

Inquiry-based olericulture seed cultivation program to increase industrial agricultural insight and student entrepreneurship spirit

Zhahrotun Nurroniah, Safina Aulia Sani, Rike Dwi Wulandari, Nadiah Putri Anggraeni, Nidya Nur Mashitoh, Lailatul Nuraini

Department of Physics Education, Faculty of Teacher Training and Education, Universitas Jember
Jl. Kalimantan No. 37 Jember, 68121, Indonesia

ARTICLE INFO:

Received: 2023-09-21
Revised: 2023-10-24
Accepted: 2023-11-12

Keywords:

Entrepreneurship,
Industrial agriculture,
Inquiry, Olericultural,
Service learning.

ABSTRACT

Learning about insights into industrial agriculture and the entrepreneurship spirit should be instilled from an earlier to students so that they develop social interaction skills and a motivation to work in the future. This research aims to improve the understanding of industrial agriculture and the entrepreneurial spirit of Jomerto 02 Patrang Elementary School students through inquiry-based cultivation of olericulture seedlings. One of the plants that is easy to plant and has an expensive harvest is the olericulture plant. The method of service implementation used by the researchers is the Service Learning (SL) approach. The results of this study show that the teachers' recapitulation results were 97.5% and included in the very good category, and the students' recapitulation results of the three indicators were in the very good category. This is evidenced by the data of the results of the indicator of self-efficacy with 82.45%, the data of the percentage results of the indicator of need for achievement with 90.96% and the percentage result of the Riks Taking Propensity indicator is 92.34%. In other words, the efforts to improve the understanding of industrial agriculture and the entrepreneurial spirit of the students of SDN Jomerto 02 Patrang can be continued by the school.

©2023 Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang
This is an open access article distributed under the CC BY-SA 4.0 license
(<https://creativecommons.org/licenses/by-sa/4.0/>)

How to cite: Nurroniah, Z., Sani, S. A., Wulandari, R. D., Anggraeni, N. P., Mashitoh, N. N., & Nuraini, L. (2023). Inquiry-based olericulture seed cultivation program to increase industrial agricultural insight and student entrepreneurship spirit. *Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang*, 8(4), 782-792.
<https://doi.org/10.26905/abdimas.v8i4.11403>

1. INTRODUCTION

The inquiry learning model is a learning model that can stimulate students' ability to think critically in solving problems by finding and collecting information independently (Efendi & Wardani, 2021). The inquiry learning model is a student-centered learning model during the learning process. This inquiry model is able to make students maximally active to seek and find the core of the subject matter themselves, discuss, and improve critical thinking skills to students during the learning process (Harahap et al., 2021). The use of inquiry models can assist students in developing students' intellectual skills and can provide opportunities for students to develop scientific attitudes in the student science process.

The agricultural sector is a sector that can survive the monetary crisis that was experienced a few years ago, one of which is by cultivating olericultural crops. Olericultural crops are one of the commodities of the horticultural crop subsector (Ash'ari & Hasiani, 2023). In other words, olericultural crops are one of the plants that are generally easy to find and processed by the community to be used as food ingredients or side dishes.

Olericulture crops can be broadly divided into two, annual and seasonal crops. Seasonal crops can only be harvested at certain times, although they can be cultivated at any time. Examples of seasonal crops include melinjo, petai, jengkol, and others. As for the type of perennial plants can be harvested throughout the year and can be harvested without any time limit. However, the harvest time can be done after entering the harvest age. Examples of annual crops include carrots, kale, spinach, shallots, and so on.

Entrepreneurship is one of the character traits that needs to be instilled in students from an early age. Enggartiasto Lukita, former Minister of Trade of Indonesia, said that the level of entrepreneurship in Indonesia ranks 94 out of 137 countries. In fact, in 2018, the average working-age population in developed countries is around 14% of the total number of entrepreneurs, while in Indonesia it only reaches 3.1% (Zuraya, 2018). The data shows that the level of entrepreneurship in Indonesia is still relatively low. Efforts to instill a spirit of entrepreneurship through education, there are important steps in shaping mental entrepreneurship through learning and habits, which will form character in the future. In this case, the Elementary School (SD) as the first compulsory educational learning door for children certainly has an important role (Kusuma, 2017).

Producing a generation that is outstanding and able to achieve success in a globally competitive environment can be achieved through the implementation of education that provides maximum opportunities for students to develop themselves according to their potential, talents, interests, and abilities (Prasetyaningsih, 2016). In order to achieve sustainable development and advance society, the role of teachers as a human component in the teaching and learning process is very important. Teachers have a strategic role in shaping potential and quality human resources. To achieve this, teachers must understand the demands of a growing society and position themselves as professionals who actively participate in education. Therefore, the role of teachers will have a positive impact in achieving the goals of educational development and human development as a whole (Hasanah, 2019).

Schools can realize this through activities that support students in gaining knowledge and skills, while developing character as entrepreneurs (Wahyuni & Hidayati, 2017). The selection of learning models must be done carefully to increase the effectiveness of learning, especially in shaping the entrepreneurial spirit in students (Aini, 2020). It is important to develop an entrepreneurial spirit early on in students so that they are ready for entrepreneurship when interacting with society. The government's responsibility also lies in shaping the entrepreneurial spirit in students through entrepreneurship education. Entrepreneurship education is a solution to reduce the unemployment rate (Maknuni, 2021).

SDN Jomerto 02 is one of the B-accredited elementary schools that is a partner in the Student Village Program (Promahadesa) organized by LP2M University of Jember. SDN 02 Jomerto is located on Jl. Branjangan No. 37, Patrang, Jember. The results of observations and interviews with one of the teachers of SDN Jomerto 02 stated that the facilities and infrastructure available at the school are able to support the learning process well. SDN Jomerto 02 has also never applied planting training to its students. Based on the description of the problem, this community service activity discusses efforts to foster the spirit of entrepreneurship and insight into industrial agriculture among elementary school students through inquiry-based olericulture cultivation training, namely by using the Service Learning method. The Service

Learning method is an approach that involves practical experience, academic learning, and community involvement. The method plays an important role in building the spirit of entrepreneurship and insight into industrial agriculture among students.

2. METHODS

In this research, the service implementation method used by researchers is using the Service Learning (SL) approach. The Service Learning approach is a method that emphasizes practical aspects by referring to an Experiential Learning concept in carrying out service. This concept applies lecture knowledge in the midst of society while interacting and can be a solution to the problems faced by the community, so that the role of students can actually apply and perform community service. In other words, Service Learning is not the same as visiting or social assistance activities. However, Service Learning is an approach that combines academic goals in an effort to foster awareness in solving problems directly (Setyowati & Permata, 2018). Thus, the method plays an important role in independence, especially independence in children (Prasasty et al., 2022). The Service Learning method was chosen because this method is considered capable of providing changes in student attitudes and actions by proving social care that involves a sense of caring, and has a relationship with himself as a citizen (Walukow & Jossapat, 2021)

Meanwhile, inquiry-based learning is a learning method that follows science methodology and provides opportunities for meaningful learning (Aditomo et al., 2011). Service learning involves understanding concepts and developing skills through practical activities, while inquiry-based learning has the potential to increase the level of teaching and research by combining learning. In community service, Service Learning can be integrated into meaningful inquiry-based learning with instruction and reflection to enrich the learning experience. The advantages of the Service Learning approach include: 1) it helps student's critical thinking skills and analyze information well. 2) Increases students' engagement and motivation in learning. 3) Communicates communication and collaborative skills and 4) prepares students to face real life challenges by developing problem solving and adapting skills (Karim, 2013). By integrating service learning into inquiry-based learning, students can develop a deeper understanding of the content of the activities, improve critical thinking and problem-solving skills, and have a positive impact on students.

There are three important criteria that must be considered in the Service Learning approach, namely services are required to be in accordance with the needs and provide benefits to the community, can improve the quality of academic learning, and can actively participate and be able to work together with the community. Based on these criteria, it is certainly very important to do so in order to be categorized into Service Learning academic qualifications. If the three criteria do not exist, then it cannot be said to be a Service Learning approach. Figure 1 shows the stages of Service Learning among the Community Service Models.

Broadly speaking, there are three parts in the implementation of Service Learning, namely: (1) Pre-implementation by introducing and exploring community needs; (2) Implementation of Service Learning by applying knowledge and learning at the Service Learning practice location; and (3) Post-implementation of Service Learning by referring to monitoring reports from lecturers and from the community based on Figure 2.

Over time, it can be expected that there will be continuous refinement and improvement, so that human resources become more qualified and ready to go directly to the community



Figure 1. The stages of Service Learning among community service models

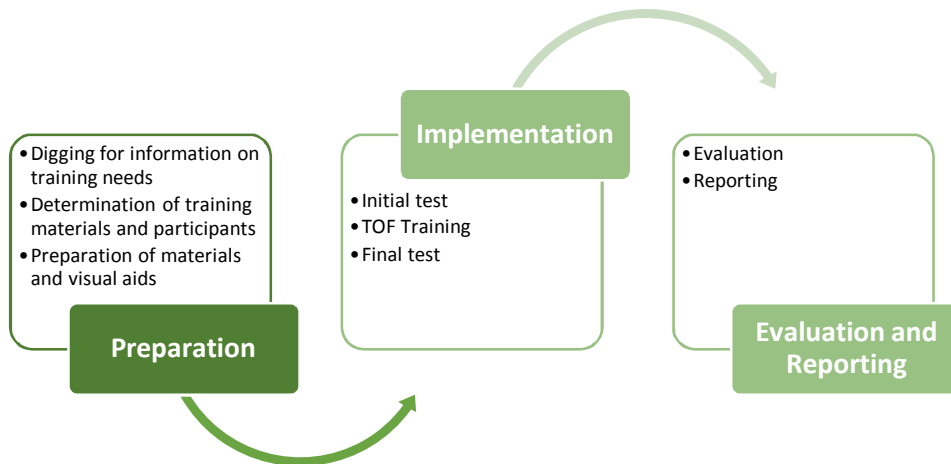


Figure 2. Service Learning approach

3. RESULTS AND DISUSSION

Result

Olericulture plants are plants that produce vegetable crops. Vegetable plants are one of the foodstuffs that can be consumed every day and are often found in the surrounding environment. In this training activity, it is held every Saturday at SDN Jomerto 02. The stages of implementation include the pre-implementation stage, the implementation stage, and the post-implementation stage.

Pre-implementation phase

Olericulture plants are plants that produce vegetable crops. Vegetable plants are one of the foodstuffs that can be consumed every day and are often found in the surrounding environment. In this training activity, it is held every Saturday at SDN Jomerto 02. The stages of pre-implementation stage are: (1) Guidebook Preparation. The preparation of the handbook was conducted in May 2023. The program guidebook consists of an explanation of olericultural plants and how to care for them along with how to process products. The program guidebook that has been developed with the team has been validated and declared very valid with a percentage of 83.75% (Febriyanti et al., 2023). This

guidebook can be seen in Figure 3; (2) Socialization. The socialization was held on May 27, 2023. In this socialization activity, students were given insights into industrial agriculture regarding the activities that will be carried out during the Promahadesa program. This socialization activity can be seen in Figure 4; (3) Pretest. The pretest was conducted after the socialization activities were carried out. This pretest was conducted with the aim of knowing students' initial knowledge related to olericultural plants. Researchers conducted pretests in two classes, namely classes 5 and 6. This pretest activity can be seen in Figure 5; and (4) Land Preparation. Land preparation was conducted in June 2023. This preparation required several things, namely seeds of ten olericultural crops, organic fertilizer, hoes, clurit, and polybags. This land preparation activity can be seen in Figure 6.



Figure 3. Guidebook cover
Figure 4. Program socialization
Figure 5. Conducting the pre-test
Figure 6. Land preparation

Implementation

The implementation stage that researchers carried out, which included training on planting 10 olericulture seeds (chili, eggplant, mustard greens, spinach, water spinach, lettuce, long beans) celery, cucumber, and tomato), maintenance, harvesting, and bazaar. The detail of the stages one by one are: (1) Planting. Planting activities begin with imbibition to determine the quality of the seeds where if after soaking in water the seeds float then the seeds are considered unfit for use. After that, seeds that are suitable for use are planted using polybags containing soil mixed with cocopeat and husks. The planting activity can be seen in Figure 7; (2) Maintenance. Maintenance activities carried out in the form of routine watering every day by providing student worksheets to monitor student activities during plant care. Maintenance activities can be seen in Figure 8; (3) Harvesting. Harvesting activities are carried out when crops with a short harvest period are ready to be harvested, such as spinach, kale, and mustard greens. Other than these crops, further maintenance is needed because the harvest period is still long. Solid

harvesting activities are seen in Figure 9; and (4) Bazaar. This bazaar activity was held in October with a bazaar mechanism, namely providing coupons distributed to students and teachers of SDN Jomerto 02 and then the coupons can be exchanged n with the desired product. For product sales, it was carried out by 5th and 6th grade students. The bazaar activity can be seen in Figure 10.



Figure 7. Planting the seeds
Figure 8. Olericulture plant care
Figure 9. Harvesting of olericultural crops
Figure 10. Olericulture bazaar

Post-implementation stage

In this post-implementation stage, researchers gave post-tests to students with the aim of knowing the level of students' knowledge related to the material taught. The implementation of the post-test can be seen in Figure 11. In addition, at this post-implementation stage, researchers also gave response questionnaires to 5th and 6th grade students and teachers after a series of activities were carried out as a form of response to several activities that had been carried out. The implementation of the response questionnaire can be seen in Figure 12.



Figure 11. Implementation of the post-test
Figure 12. Implementation of the response questionnaire

In working on the response questionnaire there are several observation criteria. Response criteria by Arikunto (2020) for teachers and students can be seen in Table 1 and the recapitulation of teacher response results can be seen in Table 2.

Table 1. Assessment criteria

Response Value P (%)	Attitude Statement
$80 < P \leq 100$	Very Good
$60 < P \leq 80$	Good
$40 < P \leq 60$	Simply
$20 < P \leq 40$	Less
$P \leq 20$	Very Less

Table 2. Recapitulation of teacher responses

Statement	Teacher 1	Teacher 2
- The material in the program guidebook is in accordance with the needs of the activity	4	5
- The content of the program manual is easy to understand	4	5
- The design of the manual is very attractive	4	5
- Inquiry-based olericulture training activities can support the learning process in the classroom	5	5
- Inquiry-based aquaculture training activities can involve student's active role in the activities	5	5
- Inquiry-based olericulture cultivation training activities have a positive impact on increasing student's understanding of industrial agricultural insights	5	5
- The bazaar of olericulture products can support the learning process in the classroom	5	5
- The bazaar activity of a series of inquiry-based aquaculture training programs can involve students' active role in activities	5	5
- Bazaar activities from a series of inquiry-based aquaculture training programs can motivate students to carry out entrepreneurial activities	5	5
- Inquiry-based olericulture cultivation training activities to improve industrial agriculture insights and entrepreneurship spirit of SDN Jomerto 02 Patrang students will potentially be continued by the school	5	5
Total Score	57	60
Percentage	95%	100%
Average		97.5%

From the data recapitulation of the results of the teacher's response can be seen in Graph 1, the average data obtained is 97.5%, which is included in the very good category. This shows that from several activities that have been carried out, this activity is very effective to be carried out as an effort to improve the insight of industrial agriculture and the entrepreneurial spirit of students.

Entrepreneurship intention has an important role in shaping individuals into entrepreneurs and entrepreneurship intention itself is influenced by many factors both internal and external. There are several factors in shaping entrepreneurial intentions, one of which is entrepreneurial traits consisting of Self Efficacy, Need for Achievement, and Riks Taking Propensity. Self Efficacy is a person's self-efficacy or assessment of his ability to organize and carry out a series of behaviors needed to achieve planned goals. Need for Achievement is the need for achievement and recognition from family and society. Riks Taking

Propensity is a willingness to take risks or a person’s ability to handle uncertainty and willingness to take the risk of loss (Ardhimursandi, 2016). Based on the factors of entrepreneurship intention formation, it can be used as an indicator to find out students’ responses to the entrepreneur training commented [A16]: There is a truncated teacher response statement! That has been carried out. The following is a recapitulation of student responses which can be seen in Table 3.

Table 3. Recapitulation of student responses

Indicator	Percentage	Category
Self Efficacy	82.45	Very good
Need for Achievement	90.96	Very good
Risk Taking Propensity	92.34	Very good
Average	88.58	Very good

Based on the recapitulation of student responses in Table 3, there are indicators of entrepreneurship obtained from the percentage results of student response questionnaires. In the Self Efficacy indicator, 82.45% was obtained, the percentage result of the Need for Achievement indicator was 90.96%, and the percentage result of the Risk-Taking Propensity indicator was 92.34%. The data shows that the three indicators are in the very good category. This shows that the training program for cultivating olericultural plants to foster the entrepreneurial spirit of students is very interesting to do because students can have new experiences and add insight, especially in agriculture and entrepreneurship.

Discussion

Student program activities based on the results of the implementation of the inquiry-based olericulture plant cultivation training program at SDN Jomerto 02 Patrang, there are several aspects that need to be discussed. First of all, the implementation method uses a Service Learning (SL) approach that emphasizes practical experience and direct interaction with the community. This approach helps students apply their theoretical knowledge into a real context, creating a meaningful connection between academic learning and community service.

At the pre-implementation stage, the development of a program manual plays a key role. The handbook covers basic knowledge about olericultural crops, care techniques, and product processing. The handbook validation result of 83.75% indicated the accuracy of the information presented. Socialization to students introduced them to the concept of industrial agriculture and the objectives of the Promahadesa program. A pretest was used to measure students’ initial understanding of olericultural crops before the training began, providing a baseline against which to assess students’ learning progress.

The implementation phase involves planting, maintenance, harvesting and bazaar activities. The planting process involved the selection of quality seeds and the use of polybags with the appropriate soil mix. Maintenance activities actively involved students in watering and monitoring the plants. Harvesting is done on crops with a short harvest period such as spinach and kale. Bazaar activities provide students with the opportunity to participate in marketing aspects and direct interaction with buyers, developing social and business skills.

The post-implementation stage includes a post-test and response evaluation. The post-test was used to measure the improvement of students’ knowledge after the program ended. The results showed an increase in students’ understanding in the aspects of entrepreneurship and industrial agriculture. Teacher and student response evaluations revealed the success of the program in achieving learning

objectives and character development. Teachers gave high marks to the materials, handbook, and effectiveness of the training, while students showed high satisfaction and enthusiasm for the program.)

In the implementation of this village student program, there are several factors that support the implementation of this community service activity, namely: (1) the assistance provided by the partners in providing facilities in land preparation in the training of cultivation of olericultural crops. (2) active participation and enthusiasm of students in training activities. In the implementation of this program, there are several inhibiting factors that occur during the implementation of activities, namely: (1) The training carried out is in the form of direct training, it is necessary to explain in the form of practice to students from selecting good seeds, planting, plant care, harvesting, to bazaar activities. This is based on the knowledge of students who are new to this training activity. (2) The teaching implementation of this training emphasizes the practical method, which sometimes students still need help in the form of guidance to inform them about the next steps. (3) The time period is limited so that there needs to be a clear division of time in the implementation of this student program.

Based on previous research on planting training to foster the spirit of entrepreneurship in students, it is known that this training can increase student's knowledge in the field of plant cultivation. In addition, student's skills were also honed, enabling them to carry out the entire agricultural process from seeding to harvesting. Not only that, students are also able to apply marketing strategies directly thanks to this training (Savitri et al., 2020). In addition, this training provides students with knowledge on effective vegetable cultivation techniques (Noviani et al., 2023). The bazaar encourages students to develop an entrepreneurial spirit in themselves. This gives them the ability to see the future carefully and plan steps carefully, in order to find solutions to the problems that arise in this activity (Turmuzi et al., 2022). The role of education in nurturing the entrepreneurial spirit in the younger generation is crucial given the challenges and rapid economic changes. Education has the responsibility to provide relevant entrepreneurship skills, create a supportive environment, and remove the negative stigma of failure (Ahmad et al., 2023). Thus, fostering entrepreneurship values in students can be one of the solutions to solve major problems for the Indonesian nation (Subekti et al., 2020)

4. CONCLUSION AND RECOMMENDATIONS

The conclusion of this community service activity from several stages of implementing Service Learning in this community service, namely: (1) pre-implementation which consists of preparation of program guidelines, socialization, pretest, and land preparation; (2) implementation of Service Learning which includes training in planting 10 olericultural seeds (chili, eggplant, mustard greens, spinach, kale, lettuce, long beans) celery, cucumber, and tomato), maintenance, harvesting, and bazaar; and (3) after the implementation of Service Learning, giving post-test to students and response questionnaires to students and teachers after a series of activities carried out with the results of teacher recapitulation of 97.5% included in the very good category and the results of student recapitulation of the three indicators are in the very good category of 88.58%. This shows that the training program for cultivating olericultural plants to foster the entrepreneurial spirit of students is very good to do. Suggestions for the next service activity are that the inquiry-based olericulture seed cultivation program as an effort to improve the insight of industrial agriculture and the entrepreneurial spirit of SDN Jomerto 02 Patrang students can be carried out sustainably by the school at all grade levels and elementary school students also need to be equipped with digital marketing skills for simple products.

Expansion of similar programs to other schools in the region. This will help more students experience the benefits of this innovative learning approach. Involve parents in the program. Involving parents as partners in education and local community empowerment can strengthen the positive

impact of this training program. By continuing these efforts, this kind of program will not only empower students with knowledge and skills, but also help create a more competitive and insightful future for future generations in the agricultural industry and entrepreneurial spirit of students

ACKNOWLEDGMENTS

Thanks to the Institute for Research and Community Service (LP2M) of the University of Jember for funding the Promahadesa program, SDN Jomerto 02 as a Promahadesa program partner, and related parties who helped the implementation of the Student Berdesa Program (Promahadesa).

REFERENCES

- Aini, L. N., Muryaningsih, S., & Irawan, D. (2020). Penerapan model missouri mathematics project untuk meningkatkan hasil belajar. *Jurnal Ilmiah KONTEKSTUAL*, 2(1), 43-49. <https://doi.org/10.46772/kontekstual.v2i01.248>
- Aditomo, A., Goodyear, P., Bliuc, A. M., & Ellis, R. A. (2011). Inquiry-based learning in higher education: principal forms, educational objectives, and disciplinary variations. *Studies in Higher Education*, 38(9), 1239-1258. <https://doi.org/10.1080/03075079.2011.616584>
- Ahmad, M. I. S., Idrus, M. I., & Rijal, S. (2023). The role of education in fostering entrepreneurial spirit in the young generation. *Journal of Contemporary Administration and Management (ADMAN)*, 1(2), 93-100. <https://doi.org/10.61100/adman.v1i2.28>
- Arikunto, S. (2020). *Research procedure: A practical approach*. Rineka Cipta.
- Ash'ari, F. M., & Hasiani, Y. (2023). Analisis komoditas unggulan subsektor hortikultura di Kabupaten Barito Kuala. *Prosiding Seminar Nasional Fakultas Pertanian Uns Dalam Rangka Dies Natalis Ke-47 Uns Tahun 2023*, 7(1), 874-884.
- Efendi, D. R., & Wardani, K. W. (2021). Komparasi model pembelajaran problem based learning dan inquiry learning ditinjau dari keterampilan berpikir kritis siswa di sekolah dasar. *Jurnal Basicedu*, 5(3), 1277-1285. <https://doi.org/10.31004/basicedu.v5i3.914>
- Febriyanti, M. P., Safitri, R. L., Ningrum, T. W., Silvira, L., Sukma, G. A. K., & Nuraini, L. (2023). Development of olericulture seed cultivation program guidebook as an effort to improve students' industrial agriculture insights. *Journal of Serambi Ilmu*, 24(2), 168-176.
- Harahap, H. S., Hrp, N. A., Nasution, I. B., Harahap, A., Harahap, A., & Harahap, A. (2021). Hubungan motivasi berprestasi, minat dan perhatian orang tua terhadap kemandirian siswa. *Edukatif: Jurnal Ilmu Pendidikan*, 3(4), 1133-1143. <https://doi.org/10.31004/edukatif.v3i4.463>
- Hasanah, U. (2019). Upaya menumbuhkan jiwa entrepreneurship melalui kegiatan market day bagi anak usia dini. *DEDIKASI: Jurnal Pengabdian Masyarakat*, 1(1), 9-19.
- Karim, N. A. (2013). The Role of academic advisor in motivating students to perform service-learning, *Sains Humanika Universiti Teknologi Malaysia*.
- Kusuma, A. I. (2017). Strategi manajemen sekolah dasar dalam menumbuhkan jiwa kewirausahaan. *Jurnal JPSD (Jurnal Pendidikan Sekolah Dasar)*, 4(2), 77-86.

- Maknuni, J. (2021). Strategi sekolah dasar dalam menumbuhkan jiwa kewirausahaan peserta didik. *Jurnal Ilmiah KONTEKSTUAL*, 2(2), 9-16. <https://doi.org/10.46772/kontekstual.v2i02.392>
- Noviani S, N., Wahyuni, S., Habibie, D., Hermanto, B., & Harahap, J. P. R. (2023). Pelatihan dan Pendampingan Bercocok Tanam Sayuran Organik Di TK RA Ulfa Khairuna. *Jurnal Pengabdian West Science*, 2(7), 582-587. <https://doi.org/10.58812/jpws.v2i07.471>
- Prasasty, A. T., Isroyati, I., & Nurhidayati, R. (2022). Pelatihan pengembangan media pembelajaran 3D pada guru kelas di SDN Pondok Terong 1 Kota Depok. *RANGKIANG: Jurnal Pengabdian Pada Masyarakat*, 4(1), 31-37.
- Prasetyaningsih, A. (2016). Membentuk jiwa kewirausahaan pada anak usia dini melalui kegiatan "Market Day". *SELING: Jurnal Program Studi PGRA*, 2(2), 88-102.
- Savitri, D. A., Nadzirah, R., & Novijanto, N. (2020). Pelatihan hidroponik sistem dft guna menumbuhkan jiwa kewirausahaan siswa di jember. *JMM (Jurnal Masyarakat Mandiri)*, 4(5), 969-977.
- Subekti, P., Hafiar, H., Sjachro, D. W., & Bakti, I. (2020). Increasing the ability of environmental-based entrepreneurs through education. *ICASI 2020: Prosiding 3rd International Conference on Advance & Scientific Innovation*, 14-19. <http://doi.org/10.4108/eai.20-6-2020.2300660>
- Setyowati, E., & Permata, A. (2018). Service learning: Mengintegrasikan tujuan akademik dan pendidikan karakter peserta didik melalui pengabdian kepada masyarakat. *Bakti Budaya: Jurnal Pengabdian Kepada Masyarakat*, 1(2), 143-192. <https://doi.org/10.22146/bb.41076>
- Turmuzi, M., Sudiarta, I. G. P., & Sutajaya, I. M. (2022). Menumbuhkan jiwa kewirausahaan melalui pembelajaran matematika materi aritmatika sosial berorientasi higher order thinking skills (HOTS). *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 6(2), 1978-1994. <https://doi.org/10.31004/cendekia.v6i2.1419>
- Wahyuni, W. R., & Hidayati, W. (2017). Peran sekolah dalam membentuk keterampilan wirausaha berbasis tauhid di SD Entrepreneur Muslim Alif-A Piyungan Bantul Yogyakarta. *MANAGERIA: Jurnal Manajemen Pendidikan Islam*, 2(2), 359-377. <https://doi.org/10.14421/manageria.2017.22-08>
- Walukow, D. S. & Jossapat, H. P. (2021). Pendekatan service learning dalam pembelajaran pendidikan kewarganegaraan di Universitas Pelita Harapan era new normal. *Journal of Bhineka Tunggal Ika*, 8(2), 136-142. <https://doi.org/10.36706/jbti.v8i2.15745>
- Zuraya, N. (2018). *Enggartiasto: Tingkat kewirausahaan di Indonesia rendah*. Retrieved from: <https://www.republika.co.id/berita/ekonomi/korporasi/18/10/18/pgsax3383-enggartiasto-tingkat-kewirausahaan-di-indonesia-rendah>
-