CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

5.1 Conclusions

This study identified the advanced digital competence possessed by the vocational high school engineering teachers. The digital competence was identified using a framework adopted from European Commission using literature reviews and descriptive statistics. It could be summarized that the 1) VHS engineering teachers are mainly related to the keyword "digital competence" instead of "digital literacy" and Spain lead the highest total of documents related to digital competence. Furthermore, the high increase of digital competence research happened during the pandemic of the COVID-19 2) the prior studies stated that generally the VHS teachers' digital competence was at the intermediate level 3) the study then analyzed the VHS engineering teachers' which assumed to have higher digital competence requirements and competencies. To conclude, it proved that VHS engineering teachers' digital competence had a high result of advanced digital competence. However, even though vocational high school teachers have been elevating their digital competence, but it needs to be more analyzed through a practical test which could show their real ability.

5.2 Implications

The results of this research can be used as input for schools, teachers or prospective teachers regarding the digital competencies that a teacher must have. These results can also provide information to teachers, that teachers need to develop digital competencies, especially in the area of content creation competencies. Furthermore, the researcher will develop this research into a continuation for dissertation by producing a digital competence test using machine learning algorithm special for vocational educators. This digital competence test will be the prediction test for the teachers to analyze their competence quickly.

5.3 Recommendations

Based on the findings in this study, the author provides several recommendations to related parties, 1) the school is expected to be able to develop teacher competencies, especially digital competencies at regular intervals to keep up with changing

technological developments also with training as the most suggested by the previous research 2) Teachers and prospective teachers, should continue to update digital skills independently to keep up to date with the technology development 3) school and government could develop and consider the curriculum re-designation by implementing the most needed digital competence for learning integration such as content creation to a better improvement and innovation of materials.