the trainees' activities can be seen in FIGURE 2.

FIGURE 2 shows that the training participants have carried out activities following the aspects that have been prepared, with an average value of 90.83%. The non-achievement that occurred during the implementation of the activity was the preliminary aspect of 20.5% and the core activity aspect of 7%. The instructor was less communicative and rigid, so the training participants were less controlled and chatted with their friends. This incident made the discussion or two-way communication between the trainer and the participants less active. Also, it made the filling out worksheets by the participant groups less effective. From the results above, applying the guided demonstration method affects the learning process results. This proves that the correct learning method can improve learning.
Learning Outcomes of Participants in the Application of Guided Demonstration Method

The results of implementing the assessment training are divided into knowledge assessment and skills assessment. Training learning outcomes are assessed using a scale ranging from 1 to 100. A score below 72 is declared as not passing.

The Results of Cognitive Domain Learning

The knowledge assessment was given as an objective test, which included 20 multiple-choice questions to n=20 trainees. Knowledge assessment was carried out after the training activities had been completed. The results of the knowledge assessment can be seen in FIGURE 3.

FIGURE 3. Percentage of learning outcomes in the cognitive/ knowledge domain.

In FIGURE 3, it can be seen that 85% of the training participants passed the knowledge assessment, while 15% did not.

Psychomotor Domain Learning Outcomes

Skills assessment consists of two aspects: performance and product. The performance aspect is divided into three indicators: preparation, manufacturing, and presentation. Each indicator consists of several points: two for preparation, seven for manufacturing, and two for presentation. The product assessment consists of three indicators: taste, appearance, and texture. The performance aspect has a value of 4, and the product aspect has a value of 6. The results of the percentage of skills assessment can be seen in FIGURE 4.

FIGURE 4. Learning outcomes in the psychomotor/ skill domain.
In FIGURE 4, it is explained that the percentage of skills assessment results is stated to be very good. The training participants can follow the practice very well so that the finished product of processed bananas meets the standard finished product criteria compiled in the training instrument.

Psychomotor results are almost the same as cognitive results, likely due to the effectiveness of the guided demonstration method in training. The guided demonstration process in this training involves participants making processed bananas side by side or following instructions from the trainer. This explanation is supported by previous research, which states that the guided demonstration method in learning shows promising results.

Based on the acquisition of cognitive and psychomotor learning outcomes, the final value of the learning can be determined. The learning outcomes assessment scale uses a value scale ranging from 1 to 100. The overall learning outcomes of the participants can be seen in FIGURE 5.

![FIGURE 5](image)

FIGURE 5. The overall learning outcomes of training participants in percentage.

In FIGURE 5, it can be explained about the success rate of the training results reaching 100%. This result shows that the training activity of making banana products using the guided demonstration method at MAN 2 Madiun is "very good."

**Participants Responses to the Application of the Guided Demonstration Method**

The training participants' responses were observed using a training participant response questionnaire. The participants' responses included three aspects observed: the trainer aspect, the material aspect, and the activity aspect. The trainer aspect consisted of four points, the material aspect consisted of seven points, and the activity aspect consisted of three. An observer evaluated the response of the training participants. The results of the training participant response can be seen in FIGURE 6.

![FIGURE 6](image)

FIGURE 6. Results of the participants' training response percentage.

FIGURE 6 shows that the response of the training participants to the application of the guided demonstration method to the training on making processed bananas at MAN 2 Madiun reached an average value of 91%, which is the "very good" category, as many of the participants gave "very agreeable" responses to the statements made. Unfavorable responses were found in the trainer aspect (9%), material (8.5%), and activities (9%). This is because some students could only participate in some training activities.
CONCLUSION

Based on this assessment, it is stated very well. This is shown by the activeness of the trainers in applying the guided demonstration method to training, obtaining a "very good" rating with a result of 95.6%. In contrast, the trainees' activities applying the guided demonstration method obtained a "very good" rating of 90.83%. The training results in applying the demonstration method are in the very good category, reaching 100%.

REFERENCES

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