Communication Skills and Their Relation to Transferable Skills for Vocational High School Students

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A B S T R A C T

One of the important abilities possessed by job seekers is transferable skills. The demands of the industry in fulfilling the workforce in the Industrial 4.0 era are more complex because they have to be adapted to hard skills and soft skills competencies. SMK is an important point in meeting the needs of industrial workers. The transferable skills developed are communication, cooperation, and discipline and responsibility. The aim is to analyze the development of transferable skills in productive learning at SMK and the absorption of soft skills by SMK students. This study uses a quantitative approach in which data processing is carried out using statistical methods. The type of research used in this study is the Quasi-Experimental method: Nonequivalent Control Group Designs. Researchers aim to determine the effect of the dependent variable and examine it retrospectively to establish causation, relationships, associations, and meaning. This research was conducted on students of Agriculture Vocational Schools in Central Lampung. The results of this study indicate that communication skills strongly support the transferable skills of vocational students. By improving the communication skills of SMK students, it also means helping students to be accepted in the workplace.

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1. INTRODUCTION

The world of education is currently more focused on providing work skills to students. Not only providing knowledge, providing experience and special skills that have been designed so that students can meet the demands of the world of work. Learning with teaching factories,

apprenticeships, the use of practice-based models, strategies and media have been used to facilitate increased knowledge and skills. At this time, students are required to have a lot of knowledge through direct experience(Bugg, 1934; Trilling & Fadel, 2009) This is because learning with direct experience can provide better skills to students (Vygotsky, 1986; Wertsch, 1986).

Based on an analysis of BPS data (2022) for the last eight years (2015-2022), the unemployment rate coming from SMK graduates tends to continue to dominate. The number of unemployed from SMK graduates always exceeds the number of unemployed from SMP and SD graduates or even not attending school. This is not in accordance with the purpose of the SMK. SMK graduates who should have good skills and be able to work immediately (Suroto, Perdana, & Sumargono, 2020), but the reality is the opposite.

Mastery of good skills can help students to face the world of work (Hidayat & Suroto, 2022). The better the student's skills, the better the career opportunities (Hertzman, Moreo, & Wiener, 2015) The role of transferable skills has an important position in education (Nägele & Stalder, 2017). Transferable skills include aspects of work character that are needed as a complement to competencies that must be mastered by students (Hidayat & Suroto, 2023), but this is where a new problem arises, namely the teacher has not shown optimally in the learning process regarding the implementation of transferable skills such as communication skills. Teachers focus more on developing skills for mastery of science and technology so that there is less and less attention to optimizing transferable skills.

Many studies related to transferable skills have been carried out. Transferable skills are needed in the world of work (Ana et al., 2020). Apart from being really needed in the world of work, transferable skills can also make students more productive (Wibowo & Syamwil, 2019). In addition, transferable skills can help students to win labor competition (Suroto, Susilaningsih, & Harini, 2017). However, to the best of our knowledge, research discussing communication skills in supporting the transferable skills of agricultural vocational students has never been conducted.

Communication skills are one of the components that contribute to supporting transferable skills (Green, Ashton, & Felstead, 2001; Siriwardane & Durden, 2014). Transferable skills are abilities that are useful in all industries, departments or work positions (Suroto et al., 2017). These abilities are acquired through life experience and job training, which have proven relevant and applicable in any workplace and profession (Sun, Adegbosin, Reher, Gail, & Evans, 2019). Providers of job vacancies generally prefer people who in themselves have more abilities (Helmawan, Yulianti, & Zamilah, 2022), for example, not only intelligent but also experts in IT, mastery of foreign languages, and so on. This is the problem, not all graduates have the capacity and skills required by the world of work. There is a mismatch between the quality of education and its relevance in the world of work, causing many educational products to have difficulty entering the world of work (Handayani, 2015; Rakhmawati, Surokim, & Kurniasari, 2015).

Interpersonal communication skills are absolutely owned by every student (Fatha, 2019), with good communication skills, the message to be conveyed can be well received by the other person, avoiding misunderstandings and misunderstandings. Optimization of transferable skills will shape students into workforce with good quality competencies and in accordance with industry needs to face competition. Forming vocational students to become human capital with good communication skills is not an easy thing, it requires a learning process that supports both adaptively, normatively and productively. Based on the study above, this study aims to determine the effect of providing communication skills in supporting the transferable skills of vocational students.

2. METHOD

The research approach used in this study is a quantitative approach. Reasons for taking a quantitative approach. As a research approach, it is possible to achieve real research data in the form of numbers so as to facilitate the process of analysis and interpretation using statistical calculations, which are then used to reveal students' transferable skills scores. Meanwhile, to see the effect of optimizing communication skills carried out using the Quasi-Experimentals: Nonequivalent Control Group Designs method. This design is almost the same as the pretest-posttest control group design (Diani & Syafitri, 2016), only in this design the experimental group or the control group are not randomly selected (Sugiyono, 2014). Researchers intend to get an overview of the phenomena that occur before and after receiving treatment. In this study, we wanted to measure the effect of students' transferable skills scores before and after getting the optimization of communication skills.

The research was conducted at Alam Nusantara Vocational High School, Central Lampung. The research population was students of Class XI at SMK Alam Nusantara Central Lampung for the 2021/2022 Academic Year as many as two classes with a total of 53 students. The research sample was class XI students at SMK Alam Nusantara Central Lampung, consisting of two classes of 40 students. Data collection techniques using observation, documentation, questionnaires and tests.

The steps of the analysis carried out are as follows: (1) Determine the average pretest and posttest scores; (2) Normality test using Kolmogorov-Smirnov; (3) After the normality test is carried out, homogeneity is then tested; (4) After obtaining the prerequisite data for normal and homogeneous distribution, then a hypothesis test is carried out using the t-test using SPSS software. ver. 22.0; and (5) Testing Criteria. If the value of $t_{count} > t_{table}$, then Ho is rejected and Ha is accepted. However, if $t_{count} < t_{table}$ then, Ho is accepted and Ha is rejected (Sugiyono, 2014)

3. RESULTS AND DISCUSSION

3.1 Results

This research was conducted in class XI of the Alam Nusantara Vocational High School, Central Lampung. Quasi-Experimental methods: Nonequivalent Control Group Designs were carried out in two classes, namely the experimental class and the control class. The pretest and posttest in this study produced the following data (Figure 1):
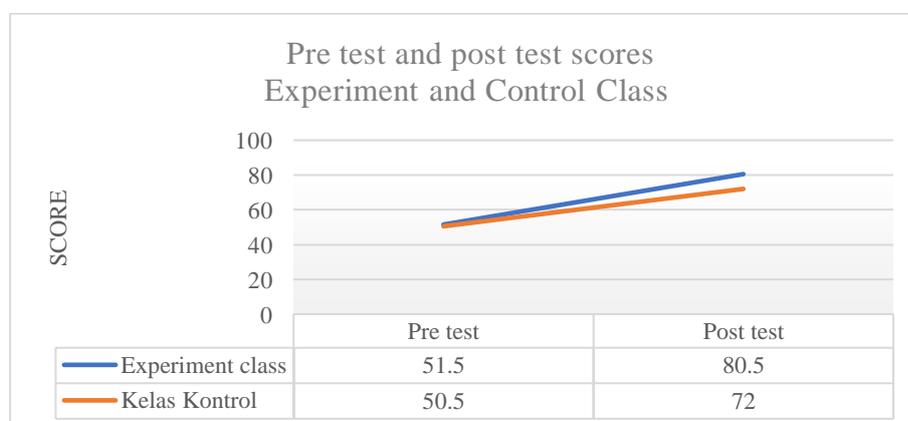

	Pre test	Post test
Experiment class	51.5	80.5
Kelas Kontrol	50.5	72

Figure 1. The pretest and posttest

The pre test is given before the implementation of treatment to find out the extent to which communication is mastered. The lowest pre-test score for the experimental group was 40 and for the control group was 30. The highest pre-test scores for the experimental group and control group were 70 and 75, respectively. After being given treatment, it was found that the lowest post-test scores for the experimental group and the control group were 60 and 60 respectively. 40. The highest post-test scores in the experimental group and the control group were 95 and 85, respectively.

Before being given treatment, the pretest value was tested for normality first. It is known that the normality test results in the experimental and control groups were 0.279 and 0.185, respectively. The significance level of each group is greater than α (Sig. > 0.05) so that it can be stated that the data comes from samples that are normally distributed. After the normality test the data is tested for homogeneity. From this test it is known that the results of the homogeneity test in the experimental group and the control group show a significance level of 0.825 or greater than α (Sig. > 0.05) so that the research data can be declared homogeneous.

After the data is known to be normal and homogeneous, it is continued with the t test. This test is used to determine whether or not there is a difference in the pre-test-post-test values of the experimental group and the pre-post-test values of the control group. The data can be seen in the following table:

Table 1. Pre-test and post-test t-test values for the experimental group and the control group

Pre Test Value				Post Test Value		
	Mean	N	Std. Error Mean	Mean	N	Std. Error Mean
Experiment	51,50	20	2,951	80,52	20	1,775
Control	50,50	20	3,308	72,02	20	1,557

The next process is the T test to find out the difference in the average value of the pretest and posttest. The following are the results of testing the difference in the average post-test scores for the experimental class and the control class.

Table 2. T-test for Equality in Pre-test and Post-test scores for the experimental group and the control group.

	t-test for Equality of Means						
Pre Test Value				Post test Value			
	t	df (dk)	Sig. (2-tailed)	t	df (dk)	Sig. (2-tailed)	t
Equal variances assumed	0,228	39	0,825	3,605	38	0,001	3,605
Equal variances not assumed	0,228	37,627	0,825	3,605	37,627	0,001	3,605

Based on the table above, it can be seen that the pre-test value of the output t-test for Equality of Means obtained a t_{count} of 0.228 with a significance level of 0.825. Meanwhile, the t_{table} value with dk = n1 + n2 − 2 (dk = 38) is 0.6812. Based on the results of these calculations, it can be stated that there is no significant difference in the average pre-test scores of the experimental group and the control group.

Furthermore, it is known that the post test value data from the output t-test for Equality of Means obtained a t_{count} of 3.605 with a significance level of 0.001. Meanwhile, the t_{table} value with dk = n1 + n2 − 2 (dk = 38) is 0.6812. Based on the results of these calculations, it can be seen that t_{count} is greater than t_{table} (3.605 > 0.6812) and the significance value is greater than α (0,001 <0.05), so it can be stated that there is a significant difference in the average post-test scores of the experimental group and control group.

3.2 Discussion

The results of statistical calculations with the t test reveal that the post value indicates that t_{count} is greater than t_{table} (3.605 > 0.6812) and the significance value is greater than α (0.001 <0.05), so it can be stated that there is a significant difference in the average post test scores of the experimental group and the control group.

According to Hasnawati, Agustini, & Koestiari (2015) stated that communication skills are the knowledge of a person who is used in verbal, nonverbal communication techniques and through communication media effectively to maintain activeness in asking questions, interacting and collaborating with others, therefore by providing them with students in communicating so that in the future SMK graduates can be ready to work and also be able to compete in the world of work.

Research related to communication skills in supporting transferable skills to students graduating from an Agricultural Vocational School in Central Lampung is an effort to increase the core competencies needed to apply basic skills and problem-solving skills to change the environment to become one of the main elements of educational policy (Azmy, 2015) The parties in the ranks of the government must also support the improvement in the quality of the SMK students. Students are said to have good transferable skills if they are skilled in communicating, solving problems, working with others, able to manage themselves, able to learn and master technology in their field of work. In accordance with these expectations, graduates of SMK students can be sure they will have competitiveness high work (Nägele & Stalder, 2017).

As explained in previous studies, transferable skills are abilities that are useful in all industries, departments or work positions (Suroto et al., 2017). Communication skills are one of the components that contribute to supporting transferable skills (Green, Ashton, & Felstead, 2001; Siriwardane & Durden, 2014). These abilities can support life experience and job training, which prove relevant and applicable in any workplace and profession (Sun et al., 2019). Providers of job vacancies generally prefer people who have more abilities in themselves (Helmawan et al., 2022).

From the phenomenon above, in an effort to minimize intellectual unemployment, students must be equipped with several competencies that can support transferable skills (Wibowo & Syamwil, 2019) such as communication skills (Suroto et al., 2017; Guffey & Loewy, 2019). For students, having transferable skills is important because these skills are really needed to complete the work in which they work (Rakhmawati et al., 2015).

4. CONCLUSION

This study shows that there is an influence of communication skills in supporting the Transferable Skills of Agricultural Vocational High School students in Central Lampung. The tests conducted by the researchers clearly show that improving communication skills also greatly contributes to improving transferable skills. After optimizing communication, students are expected to be able to master various communications with other people and the ability to work in a team. Thus SMK graduates are ready to compete in the world of work.

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REFERENCES

Ana, A., Alhapip, L., Syaom Barliana, M., Rahmawati, Y., Muktiarni, & Dwiyanti, V. (2020). Transferable skills needed in the workplace. *Journal of Engineering Education Transformations*, *34*(Special Issue), 95–101. https://doi.org/10.16920/JEET/2020/V34I0/157858

Azmy, A. (2015). Pengembangan kompetensi sumber daya manusia untuk mencapai career ready professional di Universitas Tanri Abeng. *Binus Business Review*, *6*(2), 220–232.

BPS. (2022). Tingkat Pengangguran Terbuka Berdasarkan Tingkat Pendidikan. Retrieved from bps.go.id website: https://www.bps.go.id/indicator/6/1179/1/tingkat-pengangguran-terbuka-berdasarkan-tingkat-pendidikan.html

Bugg, E. G. (1934). How We Think. enlarged enlarged (Book Review). *American Journal of Psychology*, *46*, 523.

Diani, R., & Syafitri, S. (2016). Uji Effect Size Model Pembelajaran Scramble Dengan Media Video Terhadap Hasil Belajar Fisika Peserta Didik Kelas X Man 1 Pesisir Barat. *Jurnal Ilmiah Pendidikan Fisika Al-Biruni*, *05*(2), 265–275. https://doi.org/10.24042/jpifalbiruni.v5i2.126

Fatha, P. R. Al. (2019). Efektivitas Layanan Informasi untuk Meningkatkan Komunikasi Antar Pribadi pada Siswa Kelas X Man 1 Aceh Tenggara. Al-Mursyid. *Al-Mursyid*, *4*(2), 131–140.

Green, F., Ashton, D., & Felstead, A. (2001). Estimating the determinants of supply of computing, problem-solving, communication, social, and teamworking skills. *Oxford Economic Papers*, *53*(3), 406–433. https://doi.org/10.1093/oep/53.3.406

Guffey, M. E., & Loewy, D. (2019). *Essentials of Business Communication*. Retrieved from http://books.google.com/books?id=ogWEV66kKE4C&pgis=1

Handayani, T. (2015). *Relevansi Lulusan Perguruan Tinggi Di Indonesia Dengan Kebutuhan Tenaga Kerja Di Era Global (The Relevance Of Graduates Of Higher Education In Indonesia With The Requirements Of Labor In The Global Era)*. *10*(1).

Hasnawati, Agustini, R., & Koestiari, T. (2015). pengembangan perangkat pembelajaran kooperatif tipe NHT (numbered heads together) untuk melatihkan keterampilan berkomunikasi dan meningkatkan hasil belajar pada materi larutan elektrolit dan nonelektrolit. *Pendidikan Sains Pascasarjana Universitas Negeri Surabaya*, *5*(1), 830–837.

Helmawan, G., Yulianti, H. F., & Zamilah, E. (2022). *Analisis Sistem Seleksi Dalam Usaha Pengembangan Sumber Daya Manusia Pada Hotel Summer Banjarmasin*.

Hertzman, J. L., Moreo, A. P., & Wiener, P. J. (2015). Career Planning Strategies and Skills of Hospitality Management Students. *Journal of Human Resources in Hospitality and Tourism*, *14*(4), 423–443. https://doi.org/10.1080/15332845.2015.1002071

Hidayat, N., & Suroto. (2022). Multimedia for Improving Competency of Business Presentations: A Brief Literature Review. *Proceedings of the Universitas Lampung International Conference on Social Sciences (ULICoSS 2021)*, *628*(ULICoSS 2021), 534–537. https://doi.org/10.2991/assehr.k.220102.071

Hidayat, N., & Suroto. (2023). *Using Multimedia in Business Communication Learning : Case studies to Improve Vocational Students Business Presentations*. *15*, 611–618. https://doi.org/10.35445/alishlah.v15i1.2278

Nägele, C., & Stalder, B. E. (2017). Competence and the need for transferable skills. In *Technical and Vocational Education and Training* (Vol. 23, pp. 739–753). https://doi.org/10.1007/978-3-319-41713-4_34

Rakhmawati, F. N., Surokim, & Kurniasari, N. D. (2015). Model Komunikasi Pembelajaran Transferable Skill Sebagai Upaya Meminimalisasi Pengangguran Intelektual Melalui

Bengkel Kerja Komunikasi. *Jurnal Komunikasi*, *9*(2).

Siriwardane, H. P., & Durden, C. H. (2014). The Communication Skills of Accountants: What we Know and the Gaps in our Knowledge. *Accounting Education*, *23*(2), 119–134. https://doi.org/10.1080/09639284.2013.847329

Sugiyono. (2014). *Metode penelitian Kualitatif dan Kuantitatif*. Bandung: CV. Alfabeta.

Sun, J., Adegbosin, A. E., Reher, V., Gail, R., & Evans, J. (2019). Validity and reliability of a self-assessment scale for Dental and Oral Health student's perception of transferable skills in Australia. *European Journal of Dental Education*, *23*(2).

Suroto, Perdana, Y., & Sumargono. (2020). Character and design of education learning competence business presentation of vocational school students. *ACM International Conference Proceeding Series*, 1–3. https://doi.org/10.1145/3452144.3453775

Suroto, Susilaningsih, & Harini. (2017). Toward Successful Career of Vocational Education Students through Improving Business Communication Skills. *International Conference on Teacher Training and Education 2017 (ICTTE 2017)*, *158*(Ictte), 730–735. Surakarta: Atlantis Press. https://doi.org/https://doi.org/10.2991/ictte-17.2017.107

Trilling, B., & Fadel, C. (2009). *21st Century Skills, Enhanced Edition: Learning for Life in Our Times*.

Vygotsky, L. S. (1986). *Thought and Languange*. MIT Press.

Wertsch, J. V. (1986). *Culture, communication, and cognition: Vygotskian perspectives*. CUP Archive.

Wibowo, Y. E., & Syamwil, R. (2019). Pengembangan Transferable Skills dalam Pembelajaran Produktif Sekolah Menengah Kejuruan di Era Industri 4.0. *Jurnal Dinamika Vokasional Teknik Mesin*, *4*(2), 117–128. https://doi.org/10.21831/dinamika.v4i2.27395