

## Appendix 1

### RESEARCH MATRIX

Title	Problem	Variables	Indicators	Data Resources	Research Method	Hypothesis
Improving Speaking Ability through I-O-C (Inside-Outside-Circle) technique at the tenth grade of SMK Moch Sroedji Jember in academic year 2018-2019	1. How can the use of inside-outside-circle technique improve the speaking ability of the tenth grade at SMK Moch. Sroedji Jember in 2018/2019 academic year? 2. How can the use of inside-outside-circle improve the students' active participation of the tenth grade at SMK Moch. Sroedji Jember in 2018/2019 academic year?	<b>Independent:</b> The use of I-O-C (Inside-Outside-Circle) technique	<b>➤ I-O-C (Inside-Outside-Circle):</b> The teaching steps in Inside-Outside Circle Technique Teacher's preparation: 1) Find a subject and adapt it where necessary to suit them 2) Prepare the possible picture The way to use the technique: 1. Divided students into 3 groups consisting of 6 and 8 students. 2. Choosing 1 groups to perform in front of the class. 3. Formed them with two circles 3 inside and 3 outside in pairs. 4. Provide a picture to each groups. The inside circle started by describing the picture given and for the outside circle guessed the topic that described by the	<b>➤ Subject:</b> Tenth grade students of SMK Moch Sroedji Jember in 2018-2019 academic year <b>➤ Informant:</b> The tenth grade English teacher at SMK Moch Sroedji Jember in 2018/2019 academic year. <b>➤ Documents:</b> <ul style="list-style-type: none"> <li>• Name of research subject</li> <li>• Students' score of speaking</li> <li>• Students</li> </ul>	<b>➤ Research Design:</b> Classroom Action Research(CAR) The step of the research <ol style="list-style-type: none"> <li>a) Planning</li> <li>b) Action</li> <li>c) Observing</li> <li>d) Reflecting</li> </ol> <b>➤ Informant:</b> Tenth grade English teacher at SMK Moch Sroedji Jember in 2018/2019 academic year Class mean score are >70 <b>➤ Instruments:</b> <ul style="list-style-type: none"> <li>• Speaking Test</li> <li>• Observation checklist</li> </ul> <b>➤ Criteria of success:</b> 70% <b>➤ Data Analysis:</b> $E = \frac{n}{N} \times 100\%$ Where: E: Percentage of students	<b>➤ Inside-outside-circle technique can improve tenth grade students speaking ability at SMK Moch Sroedji Jember in 2018/2019 academic year</b> <b>➤ Inside-outside-circle technique can improve tenth grade students' participation on speaking activities in the classroom at SMK Moch Sroedji Jember</b>

		<p><b>Dependent Variable:</b> Students' speaking ability</p>	<p>inside circle in three minutes.</p> <p>5. They had their own time to describe and guessed because they were rotated clockwise one position if the inside circle had described the pictures.</p> <p>➤ <b>The student score of speaking ability:</b></p> <ol style="list-style-type: none"> <li>1. Grammar</li> <li>2. Fluency</li> <li>3. Vocabulary</li> <li>4. Pronunciation</li> </ol>	<p>previous speaking test score</p>	<p>speaking ability</p> <p>n: Number of students achieved minimum standard score</p> <p>N: Total number of students in the class</p>	<p>in 2018/2019 academic year.</p>
--	--	--	---	-------------------------------------	--	------------------------------------



