

Strengthening Student Entrepreneurial Competencies through Mentoring in Developing Innovative Functional Beverages

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Abstract. Limited practical entrepreneurial experience and low innovation capacity among students remain challenges in student entrepreneurship programs. Furthermore, the utilization of local resources as a foundation for developing innovative products has not been optimally integrated into entrepreneurship education. Therefore, this community service activity aims to strengthen students' entrepreneurial competencies through mentoring in the development of an innovative functional beverage based on local resources, namely Cendol Daun Katuk (CENDAKA). This activity involved five students participating in the student entrepreneurship program at Sebelas Maret University. The implementation stages included needs identification, product innovation training, mentoring for product development and production, as well as mentoring on online and offline marketing strategies. Evaluation was conducted through observations of the 5 student participants and a consumer response questionnaire involving 110 respondents using a Likert scale. The results of the activity show that students successfully developed an innovative product by integrating traditional cendol with katuk leaf extract (*Sauropus androgynus*) as both a natural colorant and a functional ingredient. The mentoring process also helped students understand product development, innovation practices, and marketing implementation in entrepreneurial activities. Consumer responses indicated a high level of acceptance, with satisfaction scores above 80% across all evaluated aspects. These findings suggest that mentoring-based entrepreneurial activities can support the development of students' entrepreneurial competencies while promoting the utilization of local resources and sustainable product innovation. Therefore, this initiative contributes to strengthening entrepreneurship education and community-based economic development.

Katakunci:
Pendampingan;
Kewirausahaan;
Sumber Daya Lokal.

Abstrak. Keterbatasan pengalaman kewirausahaan praktis dan rendahnya kapasitas inovasi mahasiswa masih menjadi tantangan dalam program kewirausahaan mahasiswa. Selain itu, pemanfaatan sumber daya lokal sebagai dasar pengembangan produk inovatif

belum terintegrasi secara optimal dalam pembelajaran kewirausahaan. Oleh karena itu, kegiatan pengabdian kepada masyarakat ini bertujuan untuk memperkuat kompetensi kewirausahaan mahasiswa melalui pendampingan dalam pengembangan minuman fungsional inovatif berbasis sumber daya lokal, yaitu Cendol Daun Katuk (CENDAKA). Kegiatan ini melibatkan lima mahasiswa peserta program kewirausahaan mahasiswa di Universitas Sebelas Maret. Tahapan pelaksanaan meliputi identifikasi kebutuhan, pelatihan inovasi produk, pendampingan pengembangan dan produksi produk, serta pendampingan strategi pemasaran secara daring dan luring. Evaluasi dilakukan melalui observasi terhadap 5 mahasiswa peserta kegiatan dan kuesioner respons konsumen yang melibatkan 110 responden menggunakan skala Likert. Hasil kegiatan menunjukkan bahwa mahasiswa berhasil mengembangkan produk inovatif dengan mengintegrasikan cendol tradisional dan ekstrak daun katuk (*Sauropus androgynus*) sebagai pewarna alami sekaligus bahan fungsional. Proses pendampingan juga membantu mahasiswa dalam memahami pengembangan produk, praktik inovasi, dan implementasi pemasaran dalam kegiatan kewirausahaan. Respons konsumen menunjukkan tingkat penerimaan yang tinggi dengan skor kepuasan di atas 80% pada seluruh aspek yang dinilai. Temuan ini menunjukkan bahwa kegiatan kewirausahaan berbasis pendampingan dapat mendukung pengembangan kompetensi kewirausahaan mahasiswa sekaligus mendorong pemanfaatan sumber daya lokal dan inovasi produk berkelanjutan. Oleh karena itu, kegiatan ini berkontribusi dalam memperkuat pendidikan kewirausahaan dan pengembangan ekonomi berbasis masyarakat.

1 Introduction

Traditional food products are an important part of cultural identity and a source of local economic potential with high historical, social, and economic value (Santoso et al., 2023). In Indonesia, various traditional food products have long been part of people's lives and have been passed down from generation to generation (Abdurahman et al., 2023). Various traditional food products such as Betawi cakes like kue pancong and kue rangi have long been part of people's lives and passed down from generation to generation (Andriyanti & Setiawan, 2024). However, amid the dynamics of changes in consumption patterns and the development of the modern food industry, many traditional products face serious challenges in maintaining their existence (Ali, 2025). One of the main problems faced is stagnation in innovation, which can be seen

in several indicators: limited product renewal, lack of variation in raw materials, outdated packaging, weak digital marketing adoption, and declining consumer interest among younger generations (Ibrahim et al., 2026). Traditional products are often perceived as less attractive and less competitive compared to modern products that are more adaptive to market trends (Fibri & Frøst, 2019).

In a broader context, the challenge of maintaining the sustainability of traditional products is closely related to the limited capacity of human resources in developing innovative and market-oriented products (Harsanto et al., 2026). Previous studies indicate that innovation capability and entrepreneurial competence are key determinants in increasing the competitiveness of local products in a rapidly changing market environment. This is supported by evidence that innovation capability significantly contributes to improving firm performance and competitive advantage, particularly in SMEs operating in dynamic markets (Sulistyo & Ayuni, 2019). However, many development programs still focus more on product outcomes rather than strengthening the competencies of individuals involved in the process. Entrepreneurship education that integrates experiential learning and practical activities has been shown to improve entrepreneurial competencies, entrepreneurial mindset, and students' readiness to engage in entrepreneurial careers (Nabi et al., 2017). Recent evidence shows that MSME empowerment initiatives in Indonesia, such as OK OCE, often emphasize product innovation and marketable outputs, but the mediation effect on entrepreneurial competence remains limited, indicating that individual capacity building was not significantly improved (Nugraha et al., 2025). Similarly, literature reviews highlight that high failure rates among new MSMEs are linked to weak entrepreneurial competence, suggesting that programs focusing only on product results without adequate training and mentoring fail to sustain long-term competitiveness (Muchtadin, 2022).

The lack of innovation in traditional products in Indonesia has led to declining consumer interest, particularly among younger generations, as well as limited economic value development of these products. Many traditional products are still produced and marketed conventionally

without improvements in taste, appearance, packaging, or functional value that align with current market demands (Amri & Burhan, 2025). This condition makes traditional products less competitive compared to modern products that are more innovative, practical, and visually appealing. In addition, market developments and the rapid growth of the digital era require Micro, Small, and Medium Enterprises (MSMEs) to market their products more effectively and competitively. In the traditional culinary MSME sector, innovation has become an important factor in maintaining business sustainability and supporting business development amid increasingly competitive market conditions (Ningsih et al., 2025)

Changes in consumer consumption patterns also indicate that functional foods are increasingly favored because they provide health benefits beyond basic nutrition and contribute to disease prevention and well-being (Baker et al., 2022). Consumers are also becoming more interested in food products that combine health benefits and sustainability aspects (Uliano et al., 2024). This condition creates opportunities for the development of traditional products based on local resources. One traditional product with strong potential for development is cendol, a traditional beverage that is widely accepted by society and flexible to innovate in terms of flavor, nutritional value, and product appearance.

One local food resource with potential to be developed as a functional food is katuk leaves (*Sauropus androgynus*). Katuk leaves contain protein, crude fiber, vitamin K, provitamin A (beta-carotene), vitamins B and C, as well as minerals such as calcium, iron, potassium, phosphorus, and magnesium that are beneficial to health (Mustarichie et al., 2019). Katuk leaves also contain high chlorophyll levels and have antipyretic and lactagogue properties, although they contain papaverine alkaloids, so excessive consumption should be avoided (Suwanti & Kuswati, 2016). The utilization of katuk leaves as an additional ingredient in cendol can increase the functional value and added value of traditional products. Apart from imparting functional health benefits, the formulation of natural chlorophyll powder from katuk leaves can be directly integrated into the cendol mixture as a strategy to mitigate

reliance on synthetic coloring agents. Moreover, the robust antioxidant properties exhibited by the leaf's chlorophyll content serve to boost the product's functional health benefits without adversely affecting its organoleptic properties (Suparmi et al., 2016).

In the local context, katuk leaves are relatively easy to find in Surakarta and surrounding areas, but their utilization is still limited to household vegetable consumption and has not been widely developed into innovative products with economic value. Based on preliminary observations in the student entrepreneurship program at Sebelas Maret University, students' abilities in product development, packaging, and digital marketing of local food-based products are still limited, causing students to lack confidence in developing independent businesses. The low level of students' entrepreneurial interest is also influenced by limited practical experience, self-efficacy, and involvement in real business activities (Liu et al., 2019). In addition, low self-confidence is one of the main barriers preventing students from engaging in entrepreneurship (Deliana, 2023). Therefore, this community service activity is important to implement through mentoring in the development of an innovative Cendol Daun Katuk (CENDAKA) product to improve students' entrepreneurial competencies while encouraging the utilization of local resources to create greater added value and competitiveness in society.

Previous studies have largely focused separately on either product innovation or entrepreneurship education alone (Liu et al., 2019). Conventional research often emphasizes theoretical business concepts or classroom-based interests, yet fails to critically examine how students execute technical product development using local materials in real-world community contexts. This gap is reinforced by Mngwengwe et al. (2025), who explicitly state that "the disconnect between theoretical knowledge and practical application in the Business Studies curriculum is a pressing concern, especially in developing nations." Their study further reveals that "while the curriculum provides a robust theoretical foundation, it lacks practical application, leaving learners ill-prepared for the workforce." Therefore, a learning approach that bridges the gap

between theory and practice through direct field experience is urgently needed.

To address this gap, this study implements a mentoring project for an innovative functional beverage product, Cendol Daun Katuk (CENDAKA), strategically executed in two distinct locations in Sukoharjo Regency, Central Java, based on initial field observations. The first location is Gadingan (Mojolaban District), a busy rural main street surrounded by active agricultural land. This location was selected due to the high daily traffic of local farmers and commuters in need of refreshing beverages, combined with the absence of direct competitors selling traditional dawet in the area. The second location is Bolon (Kartasura District), a bustling open-air food court where the community gathers in the late afternoon. This location offers strong product-market fit, particularly during seasonal moments such as the month of Ramadan, where CENDAKA aligns perfectly with consumer needs for iftar (breaking the fast) menus. Testing the product in these two contrasting market ecosystems provides students with critical hands-on experience in local marketing, market adaptation, and risk management.

Based on this need, a community service activity was conducted in the form of mentoring a group of students in developing an innovative product, namely Cendol Daun Katuk (CENDAKA). This activity focused on guiding students through the stages of product innovation, production, and marketing using both online and offline approaches. Through this mentoring process, students were expected to strengthen several entrepreneurial competencies, including product development skills, innovation capability, marketing skills, teamwork, opportunity recognition, and entrepreneurial decision-making. In addition, this activity emphasized innovation aspects in the CENDAKA product, particularly the utilization of katuk leaves as a functional ingredient, natural coloring agent, local-resource-based beverage innovation, and the integration of online and offline marketing strategies. Therefore, this study aims to describe how mentoring activities can strengthen students' entrepreneurial competencies through experiential learning and the development of CENDAKA as an innovative functional beverage product based on local resources.

2 Method

This community service activity was conducted over a period of 8 months, from June to December 2026. The activity aimed to strengthen students' entrepreneurial competencies through mentoring in the development of an innovative functional beverage product, namely Cendol Daun Katuk (CENDAKA). The participants of this activity were a group of five students involved in a student entrepreneurship program at Sebelas Maret University. This activity involved five students because it was designed as an intensive mentoring program for a student entrepreneurship team. The objective was not statistical generalization but competency development through direct and continuous mentoring. Therefore, the small number of participants allowed more focused guidance throughout product development and marketing implementation. Entrepreneurship education contributes to cognitive, skill-based, and affective learning outcomes that support entrepreneurial competency development (Kozlinska et al., 2020).

The method used in this community service activity was Participatory Action Research (PAR). Participatory Action Research (PAR) is one of the social research models widely applied in community service activities, particularly in higher education institutions. This is because the principles of PAR are aligned with the implementation of the tridharma of higher education, namely education and teaching, research, and community service (Bellicha et al., 2024). These three elements of the tridharma are reflected in the main concepts of PAR, namely participatory, action, and research (Lapidot-lefler, 2025). The application of the PAR method aims to ensure that the results of the research can provide direct benefits to the community, both through the research findings and the experiences gained by the community during their involvement in the research process. In addition, PAR is built upon the principles of sustainability and independence, enabling communities to identify solutions to similar problems based on the experiences obtained from the research activities in which they participated (Siswadi & Syaifuddin, 2024).

The implementation of the activity was carried out through several stages. The first stage was problem and needs identification. At this

stage, observations and participatory discussions were conducted with the students to identify their initial understanding, challenges, and needs in developing innovative products and entrepreneurial activities. The results of this identification stage were used as the basis for designing the mentoring program.

The second stage was action planning and product innovation training. In this stage, the students together with the community service team prepared the development plan for the CENDAKA product. Furthermore, training was conducted regarding product innovation, functional food development, and the utilization of katuk leaves (*Sauropus androgynus*) as the main ingredient of the product. This stage aimed to provide conceptual and technical understanding to the students before entering the production process.

The third stage was the implementation of actions through mentoring in product development and production. In this stage, students were actively involved in the formulation and production process of CENDAKA, starting from the selection of raw materials, extraction of katuk leaves, preparation of the cendol mixture, to the final product serving. The mentoring process was conducted participatively by emphasizing hands-on practice to ensure that students were able to independently develop the product.

The fourth stage was mentoring in marketing strategies. Students were assisted in designing and implementing both online and offline marketing strategies. Online marketing was conducted through social media platforms such as Instagram and TikTok, while offline marketing was carried out through direct selling in strategic locations. This stage aimed to improve students' skills in product promotion, marketing communication, and product distribution.

The final stage was evaluation and reflection of the activity. Evaluation was conducted through observation of students' involvement and competency development during the mentoring process, as well as through questionnaires distributed to 110 consumer respondents. The questionnaire used a five-point Likert scale consisting of very satisfied (5), satisfied (4), neutral (3), dissatisfied (2), and very dissatisfied (1). The

evaluation covered aspects of product quality, product benefits, packaging, price, service, and consumer satisfaction.

Data obtained from observations were analyzed descriptively to describe the improvement of students' entrepreneurial competencies. Meanwhile, questionnaire data were analyzed using percentage-based descriptive analysis to determine the level of consumer acceptance of the CENDAKA product. The results of the evaluation and reflection were used as the basis for improving and developing future community service activities.

3 Results

The implementation of the community service activity showed that the mentoring program was successfully carried out through several structured stages, resulting in both product outcomes and measurable improvements in students' entrepreneurial competencies. The improvement of entrepreneurial competencies was evaluated through observational indicators consisting of business opportunity identification, product innovation capability, marketing skills, teamwork, communication skills, and entrepreneurial insight during product development and commercialization activities.

At the initial stage, the needs identification revealed that students had limited experience in developing innovative products and lacked practical knowledge in marketing strategies. Most students were only familiar with theoretical concepts of entrepreneurship and had not previously engaged in real product development, market analysis, branding, or commercialization activities. Initial observations showed that students were unable to independently identify market opportunities, formulate innovative products, or implement digital marketing strategies.

During the mentoring process, students demonstrated significant improvement in identifying business opportunities related to the increasing consumer demand for healthy and functional beverages. They recognized that traditional cendol products could be transformed into

more innovative and market-oriented beverages through the integration of functional local ingredients.

In the product development stage, students successfully developed Cendol Daun Katuk (CENDAKA) as an innovative functional beverage by integrating traditional cendol with katuk leaf extract (*Sauropus androgynus*). The innovation of CENDAKA lies not only in the modification of a traditional beverage but also in the utilization of katuk leaves as a natural coloring agent and functional ingredient containing nutritional and bioactive compounds. Compared to commonly used ingredients in traditional beverages, katuk leaves provide added value through their health-oriented properties, allowing the product to align with current consumer preferences toward healthy functional beverages. In addition, the incorporation of katuk leaves contributed to the development of a distinctive green appearance, unique flavor characteristics, and a healthier beverage concept, differentiating CENDAKA from regular cendol products.



Figure 1. Final Appearance of CENDAKA Product

Students were actively involved in all production processes, including raw material selection, extraction of katuk leaves, product formulation, packaging adaptation, branding, and final product presentation. Through these activities, students demonstrated improvements in entrepreneurial competencies, particularly in product innovation capability, opportunity recognition, problem-solving, teamwork, communication skills, and market-oriented thinking.

However, after participating in the mentoring activities, students demonstrated observable improvements across several competency indicators. Students were able to identify business opportunities related to the growing demand for healthy functional beverages, develop CENDAKA as an innovative product based on local resources, implement online and offline marketing strategies, and communicate product value directly to consumers. In addition, students demonstrated improved collaboration and decision-making skills during production and marketing activities, indicating the effectiveness of the mentoring process in strengthening practical entrepreneurial competencies. This stage resulted in a tangible product that met basic quality standards in terms of taste, texture, appearance, and consumer acceptance.

In the marketing stage, students were able to implement both online and offline marketing strategies. Online marketing was conducted through social media platforms such as Instagram and Whatsapp, while offline marketing was carried out through direct selling in strategic locations. These activities enabled students to interact directly with consumers and obtain immediate feedback on the product.



Figure 2. Students Conducting Direct Marketing Activities

The evaluation results based on consumer response questionnaires involving 110 respondents indicate a high level of acceptance of the CENDAKA product. The assessment covered several aspects, including product quality, product benefits and value,

packaging, price, service, and consumer satisfaction and loyalty. A summary of consumer responses is presented in Table 1.

Table 1. Consumer Response to CENDAKA Product

No	Aspect	Score (%)	Category
1	Product Quality	86.2	Very Satisfied
2	Product Benefits and Value	87.1	Very Satisfied
3	Product Packaging	86.6	Very Satisfied
4	Product Price	89.9	Very Satisfied
5	Customer Service	91.0	Very Satisfied
6	Satisfaction and Loyalty	80.7	Very Satisfied

As shown in Table 1, all evaluated aspects achieved satisfaction levels above 80%, indicating that the product was categorized as “very satisfied” by consumers. Among all aspects, customer service obtained the highest score (91%), followed by product price (89.9%), while satisfaction and loyalty showed the lowest score (80.7%), although it remained within the “very satisfied” category.

The interpretation of consumer satisfaction levels is presented in Table 2.

Table 2. Summary of Consumer Satisfaction Levels

No	Satisfaction Level	Percentage Range (%)	Interpretation
1	Very Dissatisfied	0 – 20	Very Low
2	Dissatisfied	21 – 40	Low
3	Neutral	41 – 60	Moderate
4	Satisfied	61 – 80	High
5	Very Satisfied	81 – 100	Very High

In addition to product acceptance, the mentoring activity also resulted in observable improvements in students’ entrepreneurial competencies. These improvements are summarized in Table 3.

Table 3. Improvement of Students' Entrepreneurial Competencies

No	Competency Aspect	Before Mentoring	After Mentoring
1	Product Development	Low	High
2	Innovation Skills	Low	High
3	Marketing Skills	Low	High
4	Teamwork	Moderate	Very High
5	Entrepreneurial Insight	Low	High

As presented in Table 3, students showed significant improvement in various aspects, particularly in product development and marketing implementation. They were able to transform theoretical knowledge into practical skills through direct involvement in entrepreneurial activities. Overall, the results indicate that the mentoring-based community service activity successfully produced an innovative product while simultaneously enhancing students' entrepreneurial competencies through experiential learning.

4 Discussion

The results of this community service activity demonstrate that mentoring plays a significant role in strengthening students' entrepreneurial competencies while simultaneously supporting the development of innovative products based on local resources. The success of the mentoring program can be seen from two main aspects, namely the successful development of the CENDAKA product and the improvement of students' competencies in entrepreneurship practices. This finding is consistent with previous studies highlighting that mentoring-based entrepreneurship programs significantly enhance both cognitive and practical competencies of participants (Priatana & Supiandi, 2021)

From the perspective of product development, the innovation of CENDAKA reflects an effort to transform traditional food into a product that is relevant to modern consumer demands. This finding is in line with

the view that innovation is a key factor in maintaining the sustainability and competitiveness of traditional products in a dynamic market environment (Bugheanu et al., 2026). The integration of katuk leaf extract (*Sauropus androgynus*) into cendol not only provides a natural coloring agent but also adds functional value, supporting the concept of functional food that aligns with current health-conscious consumption trends (Bayuadi et al., 2025; Kusuma & Aprileili, 2022). This indicates that the use of local resources can enhance both the economic and functional value of traditional products without eliminating their cultural identity. In addition, the transformation of traditional products through innovation aligns with the concept of value-added entrepreneurship, where local resources are processed into higher-value products to increase market competitiveness (Permatasari et al., 2023).

Furthermore, the high level of consumer acceptance, with satisfaction scores above 80% across all aspects, indicates that the product innovation carried out by the students was effective. This supports previous findings that product innovation contributes significantly to increasing consumer interest and perceived product value (Amri & Burhan, 2025). The high score in customer service (91%) and product price (89.9%) suggests that not only the product itself but also the way it is delivered and positioned in the market plays an important role in shaping consumer satisfaction. This is consistent with the notion that competitiveness in traditional products is not solely determined by product characteristics but also by service quality and marketing strategies (Soleh et al., 2024). These results also reinforce the argument that customer satisfaction is a multidimensional construct influenced by product quality, service delivery, and perceived value (Mulyati & Rahmat Jaya, 2025)

In addition to product-related outcomes, the mentoring activity also had a substantial impact on students' entrepreneurial competencies. Initially, students had limited experience in developing and commercializing products. However, through continuous mentoring, they were able to engage in the complete entrepreneurial process, from idea generation to product marketing. This finding highlights the importance of experiential learning in entrepreneurship education,

where students gain practical skills through direct involvement rather than relying solely on theoretical knowledge. This is in line with experiential learning theory, which emphasizes learning through concrete experience, reflection, and active experimentation (Morris, 2020).

The improvement in students' competencies, particularly in product development, innovation skills, and marketing implementation, indicates that mentoring-based approaches are effective in bridging the gap between theory and practice (Samsuri et al., 2024). This aligns with the idea that capacity-building activities are essential in enhancing individuals' ability to innovate and adapt to market demands. Without such practical exposure, innovation efforts tend to remain conceptual and less impactful. Similar findings have been reported in entrepreneurship education studies, which show that mentoring and hands-on practice significantly improve students' readiness to enter real business environments (Nabi et al., 2017).

Moreover, the involvement of students in real marketing activities, both online and offline, provides them with valuable insights into consumer behavior and market dynamics. The use of digital platforms such as Instagram and TikTok reflects the adaptation to modern marketing trends, which are increasingly dominated by digital media. This finding supports the argument that traditional products must adapt to changing consumption patterns and technological developments in order to remain relevant (Ali, 2025). The combination of online and offline marketing strategies also demonstrates a comprehensive approach to product promotion, allowing students to reach a broader audience while maintaining direct interaction with consumers. This approach is consistent with integrated marketing communication strategies, which combine multiple channels to maximize market reach and engagement (Rehman et al., 2022).

Another important aspect highlighted in this study is the role of local resources in supporting sustainable innovation. The use of katuk leaves as a functional ingredient not only enhances product value but also promotes the utilization of locally available materials. This is in line with the concept of developing traditional products based on local

wisdom and resources, which can strengthen local economies and support sustainability (Santoso et al., 2023). By introducing students to the potential of local resources, the mentoring activity also contributes to fostering awareness of sustainable and culturally rooted entrepreneurship. This finding also supports the perspective that local resource-based innovation is a key driver of sustainable community development and economic resilience (Santos, 2024)

The findings of this study also indicate that mentoring activities can serve as an effective strategy for empowering students as future entrepreneurs. Through structured guidance, students are not only able to develop products but also gain confidence in implementing business ideas. This is particularly important in the context of higher education, where students are expected to develop not only academic competencies but also practical skills that are relevant to real-world challenges. Mentoring has been widely recognized as an effective pedagogical strategy in entrepreneurship education, particularly in fostering entrepreneurial mindset and self-efficacy (Santos et al., 2019)

However, despite the positive outcomes, several limitations can be identified. The mentoring activity was conducted on a relatively small group of students, which may limit the generalizability of the results. In addition, the evaluation of student competency improvement was primarily based on observation and performance during the activity, without the use of standardized measurement instruments. Future community service activities are recommended to involve a larger number of participants and to incorporate more structured evaluation tools to measure competency development more objectively. In addition, while consumer responses indicate a high level of satisfaction, further studies are needed to examine other aspects of the product, such as nutritional content, shelf life, and long-term market potential. This is important to ensure that the product not only meets consumer preferences but also fulfills quality and safety standards required for broader commercialization. These limitations are also commonly reported in community-based entrepreneurship programs, particularly regarding measurement validity and scalability.

Overall, the results of this study confirm that mentoring-based community service activities can effectively enhance students' entrepreneurial competencies while supporting the development of innovative products based on local resources. The integration of product innovation, practical experience, and market engagement provides a comprehensive learning experience that is relevant to current educational and economic needs. Therefore, such activities have strong potential to be further developed and implemented on a larger scale as part of efforts to strengthen entrepreneurship education and promote sustainable innovation. This reinforces the role of higher education institutions as key agents in fostering innovation, entrepreneurship, and community empowerment.

5 Conclusion

This study confirms that mentoring-based community service effectively enhances students' entrepreneurial competencies, particularly in product innovation and marketing implementation, while facilitating the development of innovative products based on local resources, such as Cendol Daun Katuk (CENDAKA). The high level of consumer acceptance indicates that local resource-based innovation possesses strong market potential and sustainability, highlighting the critical importance of integrating experiential learning and mentoring in entrepreneurship education to bridge the gap between theory and practice. However, given the limitations of this study, including the small number of participants and the absence of standardized assessment tools, broader implementation involving a larger cohort of students and more rigorous, standardized evaluations are strongly recommended for future programs. Overall, mentoring-based approaches offer a promising model for strengthening entrepreneurship education and promoting sustainable, locally grounded innovation.

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