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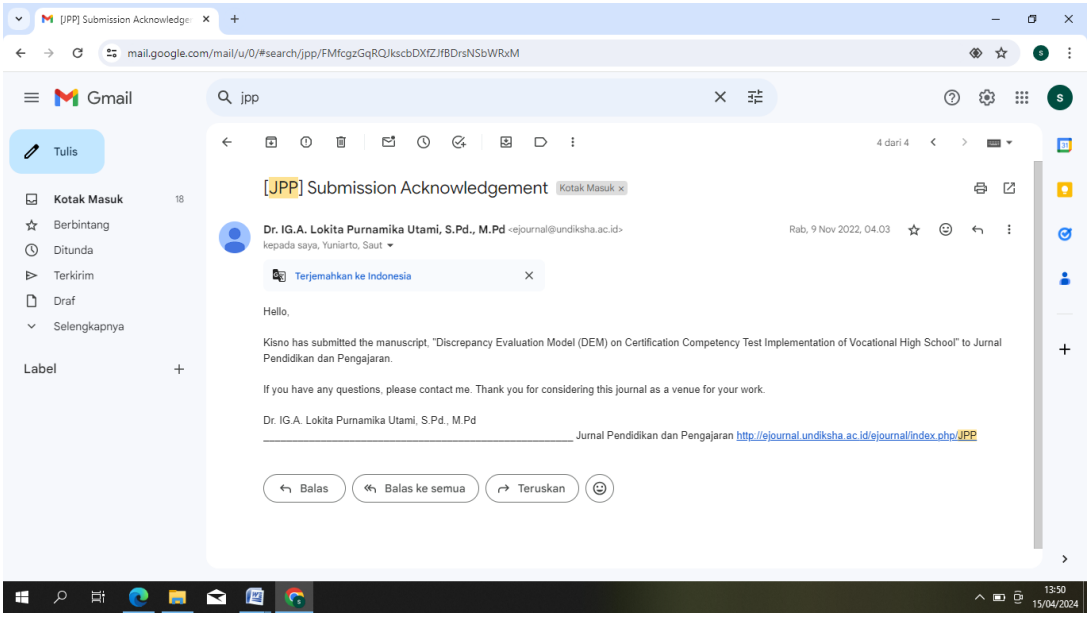

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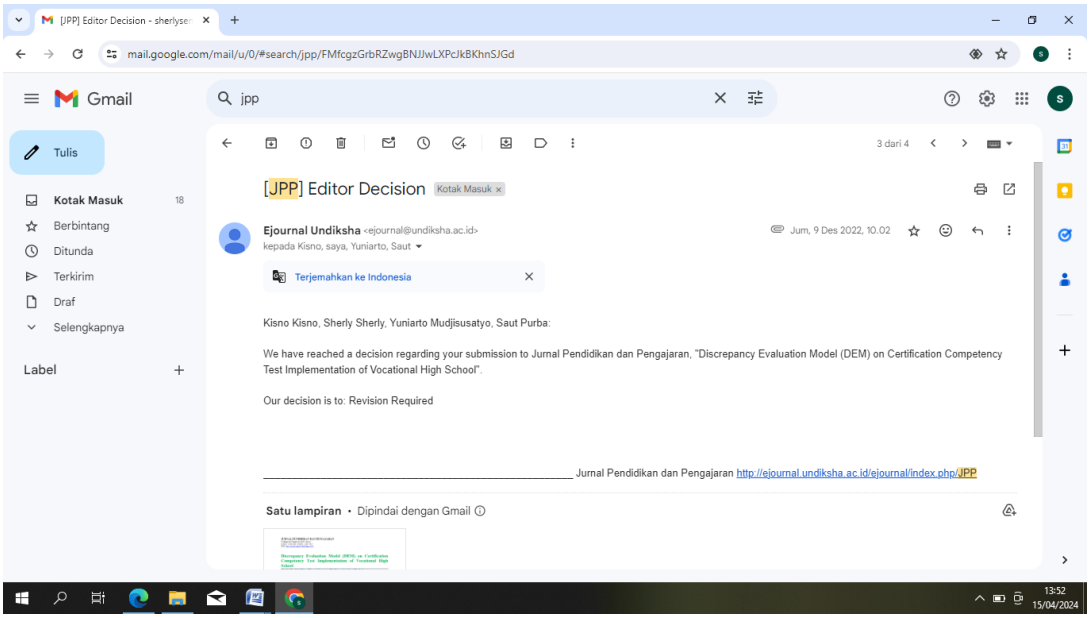


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# Discrepancy Evaluation Model (DEM) on Certification Competency Test Implementation of Vocational High School

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## Abstrak

Uji Sertifikasi Kompetensi merupakan salah satu syarat utama bagi kelulusan siswa SMK dan kesenjangan teori dan fenomena dalam evaluasi Uji Sertifikasi Kompetensi masih jarang dilakukan. Penelitian ini bertujuan untuk mengevaluasi pelaksanaan uji sertifikasi kompetensi SMK di Kabupaten Deli Serdang. Metode evaluasi menyeluruh dengan Discrepancy

**Comment [R1]:** The urgency of the research needs to be added at the beginning of the abstract.

Evaluation Model (DEM) dilakukan melalui observasi, dan studi dokumen. Kuesioner kemudian dkembangkan untuk mengumpulkan data dari 13 SMK sebagai populasi dan sampel di Kabupaten Deli Serdang. Data yang dianalisis secara deskriptif masuk dalam beberapa kategori sebagai temuan penelitian ini seperti desain, instalasi, proses, produk berbagi pencapaian sangat baik dengan skor 31,53 (100%), 57,4 (88,51%), 39,64 (87,52%), dan 43,87 (89,22%) masing-masing. Skor keseluruhan termasuk kategori sangat baik dengan rata-rata skor yang diperoleh 172,44 (91,32%). Ujian sertifikasi kompetensi di Kabupaten Deli Serdang membutuhkan peningkatan yang lebih maksimal selain pencapaiannya yang telah ada saat ini. Oleh karena itu, diperlukan kerjasama yang baik dari semua pihak, seperti penyelenggara ujian nasional tingkat provinsi, sekolah, lembaga mitra, pengawas, orang tua/masyarakat dan siswa sehingga dapat mengatasi kesenjangan sehingga hasil uji sertifikasi kompetensi semakin baik.

**Kata kunci:**model evaluasi diskrepansi, uji sertifikasi kompetensi, sekolah menengah kejuruan

## *Abstract*

*Certification Competency test is one of the requirements of VHS graduates and the gap between theory and phenomenon in this test evaluation is rarely carried out. The objective of this study is to evaluate the implementation of Certification Competency Test of VHS in Deli Serdang Regency.A thorough evaluative method with Discrepancy Evaluation Model (DEM) was implemented through observation, and document study. Then, a questionnaire was developed to collect the data from 13 VHS as the population and sample in Deli Serdang Regency. The data analysed descriptively fell into some categories as the finding of this research such as design, installation, process, product shared very good achievement with score 31.53 (100%), 57.4 (88.51%), 39.64 (87.52%), and 43.87 (89.22%) respectively. The overall score denoted very good category with average gained score 172.44 (91.32%). In conclusion, the certification competency exam in Deli Serdang Regency requires more maximum improvement despite the recent achievement. Good cooperation is needed from all parties, such as the provincial level national exam implementers, schools, partner institutions, supervisors, parents/community and students so as to fulfill the gap so that the certification competency test results will be even better.*

***Keywords:****discrepancy evaluation model, certification competency test, vocational high school*

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## 1. INTRODUCTION

The work market in the twenty-first century has become extremely competitive and demanding, with relevant and high-quality skills being the primary requirement for graduates seeking profitable employment (NGU & Teneng, 2020; Bridgstock, Grant-Iramu, & McAlpine, 2019). Graduates who work in their fields after graduation and are satisfied with their jobs contribute more to the country's economic progress (Briede & Drelinga, 2020; Lavelle, 2021; Indrawati & Kuncoro, 2021; Minaya & Scott-Clayton, 2022). The demand for qualified graduates is being driven by disruptive technology, rising global markets, and uncertain labour requirements (Ferns, Dawson, & Howitt, 2019; Green & Henseke, 2021; Mok, Xiong, & Ye, 2021; Broo, Kaynak, & Sait, 2022). This demand is usually fulfilled by Vocational High School (VHS) which are educational institutions that strive to prepare graduates who are ready to work by emphasizing their skills and knowledge based on their areas of specialization. The vocational school setting is unique in that it brings together people from various walks of life. From elementary to post-graduate, the nature of these social interactions varies by educational levels and educational systems (Daryanto, Sagala, & Badiran, 2015; Barrot, Llenares, & Del Rosario, 2021; Naidu, 2021). However, in certain nations, vocational schools are used to identify students of lower socioeconomic standing (Daryanto, 2014; Schels & Abraham, 2021; Bray, Banks, Devitt, & Ní Chorcora, 2021). Despite the number lower-economy-status-of students attending this school, the Central Statistics Agency (BPS) reported that in August 2021, the majority of unemployed people in Indonesia were dominated to 11.13% or 9.77 million by the graduates from VHS (Statistik, 2021). In short, in spite of the needs of job to overcome this graduates' income issue, it is demanded that the improvement of VHS be increased.

The revitalization of VHS under President's Instruction No. 68/2022 is intended to improve the quality of Indonesian employees, who are still statistically developing below the level of the majority

of basic education levels (Baitullah && Wagiran, 2019; Dahliah & Nur, 2021; Bakti & Hartono, 2022; Sutarto, Wardaningsih, & Putri, 2022). As a result, vocational education must remain a part of current workforce development. The creation of a marketable workforce should be achieved through vocational education that is based on the needs of global industry and increases graduate competence (Rahmah & Muslim, 2019; Ismail, Chik, & Hemdi, 2021). Competency certification is a deliberate step toward improving the quality of VHS graduates which is listed in the Regulation of Ministry of Education and Culture No. 34/2018 about National Education Standard of High School/Vocational School (Rosyid, 2020). Nondegree credentials such as, certificates, licenses, or industry certifications other than an associate or bachelor's degree are worth more to workers who have them, according to labour market data (Bishop, 2019; Hendricks, Myran, Owings, Katsioloudis, & Kaplan, 2021).

In terms of competency, the researcher discovered an apparent theoretical gap in previous study. The idea on competency is a little out of date, and current investigations reflect this theoretical void. Some of the previous theory appears to be significant and deserving of mention. However, a competency and theoretical development inquiry is necessary (Björnavold & Tissot, 2000). The absence of external conditions in this theory has a significant impact on popular understanding (Straka, 2003b) and therefore a research of these concerns is necessary. Furthermore, in order to create a stronger theoretical foundation for projects, earlier theoretical models must incorporate current research in competency certification and associated domains. The prior theory focuses mostly on internal and actual circumstances. It excludes new paradigms arising from external circumstances.

**Comment [w2]:** There needs to be a clearer description of the existence of theoretical gaps related to the competencies referred to in this study in accordance with the research topic

The certification competency test is an award for competence related to qualifications of 2 (two) or 3 (three) levels at The Indonesian Qualification Framework (IQF), administered at the end of the study period by a Professional Certification Institute or accredited education unit working with business/industrial partners, and taking into account passport skills and/or portfolio (Kuntoro, Sudana, & Anis, 2019). Varied cohorts of young people have different 'bottom up' experiences and conditions, which must be taken into account in policy responses (McDonald, Grant-Smith, Moore, & Marston, 2020). According to a case study of the finest VHS a certain proficiency, these VHS are unlikely to be ready for the ASEAN Economic Community (AEC). Some literature reported that the link and match program is very helpful in establishing cooperation between VHS and business/industrial sector with various approaches such as competency based training (CBT), such as the MoU program for the business and industrial world, curriculum synchronization, industrial job training, and skill certification competency test so as to link and match will be effective and benefit both parties (Maulina & Yoenanto, 2022).

This research is focused on the implementation of the certification competency test for some expertise in VHS in Deli Serdang Regency, North Sumatera, Indonesia. The evaluation model used is the discrepancy evaluation model (DEM) or often called the gap model, which was developed by Malcom Provus in 1971 (Steinmetz, 1983; Mustafa, 2021). This discrepancy evaluation model emphasizes the view that a gap exists in program implementation, namely the difference between the standards set and the actual performance or appearance of the program. In this study, the researchers used the gap model since based on the initial observations, the researcher observed that several certification competency test procedures did not meet the applicable standards such as practical facilities and infrastructure, requirements for examiners, verification, assessment systems, assessment standards and others. Apart from this, the discrepancy model or this gap model is very suitable for use in the certification competency test implementation program so that the gaps encountered can be information for those interested in improving certification competency test implementation in the future. Very little research has been carried out on competency certification test to properly evaluation the problem. This study intends to provide a new inquiry on management evaluation practices addressing the gaps competency certification test. The study investigates four aspects i.e. design, installation, process, and output.

## 2. METHOD

**Comment [w3]:** In the method section, the research subjects (population and sample) are not described, including the procedure for taking research subjects

Data collection techniques and methods was carried out through observation, questionnaires, and documentation study (Edmonds & Kennedy, 2017). Afterwards, data was analyzed using the

quantitative and qualitative method in which quantitatively, data was analyzed by a variety of applications statistical techniques for tabulating quantitative data. Data collected through a questionnaire using a 1-5 Likert's scale. Data processing was carried out by determining the mean and mean and standard deviation (SD) of the instrument so that the results of the instrument the questionnaire can be interpreted the score with 5 categories, namely Very good, Good, Fair, Not Good, and Bad as is shown in Table 1.

**Table 1. Respondents' score category**

| No. | Category | Resp. Score |
|---|---|---|
| 1 | Very good | $x \leq \mu + 1.5\ \alpha$ |
| 2 | Good | $x + \mu + 1.5\ \alpha \geq x \geq \mu + 0.5\ \alpha$ |
| 3 | Fair | $x + 0.5\ \mu > x \geq \mu - 0.5\ \alpha$ |
| 4 | Not Good | $x - 0.5\ \mu > x \geq \mu - 0.\ 5\ \alpha$ |
| 5 | Bad | $x \leq \mu - 1.5\ \alpha$ |

**Comment [w4]:** There is an error in writing the formula for the respondent's score in Table 1. In addition, there is no explanation of the quantity involved in the formula.

While the analysis of qualitative research was carried out via non-statistical analysis by finding out the proportions, percentages, and ratios. This type of analysis is often simple statistical analysis. It is further explained that to use the analysis needs to set a prior standard determined by the researcher based on the needs of a research (Cohen, Manion, & Morrison, 2018). The analysed data is adjusted to the stages of the discrepancy evaluation model and indicators, which is mentioned in Table 2.

**Table 2. Indicators of Discrepancy Evaluation Model (DEM)**

| No. | Aspect | Indicators |
|---|---|---|
| 1 | Design | input, process, output |
| 2 | Installation | program legality, program goals and objectives, program socialization, implementation procedures, verification, tools and facilities, assessors, and requirements for the business world and industry |
| 3 | Process | implementation of test, test's time allocation |
| 4 | Product | test score and certificate |

This research on program evaluation aims to provide input and benefits to parties involved in the implementation of the certification competency test in VHS such as supervisors, principals, committee, teachers of productive subjects, and partner institutions or business and industry world participants. This research was carried out on 13 (thirteen) VHS in Deli Serdang Regency from March to May 2022.

## 3. RESULT AND DISCUSSION

The data collected in the study were analysed and tabulatedat the first step. The next step is to calculate the value ofeach item of each component in order to obtain the value of the componentsevaluation to be measured as is illustrated in Table 3 below.

**Table 3. Result Analysis of DEM Aspects**

| No | VHS | Gained Average | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Design | | Installation | | Process | | Product | | Overall | |
| | | Score | % | Score | % | Score | % | Score | % | Score | % |
| 1 | SMKN 1 Tanjung Morawa | 31.52 | 100 | 58.8 | 90.19 | 39.4 | 85.73 | 44.8 | 90 | 174.52 | 91.48 |
| 2 | SMKS Nur Azizi | 31.55 | 100 | 60 | 92.06 | 42.33 | 92.39 | 47 | 95 | 180.88 | 94.86 |
| 3 | SMKS Dwitunggal | 31.54 | 100 | 59 | 90.5 | 43.25 | 94.47 | 45.5 | 91.54 | 179.29 | 94.13 |
| 4 | SMKS Karya Jaya | 31.5 | 100 | 55.25 | 84.64 | 37.57 | 81.98 | 41.75 | 84 | 166.07 | 87.66 |

| No | VHS | Gained Average | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Design | | Installation | | Process | | Product | | Overall | |
| | | Score | % | Score | % | Score | % | Score | % | Score | % |
| 5 | SMKS Methodist | 31.51 | 100 | 58 | 89.39 | 38.6 | 84.93 | 44 | 89.2 | 172.11 | 90.88 |
| 6 | SMKS Nurul Amaliyah | 31.52 | 100 | 59.2 | 91.26 | 41.53 | 91.59 | 46.2 | 94.2 | 178.45 | 94.26 |
| 7 | SMKS Harapan Bangsa | 31.55 | 100 | 58.2 | 89.7 | 42.45 | 93.67 | 44.7 | 90.74 | 176.9 | 93.53 |
| 8 | SMKS Wira Jaya | 31.57 | 100 | 54.45 | 83.84 | 36.77 | 81.18 | 40.95 | 83.2 | 163.74 | 87.06 |
| 9 | SMKS Gema Bukit Barisan | 31.56 | 100 | 57.55 | 88.94 | 38.15 | 84.48 | 43.55 | 88.75 | 170.81 | 90.54 |
| 10 | SMKS Sumatera | 31.53 | 100 | 58.75 | 90.81 | 41.08 | 91.14 | 45.75 | 93.75 | 177.11 | 93.93 |
| 11 | SMKS Skylandsea | 31.52 | 100 | 57.75 | 89.25 | 42 | 93.22 | 44.25 | 90.29 | 175.52 | 93.19 |
| 12 | SMKS Einstein School | 31.51 | 100 | 54 | 83.39 | 36.32 | 80.73 | 40.5 | 82.75 | 162.33 | 86.72 |
| 13 | SMKS Tamora | 31.51 | 100 | 55.3 | 86.69 | 35.9 | 82.23 | 41.3 | 86.5 | 164.01 | 88.86 |
| | VHS in Deli Serdang Regency | 31.53 | 100 | 57.4 | 88.51 | 39.64 | 87.52 | 43.87 | 89.22 | 172.44 | 91.32 |

**Design Aspect**

The program design stage is the initial stage of the discrepancy evaluation model. The design stage of this program is the design of activities or work programs, a program will be implemented if there is already a design and there are standards for implementation. The indicators that are evaluated at the design stage are the presence or absence of input, process and output elements. If this component is available, the new program is worth running, meaning that the evaluation program design provides an overview of whether the runningmeets thedetermined standards. Based on the evaluation design criteria above, the certification competency test has complied with the criteria because it has elements of input, process and output.

**Installation Aspect**

Based on the evaluation by observation, the results of the program installation component consist of 8 aspects, namely program legality, program goals and objectives, program socialization, implementation procedures, verification, tools and facilities, assessors, and partnership requirements for the business world and industry was in the good category with a percentage (88.51%). Despite the fulfilment of 8 aspects of the evaluation of the program installation according to the standard or meeting the criteria, there were several criteria from the 8 aspects that were not appropriate. The unmet criteria include minimum socialization to parents, this activity coincided with other activities related to final year examination.The next is about verification. The verification should be carried out by a verification team that involvedpartners form business and industry. In fact, verification did not participate the partners due to several things such as cost, time and relevant competence. However, the certification competency testwas executed due to several considerations and regional policies.

**Process Aspect**

Evaluation on the components or stages of the program process consists of 2 aspects, namely the UKK implementation process and the time allocation. Based on the results of the evaluation by observation, the overall category is good with a percentage (87.52%). In spite of this category, there were still gaps or criteria that have not been fulfilled. Some of the criteria that have not been implemented properly include the readiness of examinees in carrying out the exam like tools, facilities, and materials based on the functions and procedures as well as using work safety equipment while other gaps are found in examiners such as in the examiners did not meet the criteria. However, the

process run as it was so that the certification competency test could produce the expected product and continued to the next stage.

**Product Aspect**

The certification competency test program product consists of 2 aspects, namely score of test and certificates. Based on the observations, the overall product of the certification competency test program is in the good category with a percentage (89.22%). However, the implementation of certification competency test program, needs improvement in the future. The criteria that resulted a gap was to the product, but most of the products produced by participants could not function properly with the competence of expertise required by the industry sector. The test still follows a lot of remedial to achieve the minimum score criteria, which is 7.0. While the certificate met the criteria, namely for VHS carrying out certification competency test, the certificate is issued by the Professional Certification Institute. Based on the results of document evaluation, the certificates have fulfilled the stipulated criteria.

## Discussion

Certainly, it is not easy in the procurement and will require substantial costs because the assessment centres are good workplaces or workplace simulations under industry environmental standards for conducting competency tests by competency certification agencies(Budiyanto & Suyanto, 2020). Based on the finding, certification competency test implementation was not adequate enough for employability. Industries and schools provide students' vocational training under supervision of expert in their course area in order to enrich the level of trainees' acquisition of employability skills.

Participants in a research reported that the evaluation indicated the new employees lack employability skills, a higher order of thinking, metacognition, mature nature of competency, social mobility, motivation, and positive self-efficacy(Gauthier T. , 2020; Gekara & Snell, 2018; Gauthier T. , 2020; Santosa & Dwi, 2019).Participating in a youth apprenticeship program while concentrating in a secondary CTE program of study may lead to a higher rate of continuing into one's area of concentration after high school than students earningemployability skills certificate(Mindham & Schultz, 2019). Moreover, work competency developed through work experiences, trainings, and development can help students succeed in the workplace, and having a career prospect increases the possibility for them to secure permanent positions on their future employment (Icban, 2019). This research therefore contradicts the evaluation model that does not include the employability skills which are discipline and integrity in the world of work and business.

The results of the previous findings from both employer and employee data revealed that the previous work experience, computer skills, professional certifications and high grade point average have significant impact on hiring and recruitment in the skilfull jobs(Murrar, Batra, Paz, Asfour, & Balmakhtar, 2021; de Lucas, Pieper, & Arco-Tirado, 2021).Learner capabilities are traditionally what people call 'soft skills' or 'transferable skills. They are the skills or capabilities that people use regardless of the competencies that they use in their job(Paterson, 2019). Previous research indicated that the evaluation model focused on the key aspects of competency, industries and schoolswhich could improve the students learning process and producing prospective graduates with abilities to allow them to interact with job duties in the organization of workplace(Kamaliah, Roslan, Bakar, & Ghiami, 2018; Boylan, Coldwell, Maxwell, & Jordan, 2018). However, this phenomenon is not supported with the existence of soft skills requirements (Green-Weir, Anderson, & Carpenter, 2021). The organization of workplace does not limit to hard skills performance, but also soft skills. Soft skills are the invisible abilities necessary for success, for example ability to work together, integrity and others. Soft skills are used to describe abilities that are invisible from a person to thrive in work.

The outputs of the VHS are the input of the industries. Therefore, VHS should have closed linkages with the world of work to facilitate support of industry for the enhancement of practical training through placement of trainees on work experience attachment and exchange programs for the instructional staff (Singh & Tolessa, 2019). These non-academic abilities includeinterpersonal skills,computer and information technology skills, entrepreneurial skills, communication skills,

**Comment [R5]:** This discussion does not include a comparison of these findings with previous findings. Please explain how the results of this study compare with previous findings.
Then, the writer has not explained the novelty of his findings. Please add to the last paragraph.

**Comment [w6]:** There is no clear discussion related to the results of the research when it is related to the aspects that are the focus of the research (Aspects of Design, Installation, Process, and Product)

thinking skills and management skills (Sangadji & Sangadji, 2019). Nowadays VHS provide certification to certify competency of its graduate in order to enhance their value to deliver work correspond to their field. In spite of this, the effectiveness of the competency certification to decrease unemployment needs to be confirmed (Indrarini, Anwar, & Canggih, 2019). However, these researches had not revealed the partnership of parents and other involved parties to carry out the test and therefore, this research fulfill the gap between the theories and the phenomenon of Discrepancy Evaluation Model through the revelation of the necessity of the other factors such as soft skills and parents' involvement.

## 4. CONCLUSION

**Comment [R7]:** Try not to repeat the delivery of previous results. Emphasize the meaning of the findings.

The Discrepancy Evaluation Model (DEM) in this study revealed the importance of participation of many parties such as the industry and the parents of the students in the certification competency test of VHS in Deli Serdang Regency, North Sumatera Province. The final result of this research suggested a management evaluation procedures that addresses competency certification test gaps in which a good collaborationfrom the involved parties, such as the provincial level national exam implementers, schools, partner institutions, supervisors, parents/community and students/test participants in order to fulfil the gap so that the certification competency test results will be even better. This is very beneficial for students who is expected to join the workforce in the industrial world.The Discrepancy Evaluation Model (DEM) invented by Provus used in this study had managed to revealing the issues found in the design, installation, process and product aspects. The upcoming study is suggested to include the involvement of soft skills aspects and partnership from industry and parents.

## 5. REFERENCES

**Comment [R8]:** If possible, add articles from reputable journals.


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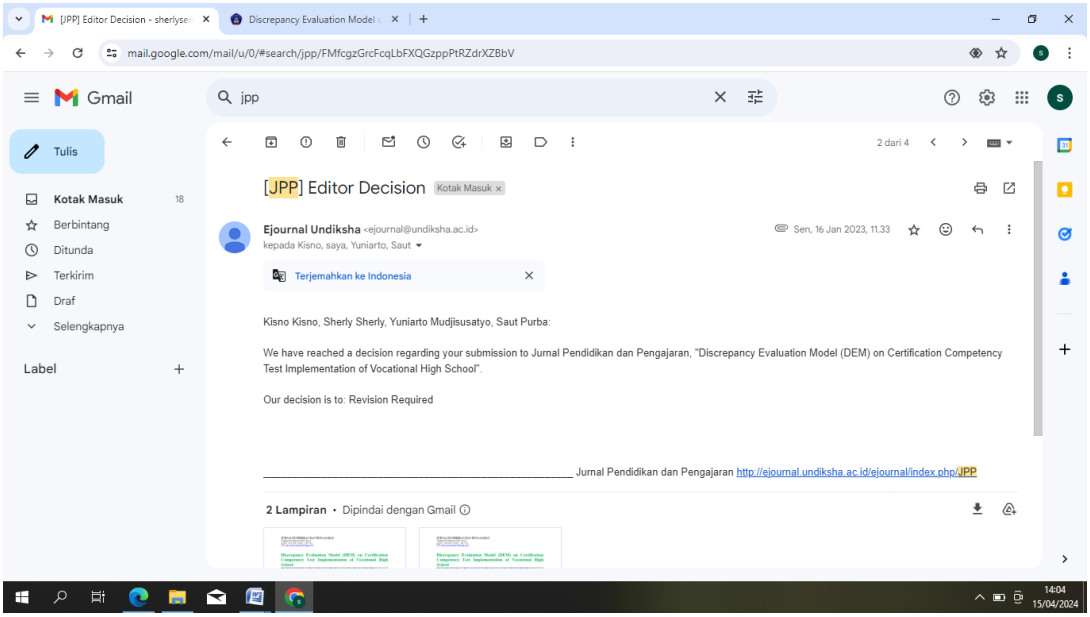


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# Discrepancy Evaluation Model (DEM) on Certification Competency Test Implementation of Vocational High School

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## Abstrak

Uji Sertifikasi Kompetensi merupakan salah satu syarat utama bagi kelulusan siswa SMK dan kesenjangan teori dan fenomena dalam evaluasi Uji Sertifikasi Kompetensi masih jarang dilakukan. Penelitian ini bertujuan untuk mengevaluasi pelaksanaan uji sertifikasi kompetensi SMK di Kabupaten Deli Serdang. Metode evaluasi menyeluruh dengan Discrepancy Evaluation Model (DEM) dilakukan melalui observasi, dan studi dokumen. Kuesioner kemudian dkembangkan untuk

mengumpulkan data dari 13 SMK sebagai populasi dan sampel di Kabupaten Deli Serdang. Data yang dianalisis secara deskriptif masuk dalam beberapa kategori sebagai temuan penelitian ini seperti desain, instalasi, proses, produk berbagi pencapaian sangat baik dengan skor 31,53 (100%), 57,4 (88,51%), 39,64 (87,52%), dan 43,87 (89,22%) masing-masing. Skor keseluruhan termasuk kategori sangat baik dengan rata-rata skor yang diperoleh 172,44 (91,32%). Ujian sertifikasi kompetensi di Kabupaten Deli Serdang membutuhkan peningkatan yang lebih maksimal selain pencapaiannya yang telah ada saat ini. Oleh karena itu, diperlukan kerjasama yang baik dari semua pihak, seperti penyelenggara ujian nasional tingkat provinsi, sekolah, lembaga mitra, pengawas, orang tua/masyarakat dan siswa sehingga dapat mengatasi kesenjangan sehingga hasil uji sertifikasi kompetensi semakin baik.

**Kata kunci:**model evaluasi diskrepansi, uji sertifikasi kompetensi, sekolah menengah kejuruan

## *Abstract*

*Certification Competency test is one of the requirements of VHS graduates and the gap between theory and phenomenon in this test evaluation is rarely carried out. The objective of this study is to evaluate the implementation of Certification Competency Test of VHS in Deli Serdang Regency.A thorough evaluative method with Discrepancy Evaluation Model (DEM) was implemented through observation, and document study. Then, a questionnaire was developed to collect the data from 13 VHS as the population and sample in Deli Serdang Regency. The data analysed descriptively fell into some categories as the finding of this research such as design, installation, process, product shared very good achievement with score 31.53 (100%), 57.4 (88.51%), 39.64 (87.52%), and 43.87 (89.22%) respectively. The overall score denoted very good category with average gained score 172.44 (91.32%). In conclusion, the certification competency exam in Deli Serdang Regency requires more maximum improvement despite the recent achievement. Good cooperation is needed from all parties, such as the provincial level national exam implementers, schools, partner institutions, supervisors, parents/community and students so as to fulfill the gap so that the certification competency test results will be even better.*

***Keywords:****discrepancy evaluation model, certification competency test, vocational high school*

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## 1. INTRODUCTION

The work market in the twenty-first century has become extremely competitive and demanding, with relevant and high-quality skills being the primary requirement for graduates seeking profitable employment (NGU & Teneng, 2020; Bridgstock, Grant-Iramu, & McAlpine, 2019). Graduates who work in their fields after graduation and are satisfied with their jobs contribute more to the country's economic progress (Briede & Drelinga, 2020; Lavelle, 2021; Indrawati & Kuncoro, 2021; Minaya & Scott-Clayton, 2022). The demand for qualified graduates is being driven by disruptive technology, rising global markets, and uncertain labour requirements (Ferns, Dawson, & Howitt, 2019; Green & Henseke, 2021; Mok, Xiong, & Ye, 2021; Broo, Kaynak, & Sait, 2022). This demand is usually fulfilled by Vocational High School (VHS) which are educational institutions that strive to prepare graduates who are ready to work by emphasizing their skills and knowledge based on their areas of specialization. The vocational school setting is unique in that it brings together people from various walks of life. From elementary to post-graduate, the nature of these social interactions varies by educational levels and educational systems (Daryanto, Sagala, & Badiran, 2015; Barrot, Llenares, & Del Rosario, 2021; Naidu, 2021). However, in certain nations, vocational schools are used to identify students of lower socioeconomic standing (Daryanto, 2014; Schels & Abraham, 2021; Bray, Banks, Devitt, & Ní Chorcora, 2021). Despite the number lower-economy-status-of students attending this school, the Central Statistics Agency (BPS) reported that in August 2021, the majority of unemployed people in Indonesia were dominated to 11.13% or 9.77 million by the graduates from VHS (Statistik, 2021). In short, in spite of the needs of job to overcome this graduates' income issue, it is demanded that the improvement of VHS be increased.

The revitalization of VHS under President's Instruction No. 68/2022 is intended to improve the quality of Indonesian employees, who are still statistically developing below the level of the majority of basic education levels (Baitullah && Wagiran, 2019; Dahliah & Nur, 2021; Bakti & Hartono, 2022;

Sutarto, Wardaningsih, & Putri, 2022). As a result, vocational education must remain a part of current workforce development. The creation of a marketable workforce should be achieved through vocational education that is based on the needs of global industry and increases graduate competence (Rahmah & Muslim, 2019; Ismail, Chik, & Hemdi, 2021). Competency certification is a deliberate step toward improving the quality of VHS graduates which is listed in the Regulation of Ministry of Education and Culture No. 34/2018 about National Education Standard of High School/Vocational School (Rosyid, 2020). Nondegree credentials such as, certificates, licenses, or industry certifications other than an associate or bachelor's degree are worth more to workers who have them, according to labour market data (Bishop, 2019; Hendricks, Myran, Owings, Katsioloudis, & Kaplan, 2021).

In terms of competency, the researcher discovered an apparent theoretical gap in previous study. The idea on competency is a little out of date, and current investigations reflect this theoretical void. Some of the previous theory appears to be significant and deserving of mention. However, a competency and theoretical development inquiry is necessary (Björnavold & Tissot, 2000). The absence of external conditions in this theory has a significant impact on popular understanding (Straka, 2003b) and therefore a research of these concerns is necessary. Furthermore, in order to create a stronger theoretical foundation for projects, earlier theoretical models must incorporate current research in competency certification and associated domains. The prior theory focuses mostly on internal and actual circumstances. It excludes new paradigms arising from external circumstances.

The certification competency test is an award for competence related to qualifications of 2 (two) or 3 (three) levels at The Indonesian Qualification Framework (IQF), administered at the end of the study period by a Professional Certification Institute or accredited education unit working with business/industrial partners, and taking into account passport skills and/or portfolio (Kuntoro, Sudana, & Anis, 2019). Varied cohorts of young people have different 'bottom up' experiences and conditions, which must be taken into account in policy responses (McDonald, Grant-Smith, Moore, & Marston, 2020). According to a case study of the finest VHS a certain proficiency, these VHS are unlikely to be ready for the ASEAN Economic Community (AEC). Some literature reported that the link and match program is very helpful in establishing cooperation between VHS and business/industrial sector with various approaches such as competency based training (CBT), such as the MoU program for the business and industrial world, curriculum synchronization, industrial job training, and skill certification competency test so as to link and match will be effective and benefit both parties (Maulina & Yoenanto, 2022).

This research is focused on the implementation of the certification competency test for some expertise in VHS in Deli Serdang Regency, North Sumatera, Indonesia. The evaluation model used is the discrepancy evaluation model (DEM) or often called the gap model, which was developed by Malcom Provus in 1971 (Steinmetz, 1983; Mustafa, 2021). This discrepancy evaluation model emphasizes the view that a gap exists in program implementation, namely the difference between the standards set and the actual performance or appearance of the program. In this study, the researchers used the gap model since based on the initial observations, the researcher observed that several certification competency test procedures did not meet the applicable standards such as practical facilities and infrastructure, requirements for examiners, verification, assessment systems, assessment standards and others. Apart from this, the discrepancy model or this gap model is very suitable for use in the certification competency test implementation program so that the gaps encountered can be information for those interested in improving certification competency test implementation in the future. Very little research has been carried out on competency certification test to properly evaluation the problem. This study intends to provide a new inquiry on management evaluation practices addressing the gaps competency certification test. The study investigates four aspects i.e. design, installation, process, and output.

## 2. METHOD

Data collection techniques and methods was carried out through observation, questionnaires, and documentation study (Edmonds & Kennedy, 2017). Afterwards, data was analyzed using the quantitative and qualitative method in which quantitatively, data was analyzed by a variety of

applications statistical techniques for tabulating quantitative data. Data collected through a questionnaire using a 1-5 Likert's scale. Data processing was carried out by determining the mean and mean and standard deviation (SD) of the instrument so that the results of the instrument the questionnaire can be interpreted the score with 5 categories, namely Very good, Good, Fair, Not Good, and Bad as is shown in Table 1.

**Table 4. Respondents' score category**

| No. | Category | Resp. Score |
|---|---|---|
| 1 | Very good | $x \leq \mu + 1.5\ \alpha$ |
| 2 | Good | $x + \mu + 1.5\ \alpha \geq x \geq \mu + 0.5\ \alpha$ |
| 3 | Fair | $x + 0.5\ \mu > x \geq \mu - 0.5\ \alpha$ |
| 4 | Not Good | $x - 0.5\ \mu > x \geq \mu - 0.5\ \alpha$ |
| 5 | Bad | $x \leq \mu - 1.5\ \alpha$ |

While the analysis of qualitative research was carried out via non-statistical analysis by finding out the proportions, percentages, and ratios. This type of analysis is often simple statistical analysis. It is further explained that to use the analysis needs to set a prior standard determined by the researcher based on the needs of a research (Cohen, Manion, & Morrison, 2018). The analysed data is adjusted to the stages of the discrepancy evaluation model and indicators, which is mentioned in Table 2.

**Table 5. Indicators of Discrepancy Evaluation Model (DEM)**

| No. | Aspect | Indicators |
|---|---|---|
| 1 | Design | input, process, output |
| 2 | Installation | program legality, program goals and objectives, program socialization, implementation procedures, verification, tools and facilities, assessors, and requirements for the business world and industry |
| 3 | Process | implementation of test, test's time allocation |
| 4 | Product | test score and certificate |

This research on program evaluation aims to provide input and benefits to parties involved in the implementation of the certification competency test in VHS such as supervisors, principals, committee, teachers of productive subjects, and partner institutions or business and industry world participants. This research was carried out on 13 (thirteen) VHS in Deli Serdang Regency from March to May 2022.

## 3. RESULT AND DISCUSSION

The data collected in the study were analysed and tabulatedat the first step. The next step is to calculate the value ofeach item of each component in order to obtain the value of the componentsevaluation to be measured as is illustrated in Table 3 below.

**Table 6. Result Analysis of DEM Aspects**

| No | VHS | Gained Average | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Design | | Installation | | Process | | Product | | Overall | |
| | | Score | % | Score | % | Score | % | Score | % | Score | % |
| 1 | SMKN 1 Tanjung Morawa | 31.52 | 100 | 58.8 | 90.19 | 39.4 | 85.73 | 44.8 | 90 | 174.52 | 91.48 |
| 2 | SMKS Nur Azizi | 31.55 | 100 | 60 | 92.06 | 42.33 | 92.39 | 47 | 95 | 180.88 | 94.86 |
| 3 | SMKS Dwitunggal | 31.54 | 100 | 59 | 90.5 | 43.25 | 94.47 | 45.5 | 91.54 | 179.29 | 94.13 |
| 4 | SMKS Karya Jaya | 31.5 | 100 | 55.25 | 84.64 | 37.57 | 81.98 | 41.75 | 84 | 166.07 | 87.66 |
| 5 | SMKS Methodist | 31.51 | 100 | 58 | 89.39 | 38.6 | 84.93 | 44 | 89.2 | 172.11 | 90.88 |

| No | VHS | Gained Average | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Design | | Installation | | Process | | Product | | Overall | |
| | | Score | % | Score | % | Score | % | Score | % | Score | % |
| 6 | SMKS Nurul Amaliyah | 31.52 | 100 | 59.2 | 91.26 | 41.53 | 91.59 | 46.2 | 94.2 | 178.45 | 94.26 |
| 7 | SMKS Harapan Bangsa | 31.55 | 100 | 58.2 | 89.7 | 42.45 | 93.67 | 44.7 | 90.74 | 176.9 | 93.53 |
| 8 | SMKS Wira Jaya | 31.57 | 100 | 54.45 | 83.84 | 36.77 | 81.18 | 40.95 | 83.2 | 163.74 | 87.06 |
| 9 | SMKS Gema Bukit Barisan | 31.56 | 100 | 57.55 | 88.94 | 38.15 | 84.48 | 43.55 | 88.75 | 170.81 | 90.54 |
| 10 | SMKS Sumatera | 31.53 | 100 | 58.75 | 90.81 | 41.08 | 91.14 | 45.75 | 93.75 | 177.11 | 93.93 |
| 11 | SMKS Skylandsea | 31.52 | 100 | 57.75 | 89.25 | 42 | 93.22 | 44.25 | 90.29 | 175.52 | 93.19 |
| 12 | SMKS Einstein School | 31.51 | 100 | 54 | 83.39 | 36.32 | 80.73 | 40.5 | 82.75 | 162.33 | 86.72 |
| 13 | SMKS Tamora | 31.51 | 100 | 55.3 | 86.69 | 35.9 | 82.23 | 41.3 | 86.5 | 164.01 | 88.86 |
| | VHS in Deli Serdang Regency | 31.53 | 100 | 57.4 | 88.51 | 39.64 | 87.52 | 43.87 | 89.22 | 172.44 | 91.32 |

**Design Aspect**

The program design stage is the initial stage of the discrepancy evaluation model. The design stage of this program is the design of activities or work programs, a program will be implemented if there is already a design and there are standards for implementation. The indicators that are evaluated at the design stage are the presence or absence of input, process and output elements. If this component is available, the new program is worth running, meaning that the evaluation program design provides an overview of whether the runningmeets thedetermined standards. Based on the evaluation design criteria above, the certification competency test has complied with the criteria because it has elements of input, process and output.

**Installation Aspect**

Based on the evaluation by observation, the results of the program installation component consist of 8 aspects, namely program legality, program goals and objectives, program socialization, implementation procedures, verification, tools and facilities, assessors, and partnership requirements for the business world and industry was in the good category with a percentage (88.51%). Despite the fulfilment of 8 aspects of the evaluation of the program installation according to the standard or meeting the criteria, there were several criteria from the 8 aspects that were not appropriate. The unmet criteria include minimum socialization to parents, this activity coincided with other activities related to final year examination.The next is about verification. The verification should be carried out by a verification team that involvedpartners form business and industry. In fact, verification did not participate the partners due to several things such as cost, time and relevant competence. However, the certification competency testwas executed due to several considerations and regional policies.

**Process Aspect**

Evaluation on the components or stages of the program process consists of 2 aspects, namely the UKK implementation process and the time allocation. Based on the results of the evaluation by observation, the overall category is good with a percentage (87.52%). In spite of this category, there were still gaps or criteria that have not been fulfilled. Some of the criteria that have not been implemented properly include the readiness of examinees in carrying out the exam like tools, facilities, and materials based on the functions and procedures as well as using work safety equipment while other gaps are found in examiners such as in the examiners did not meet the criteria. However, the process run as it was so that the certification competency test could produce the expected product and continued to the next stage.

**Product Aspect**

The certification competency test program product consists of 2 aspects, namely score of test and certificates. Based on the observations, the overall product of the certification competency test program is in the good category with a percentage (89.22%). However, the implementation of certification competency test program, needs improvement in the future. The criteria that resulted a gap was to the product, but most of the products produced by participants could not function properly with the competence of expertise required by the industry sector. The test still follows a lot of remedial to achieve the minimum score criteria, which is 7.0. While the certificate met the criteria, namely for VHS carrying out certification competency test, the certificate is issued by the Professional Certification Institute. Based on the results of document evaluation, the certificates have fulfilled the stipulated criteria.

**Discussion**

**Comment [R9]:** The discussion needs to be elaborated. This discussion needs to be added implicitly, what are the results of this research? Does it answer the goal? Make arguments that lead to the concept of how the research results, give novelty emphasis to the discussion.

Certainly, it is not easy in the procurement and will require substantial costs because the assessment centres are good workplaces or workplace simulations under industry environmental standards for conducting competency tests by competency certification agencies(Budiyanto & Suyanto, 2020). Based on the finding, certification competency test implementation was not adequate enough for employability. Industries and schools provide students' vocational training under supervision of expert in their course area in order to enrich the level of trainees' acquisition of employability skills.

Participants in a research reported that the evaluation indicated the new employees lack employability skills, a higher order of thinking, metacognition, mature nature of competency, social mobility, motivation, and positive self-efficacy(Gauthier T. , 2020; Gekara & Snell, 2018; Gauthier T. , 2020; Santosa & Dwi, 2019).Participating in a youth apprenticeship program while concentrating in a secondary CTE program of study may lead to a higher rate of continuing into one's area of concentration after high school than students earningemployability skills certificate(Mindham & Schultz, 2019). Moreover, work competency developed through work experiences, trainings, and development can help students succeed in the workplace, and having a career prospect increases the possibility for them to secure permanent positions on their future employment (Icban, 2019). This research therefore contradicts the evaluation model that does not include the employability skills which are discipline and integrity in the world of work and business.

The results of the previous findings from both employer and employee data revealed that the previous work experience, computer skills, professional certifications and high grade point average have significant impact on hiring and recruitment in the skilfull jobs(Murrar, Batra, Paz, Asfour, & Balmakhtar, 2021; de Lucas, Pieper, & Arco-Tirado, 2021).Learner capabilities are traditionally what people call 'soft skills' or 'transferable skills. They are the skills or capabilities that people use regardless of the competencies that they use in their job(Paterson, 2019). Previous research indicated that the evaluation model focused on the key aspects of competency, industries and schoolswhich could improve the students learning process and producing prospective graduates with abilities to allow them to interact with job duties in the organization of workplace(Kamaliah, Roslan, Bakar, & Ghiami, 2018; Boylan, Coldwell, Maxwell, & Jordan, 2018). However, this phenomenon is not supported with the existence of soft skills requirements (Green-Weir, Anderson, & Carpenter, 2021). The organization of workplace does not limit to hard skills performance, but also soft skills. Soft skills are the invisible abilities necessary for success, for example ability to work together, integrity and others. Soft skills are used to describe abilities that are invisible from a person to thrive in work.

The outputs of the VHS are the input of the industries. Therefore, VHS should have closed linkages with the world of work to facilitate support of industry for the enhancement of practical training through placement of trainees on work experience attachment and exchange programs for the instructional staff (Singh & Tolessa, 2019). These non-academic abilities includeinterpersonal skills,computer and information technology skills, entrepreneurial skills, communication skills, thinking skills and management skills (Sangadji & Sangadji, 2019). Nowadays VHS provide certification to certify competency of its graduate in order to enhance their value to deliver work correspond to their field. In spite of this, the effectiveness of the competency certification to decrease unemployment needs to be confirmed (Indrarini, Anwar, & Canggih, 2019). However, these researches

had not revealed the partnership of parents and other involved parties to carry out the test and therefore, this research fulfill the gap between the theories and the phenomenon of Discrepancy Evaluation Model through the revelation of the necessity of the other factors such as soft skills and parents' involvement.

## 4. CONCLUSION

The Discrepancy Evaluation Model (DEM) in this study revealed the importance of participation of many parties such as the industry and the parents of the students in the certification competency test of VHS in Deli Serdang Regency, North Sumatera Province. The final result of this research suggested a management evaluation procedures that addresses competency certification test gaps in which a good collaborationfrom the involved parties, such as the provincial level national exam implementers, schools, partner institutions, supervisors, parents/community and students/test participants in order to fulfil the gap so that the certification competency test results will be even better. This is very beneficial for students who is expected to join the workforce in the industrial world.The Discrepancy Evaluation Model (DEM) invented by Provus used in this study had managed to revealing the issues found in the design, installation, process and product aspects. The upcoming study is suggested to include the involvement of soft skills aspects and partnership from industry and parents.

**Comment [R10]:** Please give an emphasize at the meaning and impact of the research findings,without numbering, symbols, or any cite sources.

## 5. REFERENCES

**Comment [R11]:** Use 90% of research articles published in indexed journals. Add at least 30 reputable journals published in the last 8 years, and use Mendeley. Adjust the reference writing procedure by paying attention to GFA (APA style 7 edition). Try to include the DOI or the article url.


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**Bukti konfirmasi submit revisi, respon kepada reviewer, dan artikel yang diresubmit (19 Januari 2023)**

1) **Comments to the Author**

The urgency of the research needs to be added at the beginning of the abstract.

**Response:**

In the early part of the abstract, the importance of conducting this research is outlined, namely certification competency test is one of the requirements of VHS graduates and the gap between theory and phenomenon in this test evaluation is rarely carried out.

2) **Comments to the Author**

There needs to be a clearer description of the existence of theoretical gaps related to the competencies referred to in this study in accordance with the research topic.

**Response:**

We have corrected the notes given by reviewers in the introduction section. We have marked the results of the improvements in turquoise in the body of the text.

In terms of competency, the researcher discovered an apparent theoretical gap in previous study in which the prior theory focuses mostly on internal and actual circumstances. It excludes new paradigms arising from external circumstances. The idea on competency is a little out of date, and current investigations reflect this theoretical void. Some of the previous theory appears to be significant and deserving of mention. However, a competency and theoretical development inquiry is necessary (Björnavold & Tissot, 2000). The absence of external conditions in this theory has a significant impact on popular understanding (Straka, 2003b) and therefore a research of these concerns is necessary. Furthermore, in order to create a stronger theoretical foundation for projects, earlier theoretical models must incorporate current research in competency certification and associated domains.

3) **Comments to the Author**

In the method section, the research subjects (population and sample) are not described, including the procedure for taking research subjects.

**Response:**

We have corrected the notes given by reviewers in the methods section. We have marked the results of the improvements in turquoise in the body of the text.

This research on program evaluation aims to provide input and benefits to parties involved in the implementation of the certification competency test in VHS such as supervisors, principals, committee, teachers of productive subjects, and partner institutions or business and industry world participants. This research was carried out on 13 (thirteen) VHS in Deli Serdang Regency from March to May 2022. The data collection techniques and methods were carried out through observation, questionnaires, and documentation study (Edmonds & Kennedy, 2017). Afterwards, data was analyzed using the quantitative and qualitative method in which quantitatively, data was analyzed by a variety of applications statistical techniques for tabulating quantitative data. Data collected through a questionnaire using a 1-5 Likert's scale. Data processing was carried out by determining the mean and mean and standard deviation (SD) of the instrument so that the results of the instrument the questionnaire can be interpreted the score with 5 categories, namely Very good, Good, Fair, Not Good, and Bad as is shown in Table 1.

**4) Comments to the Author**

There is an error in writing the formula for the respondent's score in Table 1. In addition, there is no explanation of the quantity involved in the formula.

**Response:**

We have corrected the notes given by reviewers in the methods section. We have marked the results of the improvements in turquoise in the body of the text.

**Table 7. Respondents' score category**

| No. | Category | Resp. Score | | | |
|---|---|---|---|---|---|
| | | Design | Installation | Process | Product |
| 1 | Very good | $\bar{x} \geq 31$ | $\bar{x} \geq 55$ | $\bar{x} \geq 35$ | $\bar{x} \geq 40$ |
| 2 | Good | $31 > \bar{x} \geq 25$ | $55 > \bar{x} \geq 47$ | $35 > \bar{x} \geq 29$ | $40 > \bar{x} \geq 36$ |
| 3 | Fair | $25 > \bar{x} \geq 19$ | $47 > \bar{x} \geq 39$ | $29 > \bar{x} \geq 23$ | $36 > \bar{x} \geq 32$ |
| 4 | Not Good | $19 > \bar{x} \geq 13$ | $39 > \bar{x} \geq 31$ | $23 > \bar{x} \geq 17$ | $32 > \bar{x} \geq 28$ |
| 5 | Bad | $\bar{x} \leq 19$ | $\bar{x} \leq 31$ | $\bar{x} \leq 17$ | $\bar{x} \leq 28$ |

**5) Comments to the Author**

This discussion does not include a comparison of these findings with previous findings. Please explain how the results of this study compare with previous findings. Then, the writer has not explained the novelty of his findings. Please add to the last paragraph. There is no clear discussion related to the results of the research when it is related to the aspects that are the focus of the research (Aspects of Design, Installation, Process, and Product).

The discussion needs to be elaborated. This discussion needs to be added implicitly, what are the results of this research? Does it answer the goal? Make arguments that lead to the concept of how the research results, give novelty emphasis to the discussion.

**Response:**

We have corrected the notes given by reviewers in the discussion section. We have marked the results of the improvements in turquoise in the body of the text.

Based on the description above, in terms of the design aspect it is very good. Implementation of student certification competency tests is an effort to improve the quality of education. The certification competency test for VHS students is absolutely carried out to measure the competency achievement of students at a certain level according to the competency skills taken during the learning period. Certification competency tests are developed based on graduate competency standards with reference to SKKNI and developments in the business/industrial world. The results of the certification competency test from students will be an indicator of achievement of graduate competency standards, while for stakeholders it will be used as information on the competencies of prospective workers. The implementation of the competency certification test still needs to be improved, namely on the indicators of technological progress that are used during the implementation of the competency test so that it can be adjusted to the existing technology in the industry today (Burhan & Arifin, 2020; Setyaningrum & Purwati, 2020).

From the results of the installation aspect, it can be seen that the certification competency test verification provided by certification institution to the schools has met the minimum requirements. This means that in the implementation of the competency test for VHS in Deli Serdang Regency, seen from the installation aspect, it was considered very good. It is necessary to pay attention to the increase in the indicators of the number and quality of competency test tools and materials in accordance with current technological advances. Productive teacher apprenticeship activities are still lacking so they still need to be improved.Certainly, it is not

easy in the procurement and will require substantial costs because the assessment centres are good workplaces or workplace simulations under industry environmental standards for conducting competency tests by competency certification agencies(Budiyanto & Suyanto, 2020). Based on the finding, certification competency test implementation was not adequate enough for employability. Industries and schools provide students' vocational training under supervision of expert in their course area in order to enrich the level of trainees' acquisition of employability skills.

The process aspect in very good category. Some indicators that need to be considered are the time allocation given to test participants so that they pay attention to the characteristics of VHS students. The assessor's commitment at the time of the test must also be maintained. The assessment must be carried out as objectively as possible when conducting the assessment. Assessors can be employed from teachers from other schools or from industry. Thus, it is imperative that an assessor be prepared as well as possible, so that the results of his work in deciding a person's competence can truly be accounted for in accordance with the terms and conditions issued by the certification competency institution. Participants in a research reported that the evaluation indicated the new employees lack employability skills, a higher order of thinking, metacognition, mature nature of competency, social mobility, motivation, and positive self-efficacy(Gauthier T. , 2020; Gekara & Snell, 2018; Gauthier T. , 2020; Santosa & Dwi, 2019). Participating in a youth apprenticeship program while concentrating in a secondary CTE program of study may lead to a higher rate of continuing into one's area of concentration after high school than students earningemployability skills certificate(Mindham & Schultz, 2019). Moreover, work competency developed through work experiences, trainings, and development can help students succeed in the workplace, and having a career prospect increases the possibility for them to secure permanent positions on their future employment (Icban, 2019). This research therefore contradicts the evaluation model that does not include the employability skills which are discipline and integrity in the world of work and business.

From the product aspect, the implementation of the certification competency test for VHS students in Deli Serdang Regency is very appropriate. Mastery of cognitive, psychomotor and affective aspects is very appropriate to student competence. Products must be adapted to the needs of the industry and current technological developments. With the implementation of the competency test, it is hoped that it will be able to produce quality graduates according to industry needs. Competency certificates issued by BNSP and signed by LSP are expected to be able to provide information on mastery of graduate competencies and gain recognition from the business and industrial world.The results of the previous findings from both employer and employee data revealed that the previous work experience, computer skills, professional certifications and high grade point average have significant impact on hiring and recruitment in the skilfull jobs(Murrar, Batra, Paz, Asfour, & Balmakhtar, 2021; de Lucas, Pieper, & Arco-Tirado, 2021).Learner capabilities are traditionally what people call 'soft skills' or 'transferable skills. They are the skills or capabilities that people use regardless of the competencies that they use in their job(Paterson, 2019). Previous research indicated that the evaluation model focused on the key aspects of competency, industries and schoolswhich could improve the students learning process and producing prospective graduates with abilities to allow them to interact with job duties in the organization of workplace(Kamaliah, Roslan, Bakar, & Ghiami, 2018; Boylan, Coldwell, Maxwell, & Jordan, 2018). However, this phenomenon is not supported with the existence of soft skills requirements (Green-Weir, Anderson, & Carpenter, 2021). The organization of workplace does not limit to hard skills performance, but also soft skills. Soft skills are the invisible abilities necessary for success, for example ability to work together, integrity and others. Soft skills are used to describe abilities that are invisible from a person to thrive in work.

The outputs of the VHS are the input of the industries. Therefore, VHS should have closed linkages with the world of work to facilitate support of industry for the enhancement of practical training through placement of trainees on work experience attachment and exchange programs for the instructional staff (Singh & Tolessa, 2019). These non-academic abilities includeinterpersonal skills,computer and information technology skills, entrepreneurial skills, communication skills, thinking skills and management skills (Sangadji & Sangadji, 2019). Nowadays VHS provide certification to certify competency of its graduate in order to enhance their value to deliver work correspond to their field. In spite of this, the effectiveness of the competency certification to decrease unemployment needs to be confirmed (Indrarini, Anwar, & Canggih, 2019). However, these researches had not revealed the partnership of parents and other involved parties to carry out the test and therefore, this

research fulfill the gap between the theories and the phenomenon of Discrepancy Evaluation Model through the revelation of the necessity of the other factors such as soft skills and parents' involvement. The end result of this study recommended management evaluation procedures that address competency certification test gaps in which a good collaboration from the involved parties, including the provincial level national exam implementers, schools, partner institutions, supervisors, parents/ community, students/ test participants.

6) **Comments to the Author**

Try not to repeat the delivery of previous results. Emphasize the meaning of the findings.

Please give an emphasize at the meaning and impact of the research findings,without numbering, symbols, or any cite sources.

**Response:**

We have corrected the notes given by reviewers in the discussion section. We have marked the results of the improvements in turquoise in the body of the text.

According to the Discrepancy Evaluation Model (DEM) used in this study, it is crucial that numerous parties, including the business community and the students' parents, participate in the VHS certification competency test in Deli Serdang Regency, North Sumatera Province. The end result of this study recommended management evaluation procedures that address competency certification test gaps in which a good collaboration from the involved parties, including the provincial level national exam implementers, schools, partner institutions, supervisors, parents/community, students/test participants, is required to fill the gap in order to improve the results of the certification competency test. For students who will soon be entering the employment in the industrial sector, this is quite advantageous.The Discrepancy Evaluation Model (DEM) in this study had managed to revealing the issues found in the design, installation, process and product aspectsIt is advised that the next studies involve soft skills components and partnership with business and parents.

7) **Comments to the Author**

If possible, add articles from reputable journals.

Use 90% of research articles published in indexed journals. Add at least 30 reputable journals published in the last 8 years, and use Mendeley. Adjust the reference writing procedure by paying attention to GFA (APA style 7 edition). Try to include the DOI or the article url.

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Dear Authors,

Based on the recommendations from reviewers, I am delighted to inform you that the following manuscript has been **ACCEPTED** for the publication in **Jurnal Pendidikan dan Pengajaran** and the manuscript will be published in **Volume 56, Issue 1, April 2023**.

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