Strategies for Improving The Quality of Graduates Through Productive

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Abstract. This study aims to describe the implementation of productive subject learning to improve the quality of graduates in the competence of DPIB expertise of SMK Negeri 1 Adiwerna. This type of research is descriptive research with a qualitative approach. Data collection uses interviews, questionnaires, observations, and documentation. The data analysis technique uses descriptive analysis of percentages. The results of this study show that the quality management of graduation at SMK Negeri 1 Adiwerna is carried out by improving the learning process according to the demands of the curriculum, the function of school management, learning facilities, the quality of education personnel, the quality of education personnel, the welfare of teachers and employees as well as the needs of students, improving the quality of school management in a structured manner, adequate learning facilities, improving the quality of education personnel, improving the welfare of teachers and employees as well as the needs of students, improving the quality of quality students, creating community support for all activities in schools, and improving character and literacy education in schools. Then the graduation rate is 100%, the competency test results of competent students are 100%, the absorption of graduates at IDUKA in 2019 is 83%, in 2020 it is 60%, in 2021 it is 67%. The absorption of graduates experienced fluctuations in the decline in 2020 due to the conditions of the Covid-19 Pandemic but in 2021 it increased by 7%.

Keywords: Strategy, Quality Of Graduates, Productive Subjects.

1. Introduction

To develop human resources to be able to follow the modernization of the times, of course, it is more effective through education both formal and non-formal so that a massive and controlled system will be formed in accordance with applicable regulations. Education as one of the tools in human resource management has the aim of developing the potential of students to become human beings who have faith and piety in God Almighty, have a noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens (Law No. 20 of 2003).

Efforts to improve the quality of Human Resources (HR) are always carried out by the government with various innovations in education and training programs. One of them is carried out through Vocational High Schools (SMK) both public and private. SMK as one of the educational institutions to produce graduates who can be absorbed by Industry, the Business World and the World of Work (IDUKA). The high competition to enter IDUKA is a tough challenge for SMK, therefore the SMK curriculum must be mixed between theory and practice which is applicable, with the hope that SMK graduates have competencies that are in accordance

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with the needs of the world of work and numbers The absorption of SMK graduates in IDUKA has increased so that it can reduce the unemployment rate[2].

Various efforts to improve the quality of VOCATIONAL SCHOOLS have been stated in Presidential Instruction Number 9 of 2016 concerning the Revitalization of VOCATIONAL SCHOOLS to Improve the Quality and Competitiveness of Indonesian Human Resources. The efforts in question include making a roadmap for the development of vocational schools, developing and aligning the curriculum. In addition, innovations in the fulfillment and improvement of the professionalism of teachers and educators, school cooperation with the business world and industry and universities, increasing access to graduate certification and SMK accreditation, as well as the establishment of smk development working groups[3]).

Referring to data from the Central Statistics Agency, in 2017 the Open Unemployment Rate (TPT) for Vocational High Schools (SMK) dominated among other levels of education, namely 11.41%. Even though the TPT for high school graduates is only 7,955 [4]. Furthermore, the unemployment rate of SMK graduates in Central Java province is 13.20% (BPS Prov. Central Java 2020) then for the open unemployment rate of SMK graduates in Tegal Regency as many as 71,346 people with a composition of 25.17% are SMK graduates and 17.12% are college graduates (Radar Tegal.com 2021). The number of students in 2019/2020 was 49,379 high school and vocational high school students as many as 60,805 students. Vocational High School (SMK) graduates are recorded the highest among graduates from other levels of education. The alleged high unemployment rate of SMK graduates is caused by four things: 1) Terjadi oversupply, namely that there are more smk graduates of certain majors than in other majors; 2) Jaffairs at SMK are not in accordance with the needs of the industry which: 3) The qualityof graduates who are not in accordance with industry standards, and 4) Usia graduates who are on average only 17 years old, so they have to wait another 1 year to work[6]

The main obstacle to the unemployment rate is that the number of vocational schools and the number of industries is currently not balanced , but the border on the number of teachers and the competence of teachers is also alleged to be the cause of the problem. Guru who do not master the competence in their field will eventually produce quality graduates who have uncompetitive competitiveness. The qualifications of personnel and parties involved in the implementation of education determine the level of success, therefore quality human resources (personnel) are needed in accordance with the needs of the field. Quality resources will encourage economic development so that the community will be more prosperous[7].

The learning process at SMK there is a learning of productive subjects (productive programs). This learning contains a set of subjects (training) which specifically aims to equip students to have productive competencies through practical learning in schools and / or in the business / industrial world, in accordance with the Indonesian National Work Competency Standards (SKKNI). The strategic position of learning the productive program of SMK is basically a bench mark which should be a reference for quality in the implementation of education in SMK, but nevertheless in its efficacy it has not been utilized optimally [8]. Productive program learning at SMK is still more oriented towards debriefing and achieving hard competence, namely technical competencies/skills according to work competency standards (SKKNI).

Learning from the large number of SMK graduates who are not absorbed in employment if it is associated with limited employment, while the number of graduates increases sharply every year, the development of mental attitudes or practices of SMK graduates has strategic value. This is because character development means that the implementation of education at SMK is not only focused on preparing graduates to become business / industrial workers, but also focuses on building the character of graduates[8].

The need for character development is actually in line with the results of research at Harvard University in the United States, which states that it turns out that a person's success is not determined solely by technical knowledge and skills (hard skills) alone, but rather by the ability to manage themselves and others (soft skills). This research reveals that a person's success is only determined by about 20% by hard skills and the remaining 80% by soft skills (Samsudi 2014).

The link and match between SMK and IDUKA has not been a big problem because the competence of students will be formed from equipment that is in accordance with the equipment in IDUKA so that there must be an analysis of competency needs between SMK and IDUKA which is the basis for developing the SMK curriculum so that SMK graduates can master the competencies needed by IDUKA. Curriculum alignment requires a strategy from the principal as a leader in establishing a cooperative relationship with IDUKA[9].

The matter of finding a job for SMK graduates is a striking phenomenon and deserves serious attention. The principal, teachers, parents, and students themselves admit that schools at SMK are indeed the focus for obtaining jobs. In Winarno's research (2009) it was concluded that the teaching materials and learning strategies provided at SMK are currently not effective enough in developing the character values of students. Similarly, the understanding and experience of the managers (homeroom teachers, teachers and mentors) has not fully supported the achievement of character development goals.

Upon the background description in the introduction, the purpose of this study is described as follows. First, describe the principal's strategy in improving the quality of graduates, Second, describe the learning model in productive subjects in order to improve the quality of graduates. Third, describe the constraints and solutions taken by the productive learning process model that integrates teaching materials, learning methods, and evaluation of the learning outcomes of the SMK productive program to improve the quality of graduates.

2. Literature Review

Vocational High Schools are essentially a subsystem of the education system. Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System Article 18 explains that vocational education is secondary education that prepares students to work in certain fields. Therefore, the purpose of providing SMK education is intended to prepare students: 1) enter certain jobs and develop a professional attitude; 2) have the provision and ability to choose a career, be able to compete, and be able to develop themselves; 3) become a middle-level workforce that is independent and/or fills the needs of the business world and industry in the present and future. Thus, the existence of SMK is intended to create a workforce that has competencies according to their respective expertise programs and is able to compete globally.

SMK is said to be successful if all its graduates can be absorbed by IDUKA according to their respective expertise programs and expertise competencies. The competence of SMK graduates is required to align with the needs of IDUKA as a provider of employment by formulating a syllabus or curriculum that is oriented towards competencies and demands of the world of work according to the needs of their respective regions in the present and future. Therefore, every SMK must strive to adjust the curriculum in accordance with the development of knowledge and technology and the needs of IDUKA. However, this does not mean that SMK is only for preparing a ready-to-use workforce, but SMK also acts as a formal educational institution in charge of preparing Indonesian human resources (HR) with character, able to follow the development of knowledge and technology and become productive human beings[4].

According to the Regulation of the Minister of Education and Culture Number 34 of 2018 concerning National Standards for Vocational High School and Madrasah Aliyah Education, it is stated that productive / vocational teachers are SMK teachers who teach groups of subjects grouped in the Basic Competence of Expertise and Competence Expertise that has a Qualification Professional competence of vocational teachers SMK / MAK refers to competence as a teacher and work competencies that apply in the business and industrial world. The continuous competency development of productive teachers of industry-based vocational schools concerns several important issues, namely increasing the competence of productive teachers to suit the needs of IDUKA, the pattern of school cooperation with IDUKA, and teacher internships to industry. In terms of teacher development, according to Law Number 23 of 2014, it has been given a transfer of smk authority to the provincial government to formulate patterns or models for managing and developing vocational schools effectively and efficiently.

In addition to improving the competence of productive teachers, certification of student competencies is urgently needed today to equip students in competition in the world of work in line with this statement, the Chairman of the Certification and Competency Committee of the Chamber of Commerce and Industry, Iftida Yasar, stated that competency standards are a precarious need for the industry today amid the trend of free trade. "Labor certification is the current urgency in addition to increasing the competitiveness of domestic workers," (Bisnis.com, Monday 13/2/2020).

In addition to the above, schools must have a vision, mission, creative and innovative and quality-oriented. This strategy is a systematic effort by the principal to continuously improve the quality of services so that his focus is directed at teachers and other education personnel so that the educational institutions he leads can run well. As a leader and supervisor in schools, the role and responsibility of the principal is very strategic in improving the performance of teachers and other educational personnel[12].

Professional principals in the new paradigm of education management must have a positive impact and fundamental changes in the renewal of the education system in schools, these impacts include the effectiveness of education, strong school leadership, effective management of educational resources oriented towards quality improvement, compact, intelligent and dynamic team work, independence, participatory with school residents and the community environment, openness, managerial, innovative, continuous evaluation and improvement, responsiveness, and anticipation of needs and prioritizing accountability[13].

3. Methods

The type of research used in this study is descriptive research with a qualitative approach, where this research intends to make descriptions, images, systematically, factually and accurately regarding the facts, properties and relationships between the phenomena investigated. The purpose of this study is that the researcher wants to explain, explain objectively about

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Qualitative data is data from verbal word explanations that cannot be analyzed in the form of numbers or numbers. In this study, qualitative data is in the form of an overview of the object of study. Qualitative data provide and indicate the quality of the object of the study conducted. The data used in this research study are secondary data obtained from SMK Negeri 1 Adiwerna. The data displayed is in the form of vocational teacher data based on expertise competencies and expertise programs at SMK Negeri 1 Adiwerna. Teacher calculations are carried out based on the number of teachers who have active status and teach subjects in schools and do not include principals who are no longer teaching / guiding, productive subject data on DPIB expertise competencies, learning implementation plan documents (RPP) and a list of values of DPIB productive subjects.

Data Sources are obtained from primary data and secondary data, data collection techniques by means of wawancata, field obeservation and document obesrvation, resource persons are principals, vice principals, chairmen of DPIB expertise competencies, dpib productive subject teachers, dpib class XII learners. Data trianggulation is carriedout inthe selection and curation of data in order to obtain valid data and then presented in the form of descriptions or sentence exposures obtained from the source.

4. Results and Discussion

4.1. Principal strategy

School quality improvement management is one form of education reform. The goal is for the school to provide a better and adequate education for the learners. Autonomy in management is a potential for schools to improve teacher performance, offer direct participation of related groups, and increase community understanding of education. School quality improvement management is adopted from school-based management that was first developed in other countries (Mutohar 2016).

Strategies carried out by the principal in an effort to improve the quality of graduates include making a SMK roadmap, aligning the curriculum with IDUKA on a national and international scale, procurement of practical equipment in the implementation of *link and macth* with IDUKA in order to adjust competency needs in the field, development of human resources (teachers) for upskilling and reskilling with relevant iduka, program evaluation and follow-up are carried out regularly every semester so that existing obstacles can be identified quickly and solutions can be taken carefully and accurately that can be followed by all school residents.

4.2. School facilities and infrastructure

Standards of facilities and infrastructure are the minimum criteria that must be met related to places of study, places of exercise, places of worship, laboratories, libraries, workshops, playgrounds, and other places in an educational institution such as schools. The minimum criteria for facilities, include furniture, educational equipment, educational media, books and other learning resources, information and communication technology, and other equipment. Meanwhile, the minimum criteria for infrastructure include land, buildings, spaces, and installations of power and services owned by schools / madrasahs (Usman and Darmono 2020).

The number of students in the Competency of DPIB expertise SMKN 1 Adiwerna class X, XI and XII has 4 parallel classes with the number of students in each class 36 so that the total number is 432 students . Learning facilities and infrastructure that exist in the DPIB expertise competency at SMKN 1 Adiwerna has 8 theoretical classrooms, 2 computer

laboratory rooms as a drawing studio, one teaching factory room, and one teaching factory room industrial classrooms with a capacity of 36 learners for each classroom and practice room. Supporting facilities for learning drawing practice with software are provided by 36 units of laptops and printers in each drawing studio so that the practice process runs well and effectively. However, there are still some facilities that are not sufficient for the practical needs of students, including soil measuring equipment, three-dimensional printers and server blocks for drawing application LMS . Therefore, it can be said that the available facilities and infrastructure are not proportional to the number of existing students.

Based on the experience of Teaching Work Practices (PKM). The smoothness of learning activities in schools is not only supported by qualified facilities, of course, it is also supported by the adequacy of the space toaccommodate each study group. Sarifah (2017) stated that practical learning activities require flexibility to move indoors so that the learning process runs smoothly. Elviana (2015) also stated that the sufficient area of space, teaching staff, and supporting infrastructure greatly determines the comfort of student learning interaction. Based on the results of observations and analysis of the suitability of facilities and infrastructure on the competence of DPIB expertise with Permendikbud No. 11 of 2020 concerning Standar Sarana and Prasarana Schools with new Industrial Standards have a conformity of 86% hal this means that there are several equipment that still needs to be worked on in order to support the practice of students in schools (Sarpras Data smkn 1 Adiwerna 2020).

The fulfillment of school facilities and infrastructure does require very large costs so this has always been an obstacle at SMKN 1 Adiwerna even in all hampir schools all complained about the procurement of facilities and infrastructure while funding hammering school funds could not be sufficient because with consideration for balance with other needs related to school progress as well. Solving problems regarding the fulfillment of infrastructure at SMK Negeri 1 Adiwerna can be done by: 1) submitting facilities and infrastructure assistance to the central government and provincial governments for procurement funds and in the form of practical equipment for students, 2) using school operational assistance funds (BOS) and provincial operational assistance (BOP), 3) establishing cooperation d with IDUKA for the process of implementing student practices through the Prakerin program or internship so that students get experience in accordance with the competencies required by IDUKA.

4.3. Teachers of productive subjects

Educators are professionals as mandated in Article 39 paragraph 2, Ri Law No. 20 of 2003 concerning Sistim Pendidikan Nasional, Article 2 paragraph 1, RI Law No. 14 of 2005 concerning Teachers and Lecturers, and Article 28 paragraph (1) of PP RI No. 57 Year 2021 on Standar Nasional Pendidikan. Referring to the juridical and policy foundations, it expressly shows the seriousness and high commitment of the government in an effort to improve professionalism and appreciation for teachers who ultimately lead to improving the quality of national education. Teachers are professional educators who have pedagogical competence, personality competence, social competence, and professional competence.

As formal proof that SMK teachers are professional educators, teachers need to have a certificate issued by a certification body appointed by the government. If the teacher's academic qualifications are proven by a diploma, then mastery of teacher competencies is evidenced by teacher certification.

Especially for SMK teachers, a certificate of productive teacher expertise is required for all skill packages in SMK. Productive teacher competency certification is the process of providing competency certificates to productive smk teachers who meet the requirements. Competency certification is followed by improving teacher welfare. The form of welfare

improvement is in the form of professional allowances for productive smk teachers who have competency certificates for both public and private vocational productive teachers. This is reaffirmed in Article 28 paragraph (1) of PP RI No. 57 of 20 21 concerning National Education Standards; and Article 8 of the Law of the Republic of Indonesia Number 14 of 2005 which mandates that teachers must have academic qualifications of at least D4 / S1 and competence as learning agents, which include personal, pedagogical, professional, and social competencies. The competence of teachers as learning agents is formally evidenced by an educator certificate. The minimum academic qualification is obtained through higher education, and the educator's certificate of competence is obtained after passing the certification exam.

The number of productive subject teachers on dpib expertise competencies is 12 people consisting of 11 guru PNS and 1 honorary teacher. The number of teachers who already have an educator certificate is 11 teachers and those who do not have an educator certificate are 1 teacher. The total load of teaching hours in the 202 academic year 1/2022 for teachers of productive subjects is between 32 to 40 class hours per week while for the 2022/2023 academic year the total burden of teacher teaching hours ranges from 25 hours of lessons per week to 34 hours of lessons per week. This is already above the minimum number of teaching expenses based on the 2016 pe raturan of the Director General of GTK, which is 24 hours of lessons per week. The reference teaching load 24 hours per week is also used as a basis for disbursement of professional allowances for teachers who already have an educator certificate and meet teaching qualifications and linearity. which was taped by the Director General of GTK.

In productive subjects, they are grouped into two groups, namely group C2 basic expertise program and group C3 competence expertise. The teaching system in DPIB productive subjects for the basis of the expertise program is supported by one teacher because the number of class hours of each competency in group C2 is 3 hours lessons while the competence of expertise is taught by two teachers *(time teching)* because the number of hours is more than 4 hours of lessons. So that the number of productive teachers of DPIB can be said to be ideal. (Regulation of the Director General of GTK 2016)

In addition to teaching teachers from internal schools for the learning process in productive subjects at SMK Negeri 1 Adiwerna bringing in guest teachers from industry practitioners as many as 50 hours of lessons scheduled for five times meeting in one semester this is to foster a culture of work and discipline and provide experience for students directly. The industry chosen is an industry with a national and international scale in accordance with government regulations. On the competence of modeling design expertise and building information establish cooperation with CV. Skalatis Semarang which is engaged in contracting planning and implementing buildings.

4.4. Productive Subject Learning

Learning at SMK is learning that is the nature of implementing or applying practical knowledge in accordance with the world of work in each department, thus learning at SMK must be effective so that Basic Competencies (KD) and Competency Standards (SK) are met. Clarke & Winch in Siti Nurbaya and Moerdiyanto states that:

"Vocational education is about the social development of labour, about nurturing, advancing and reproducting particular qualities of labour to improve the productive capacity of society".

That is, vocational education is an effort to develop social employment, maintenance, acceleration and improvement of certain quality of labor in order to increase community productivity. Therefore, vocational education must be able to provide sufficient competence provisions for graduation. The quality of the learning process means that the ability of school resources to transform multi-types of inputs and situations to achieve a certain degree of added value from students. In other words, it is the occurrence of changing something into something else (Sukarji and Umiarso 2014). The educational process can be said to be of high quality if it is able to create an active, creative and innovative and fun learning atmosphere so that educational goals can be achieved properly (Mutohar 2018).

The curriculum is a set of plans and arrangements regarding the objectives, content, and learning materials as well as the method used as a guideline for the implementation of learning activities to achieve certain educational goals. Curriculum development is carried out by referring to the National Education Standards to realize the objectives ofnational education. (PP No. 57 of 2021). Research and actual facts in the field show that soft skills have an important role in determining a person's success at work. Hard skills are a minimum requirement for a person to enter a certain field of work, while soft skills will determine self-development in the job. Therefore, it is a challenge for the world of education, including SMK, to integrate the two kinds of components in an integrated and unbiased manner in order to be able to prepare complete human resources who have the ability to work and develop in the future. There are at least three fundamental aspects in integrating soft skills in the educational/learning process, including in VOCATIONAL SCHOOLS, namely: (a) integration of soft skills in curriculum development, (b) integration of soft skills in the learning process, and (c) integration of soft skills in the school climate and culture. Through these three aspects, it is hoped that SMK will be able to produce plenary graduates who have complete abilities in the form of hard skills that are integrated with the soft skills needed in their lives[14].

Husaini & Darmono (2016) recommends good vocational learning referring to prosser & Quigley's theory with five characteristics of vocational education as follows. (1) prepare learners to work more efficiently; (2) provide specialized training in terms of useful skills and knowledge for each specific job; (3) granted to those who are prepared for a particular model of work or have worked in the affairs; (4) using experience as the main method. Experience in doing a job to develop skills and in thinking about performance in a job, so as to gain full understanding and initiative in solving job problems; and (5) is the basis of the concept of psychology that the mind is a habit-forming machine that is taught through the practical habits of action and thought to achieve the goals that the learner is interested in.

On the results of data collection from respondents (principals, productive teachers, and Du / Di instructors) on dpib expertise competencies, it can be described that: (1) productive learning materials so far contain more technical (productive) skills by emphasizing the creation / creation of products or services, (2) productive learning methods that are more chosen by teachers are lectures and assignments; (3) students carry out practice in schools and at IDUKA through the pre-employment program, (4) assessment of productive program learning outcomes emphasizes less process assessment, and emphasizes more assessment of results (products), (5) character education has been integrated into each subject.

4.5. Scheduling Lessons with a Block system

The block system is a grouping of effective learning hours in units of time that is summarized allowing students to follow and receive learning materials optimally and completely Suwati, 2008: 89. According to Asril Majid in the journal of technology and vocational studies 2011, the block system is a learning that combines study hours in each face-

to-face subject which was previously carried out once a week to completion into a full week or more until the subject is completed, with the benchmark of the material can be delivered optimally and in accordance with the demands of the curriculum. According to LAB of Governer 1998, Block scheduling organizes the day into fewer, but longer, class periods to allow flexibility for instructional activities. The expressed goal of block scheduling programs is improved student academic performance. Some other rewards of these programs are heightened student and teacher morale, encouragement for the use of innovative teaching methods that address multiple learning styles, and an improved atmosphere on campus. According to the LAB of Governer, block scheduling or block systems set the class period to be fewer, but longer thus allowing for more flexible learning activities. The purpose of this block system is to improve the academic performance of students. Other benefits of this system, in order to make the morale of teachers and students higher, the encouragement to use innovative learning methods with several learning styles, and so that the school atmosphere is better.

The learning process at SMK Negeri 1 Adiwerna uses a block schedule so that students can carry out practice at school in a continuous manner for one week without being interrupted by other subjects in the hope that students' skills can be formed and grow a good work culture as a provision in facing their future. The learning model applied is Project Based Learning so that students can do tasks tailored to the demands of the industry or booker. In addition to practice in schools, students also carry out practice in the field through the industry work practice program (Prakerin) at IDUKA which is relevant so that students are able to adapt directly to IDUKA.

Assessment of productive subjects is carried out on aspects of attitudes, aspects of knowledge, and aspects of students' skills with a minimum completion mission (KKM) of 70. Productive subjects that become a reference in the world of work on DPIB expertise competencies are subjects of Software Application and Building Interior Planning (APLPIG), Construction Cost Estimation (EBK), Building Construction and Utilities (KUG)

From the learning process with a block schedule model can be presented the results of the assessment by the teacher of productive subjects as in the diagram below:

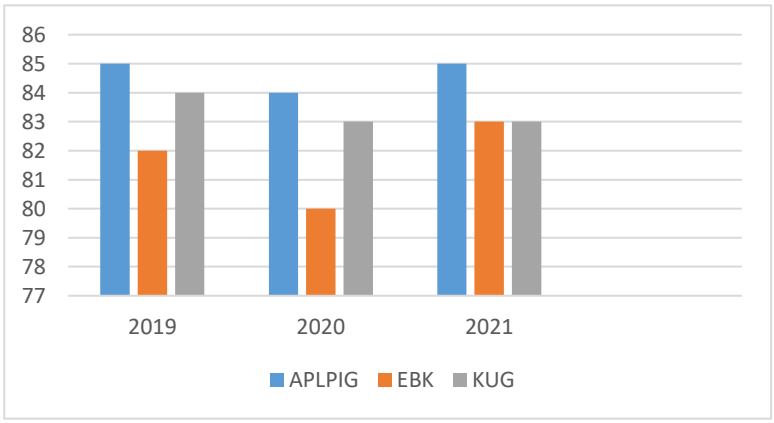

Figure 1. List of average scores of productive subjects DPIB Expertise Competencies

4.6. Learner Competency Test

Based on the Minister of Education and Culture Number 34 of 2018 concerning National Standards for SMK / MAK Education, the Expertise Competency Test (UKK) is an assessment held specifically for SMK students to measure the achievement of student competencies equivalent to qualifications of level 2 (two) or 3 (three) in the KKNI. UKK is carried out at the end of the study period by the Professional Certification Institute or accredited education units with partners in the business / industry world. Ukk results for students will be an indicator of the achievement of graduate competency standards. Meanwhile, for stakeholders, the results of UKK are used as a source of information on the competencies of prospective workers.

The implementation of the Expertise Competency Test (UKK) aims to: (1) Measure the achievement of the competence of SMK students who have completed the learning process according to the competence of the expertise taken; (2) Facilitating SMK students who will complete their education to obtain competency certificates and/or competency test certificates; (3) Optimizing the implementation of competency certification oriented towards the achievement of competencies of SMK graduates in accordance with the Indonesian National Qualifications Framework; (4) Facilitating smk cooperation with the world of work in the context of implementing competency tests according to the needs of the world of work.

In the implementation of UKK, SMK can choose one or several of the following 6 (six) types of examination schemes: Exams through the certification system of partners in the world of work or Professional Associations, Examinations through LSP One Party (LSP-P1), Exams through Second Party LSPs (LSP-P2), Exams through Third Party LSPs (LSP-P3) or Skill Certification Bodies (LSK), Examinations through the Competency Test Technical Committee (PTUK) according to regulations issued by BNSP, Independent UKK.

The expertise competency test at SMK Negeri 1 Adiwerna is carried out by LSP-P1 SMK Negeri 1 Adiwerna because each expertise competency already has a competency assessor and a competency test place (TUK) that is already standardized, a certificate of competence of a Building Draftsman with the Garuda logo issued by BNSP, then the cost of the competency test is budgeted from the School Operational Cost (BOP) fund so that it does not become a burden for students. The number of participants in the expertise competency test on DPIB expertise competencies in 2019 was 123 participants passed / competent 100%, in 2020 the number of participants 141 passed / competent 100% and in 2021 the number of participants participants 141 passed/competent 99.7%. The expertise competency test data can be seen in the following diagram:

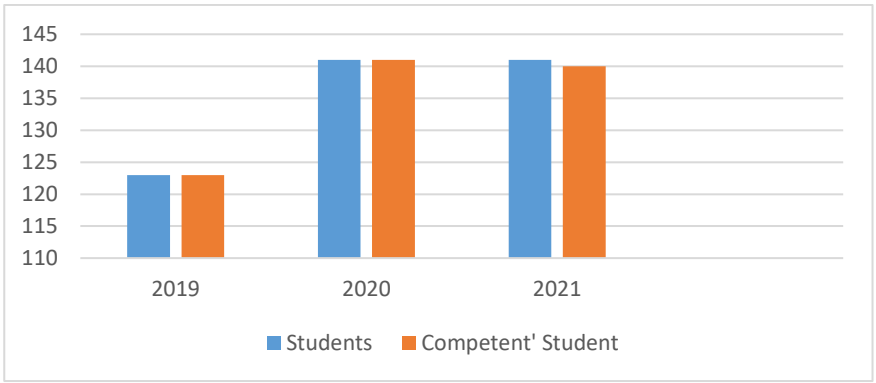

Figure 2. List of Competency Test Participants DPIB Expertise Competencies

For UKK in 2022, it is planned to start from class XI using cluster schemes 1 and 2, then for class XII clusters 3 and 4. In 2022, it has not implemented UKK because dpib expertise competencies are still in the process of consolidation between BNSP and the Ministry of PUPR through the National Construction Services Guarantee Agency (LPJKN) region IV Surabaya and the Ministry of Manpower that LSP-P1 which will hold the Expertise Competency Test (UKK) must receive a recommendation letter from LPJKN as an extension of the Ministry of PUPR.

4.7. Quality of Graduates

In the Minister of Education and Culture Number 34 of 2018, it is stated that the definition of Graduate Competency Standards (SKL) is a criterion regarding the qualifications of graduates' abilities which includes attitudes, knowledge, and skills. More specifically, in Article 35 of Law Number 20 of 2003 (Article 35) it is explained that the Graduate Competency Standard is a qualification of graduate ability which includes the attitudes, knowledge, and skills of students that must be met or achieved from an educational unit at the primary and secondary education levels. This Graduate Competency Standard is used as the main reference for the development of content standards, process standards, educational assessment standards, standards for educators and education personnel, standards for facilities and infrastructure, management standards, and financing standards[15].

Broadly speaking, graduates from SMK Negeri 1 Adiwerna have: a) loved themselves and appreciated sesame; b) express and be proud of their identity and culture; c) show an active attitude to encourage caring and sharing behaviors, as well as the ability to collaborate with the environment; d) demonstrate responsible behavior; e) demonstrate cultured behavior by conveying original ideas, making actions andn creative works; f) demonstrating the ability to analyze complex problems and ideas; g) demonstrating the ability and passion for literacy; h) using mathematical concepts, procedures, facts and tools to solve practical problems relevant to its vocational field; and i) demonstrate the ability of expertise in accordance with its vocational to strengthen independence and readiness to enter the world of work.

The following author presents the number of graduates and the availability ofapan graduates at IDUKA from dpib expertise competencies for 3 years terakhir

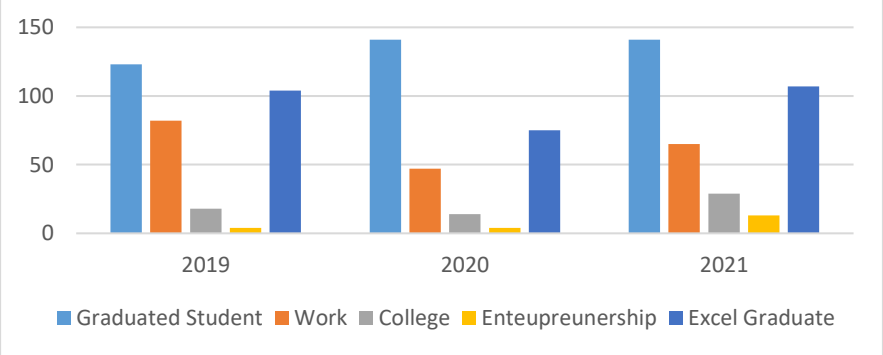

Figure 3. Graduation And Catchability List DPIB Expertise Competencies

5. Conclusion

Based on the results of the research above, several conclusions can be drawn as follows: *first,* the principal implements a strategy by establishing cooperation into the (school environment), and establishing outgoing cooperation with policymakers above it for school funding and with relevant national and international scale IDUKA in order to establish cooperation with schools in terms of curriculum alignment and validation, teacher internships, student pre-employment programs and graduate recruitment. *Second,* improving teacher competence is carried out optimally through work certification bodies and IDUKA. *Third,* the procurement of practical equipment is aligned with IDUKA. *Fourth,* the process of learning productive subjects is carried out with intensive planning, implementation, evaluation and supervision so as to produce students who are competent in their fields and have a good work culture and work ethic. *Fifth,* UKK is carried out strictly through LSP-P1 in collaboration with BNSP and related parties. *Sixth,* funding is provided as needed with accountable accountability. *Seventh,* character education is integrated into each subject. *Eighth,* the evaluation of the school program is carried out every semester to find out the obstacles that occur as early as possible, in determining solutions, discussions are carried out with all relevant parties so that the policies taken can be accepted by all parties.

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