

## The Effect Of Entrepreneurial Education On Entrepreneurial Intention Through Innovation And Digital Literacy Of High School Students In Mojokerto Regency

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### Abstrak

*In this era of globalization and technological advancement, it is important for every individual to have the ability to face the challenges of an increasingly competitive world of work. One way to prepare the younger generation to face these challenges is through entrepreneurship. This study aims to explore the impact of entrepreneurial knowledge on entrepreneurial intentions through innovation and digital literacy among students at SMAN Mojokerto Regency. The research method used is the Structural Equation Model (SEM) approach based on Partial Least Square (PLS). Data analysis techniques use descriptive statistics. The results of the analysis show that (1) there is a positive and significant influence of entrepreneurial education on entrepreneurial intention, (2) there is a positive and significant influence of entrepreneurial education on innovation, (3) there is a direct positive and significant influence of entrepreneurial education on digital literacy, (4) there is a direct positive and significant influence between the innovation variable and entrepreneurial intention, (5) There is a direct positive and significant influence of digital literacy on entrepreneurial intention, (6) There is a direct positive and significant influence between entrepreneurial education and entrepreneurial intention through innovation, (7) There is a direct positive and significant influence between entrepreneurial education and entrepreneurial intention through digital literacy. The results of this study are expected to encourage educational institutions to strengthen their entrepreneurship programs by emphasizing the aspects of innovation practice and digital literacy integration. This effort will enrich students' learning experiences, shape adaptive competencies, and continuously increase their intention to become entrepreneurs in a competitive modern business environment.*



**Keywords:** *Entrepreneurship Education, Entrepreneurial Intention, Innovation, Digital Literacy*

## INTRODUCTION

Indonesia is the largest archipelagic country in the world with more than 17,000 islands and a wealth of natural and cultural resources. Its population in 2023 has reached more than 278 million, making it one of the most populous countries in the world (BPS, 2023). The composition of Indonesia's population also shows a dominance of the productive age group, with around 70% in the 15–64 age range (Utami et al., 2025). This condition is known as a demographic bonus, which is seen as a great opportunity to accelerate economic and social development. However, this opportunity can only be utilized if it is balanced with improvements in the quality of human resources, skills, and the ability to adapt to global changes.

Ganefri et al. (2024) emphasize that the demographic bonus can be a driving force for economic growth if managed properly. A large productive-age population enables increased productivity and innovation. Mulyono et al. (2023) also explain that the demographic bonus can accelerate social and economic transformation through the utilization of education and technology. In other words, the advantage of a large population only becomes an advantage if they have the skills that are in demand. If not managed properly, the demographic bonus can actually become a burden in the form of increased unemployment and social inequality.

Although Indonesia is currently experiencing a demographic bonus, unemployment remains a major issue. Based on data from Statistics Indonesia (BPS), the number of unemployed people in August 2023 reached 7.86 million with an open unemployment rate (TPT) of 5.32% (BPS, 2023). This figure is lower than in August 2022, which reached 8.42 million people, but it is still higher than the period before the pandemic. This condition shows that improvements have indeed occurred, but they are not significant enough to address structural problems in the labor market. In particular, unemployment is mostly experienced by young people, who should be the driving force behind economic growth.

A similar situation is also experienced in Mojokerto Regency, which still faces a fairly high unemployment rate. BPS (2023) data shows that in August 2023, Mojokerto's TPT reached 4.67% or around 30,219 people out of a total population of 1.13 million. This figure decreased to 3.87% in August 2024, indicating an improvement. However, this figure still shows that thousands of Mojokerto residents are still not absorbed into the workforce. Thus, unemployment in Mojokerto still requires serious attention, particularly in terms of providing job opportunities and improving workforce skills.





When viewed based on educational level, high school graduates are the group most vulnerable to unemployment. Nationally, the unemployment rate for high school graduates in August 2023 was recorded at 7.05% (BPS, 2023). This condition also occurs in Mojokerto Regency, where the unemployment rate for high school graduates reached 6.72%, which is the highest figure compared to graduates of other educational levels (BPS, 2023). This fact shows that high school graduates face difficulties in competing in the job market. The high unemployment rate among high school graduates may be due to limited practical skills, a lack of entrepreneurship training, and a lack of readiness to meet the needs of modern industry.

The high unemployment rate among high school graduates is a warning that strategic intervention is needed. One of the main causes is the mismatch between the skills possessed by graduates and the needs of the world of work. Many high school graduates do not have the technical skills or soft skills that meet industry demands. In addition, access to further education or skills training is still limited for most graduates. Therefore, a long-term solution that can be pursued is to equip high school students with entrepreneurial skills from an early age so that they can create their own jobs.

Entrepreneurship education is seen as one answer to this challenge. According to Li and Wu (2019), entrepreneurship education plays an important role in shaping an entrepreneurial mindset that enables students to think creatively and innovatively. Bux and Van Vuuren (2019) add that this education encourages students to take initiative and have the courage to face economic uncertainty. With entrepreneurship education, students not only prepare themselves to become workers, but also potential job creators. Therefore, entrepreneurship education is increasingly relevant in the context of high unemployment among high school graduates.

In addition to developing technical skills, entrepreneurship education also equips students with soft skills that are highly needed in the modern world of work. Yousaf et al. (2020) emphasize that through this education, students can hone their leadership, problem-solving, and decision-making skills. Similar findings were reported by Wang, Murad, Fu, and Tufail (2021), who stated that entrepreneurship education enriches students with social and economic insights. These soft skills are not only useful in running a business but also important for overall career success. Thus, entrepreneurship education provides a more comprehensive foundation for high school students (Wardana et al., 2021).

Entrepreneurial intention is one of the direct impacts of entrepreneurship education. Ajzen (1991), through the Theory of Planned Behavior (TPB), explains that entrepreneurial intention is influenced by attitudes toward behavior, subjective norms, and perceived behavioral control. Civelek et al. (2025) found that entrepreneurship education strengthens these three





components. This means that entrepreneurship education can increase students' confidence to start a business. This proves that entrepreneurship education is not only about skills, but also about building strong motivation and intention (Saraswati et al., 2021).

Li and Wu (2019) and Noreña-Chavez (2020) emphasize that entrepreneurship education can increase students' confidence in entrepreneurship. Through applicable learning experiences, students understand the realities of business and the challenges they will face. Yousaf et al. (2020) also emphasize that entrepreneurship education fosters positive attitudes such as perseverance, creativity, and innovation. Bux and Van Vuuren (2019) show that students who receive entrepreneurship education are more courageous in taking concrete steps to start a business. Thus, entrepreneurship education has been proven effective in building entrepreneurial intention.

A strong entrepreneurial intention ultimately encourages individuals to innovate. Noreña-Chavez (2020) found that innovation acts as a mediator between entrepreneurial self-efficacy and entrepreneurial intention. Al-Mamary et al. (2025) assert that a high entrepreneurial intention will result in a more innovative and adaptive business model. With strong intentions, entrepreneurs tend to be more daring in experimenting with new products or strategies. This shows a close relationship between intention and innovation capabilities in entrepreneurship (Salim et al., 2024).

In addition to innovation, digital literacy also plays an important role in shaping entrepreneurial intent. Ip (2024) states that the development of digital technology has changed the way businesses operate, particularly through online stores that allow for wider market access. Ganefri et al. (2024) add that the use of digital technology enables efficient business management and marketing. Suryani and Chaniago (2023) emphasize that good digital literacy makes it easier for entrepreneurs to innovate and improve customer experience. Thus, digital literacy has become a mandatory competency in the era of digital entrepreneurship (Munthe et al., 2024).

Digital literacy can also be understood through the TPB perspective developed by Ajzen (1991). In this context, digital literacy strengthens the perception of behavioral control because it provides the knowledge and skills needed to adapt to technology. This increases individuals' confidence in utilizing digital technology for entrepreneurship. With mastery of digital literacy, prospective entrepreneurs are better prepared to manage risks and seize opportunities. Therefore, digital literacy not only functions as a tool but also as a psychological factor that influences entrepreneurial intention.





The novelty of this study is the integration of innovation and digital literacy as double mediating variables in the relationship between entrepreneurial education and entrepreneurial intention. Previous studies have mostly highlighted the direct relationship between entrepreneurial education and entrepreneurial intention. This double mediation model has not been widely studied, especially in the context of high school students in the digital era (Al-Mamary, 2025; Ip, 2024; Ganefri et al., 2024). This study focuses on public high school students in Mojokerto Regency, who face a fairly high unemployment rate. Thus, this study is expected to provide theoretical and practical contributions in preparing a competitive young entrepreneurial generation.

## LITERATURE REVIEW

### Entrepreneurial Education

Within the framework of the Theory of Planned Behavior (TPB) developed by Ajzen (1991), entrepreneurial education is seen as an external factor that can influence the formation of entrepreneurial intention through three main components, namely attitude toward behavior, subjective norms, and perceived behavioral control. Ajzen (1991) emphasizes that education can shape individual beliefs that subsequently encourage behavioral intentions, including the intention to become an entrepreneur. Entrepreneurship education plays a role in increasing knowledge, experience, and motivation, thereby forming a positive attitude toward entrepreneurship while strengthening the perception of self-control in facing business challenges. Research by Ganefri et al. (2024) shows that students who participate in entrepreneurship education tend to be more courageous in facing risks and more confident in starting a business. This is in line with the findings of Wang et al. (2021), who state that entrepreneurship programs can strengthen perceived behavioral control, which is an important predictor of entrepreneurial intention.

In line with this grand theory, a number of studies confirm the role of entrepreneurship education in shaping entrepreneurial intent, innovation, and digital literacy. Li and Wu (2019) define entrepreneurship as the process of forming a new business through team collaboration and decision-making, while Jiang et al. (2022) emphasize that entrepreneurship encompasses motivation, innovative behavior, and creative solution skills. Emami & Dimov (2017) also highlight that innovation is at the core of entrepreneurship, while Mei et al. (2020) state that entrepreneurship education is designed to foster both competence and entrepreneurial intent. Ganefri et al. (2024) add that entrepreneurship education shapes the mindset, digital literacy, and self-efficacy that support students' readiness to face the challenges of the digital economy.





The indicators for measuring entrepreneurship education also vary, ranging from curriculum quality, creativity, business skills, to the ability to identify opportunities (Jiang et al., 2022; Kusumojanto et al., 2021; Wang et al., 2021). Thus, entrepreneurship education is not only understood as a process of knowledge transfer, but also as a strategic instrument in building intention, innovation, and entrepreneurial readiness in the younger generation.

## **Entrepreneurial Intention**

The Theory of Planned Behavior (TPB) developed by Ajzen (1991) explains that entrepreneurial intention is influenced by three main factors, namely attitude toward the behavior, subjective norms, and perceived behavioral control. This theory emphasizes that intention is the main determinant of actual behavior, so understanding intention is key to designing strategies to encourage entrepreneurship. Jiang et al. (2022) proved that the three components of TPB have a significant influence in shaping students' entrepreneurial intentions, with positive attitudes and self-confidence as the dominant factors. In line with this, Noreña-Chávez (2020) found that perceived behavioral control has the strongest influence, especially for individuals who have been equipped with entrepreneurship education and access to digital information. Thus, TPB provides a solid theoretical foundation for understanding the role of psychological and social factors in shaping entrepreneurial intention.

Entrepreneurial intention is understood as a person's desire, awareness, and determination to start a business within a certain period of time. Jiang et al. (2022) explain that this intention is a psychological commitment to becoming an entrepreneur, while Yahya et al. (2023) emphasize its role as a drive to realize business ideas. Al-Mamary (2025) adds that entrepreneurial intention is the cognitive and emotional readiness to choose the path of entrepreneurship, while Tapia Mejia and Pico Gonzalez (2023) highlight the orientation of this intention towards creating something new. Practically, entrepreneurial intention brings important benefits, both in creating jobs, encouraging innovation, and strengthening individual independence (Civelek et al., 2025; Al-Mamary, 2025). To measure it, researchers use indicators such as the desire to start a business, readiness to act, and sustainability of intention (Jiang et al., 2022; Wang et al., 2021; Liu et al., 2019). Thus, entrepreneurial intention can be understood as the foundation of planned, directed entrepreneurial behavior that has the potential to drive economic development.

## **Innovation**

Within the framework of the Theory of Planned Behavior (TPB) proposed by Ajzen (1991), innovation is seen as the result of intentions formed through positive attitudes toward innovative behavior, supportive subjective norms, and perceived control over the ability to





innovate. TPB explains that innovative behavior will emerge when individuals have attitudes that support change, feel that their environment values innovation, and believe in their own capacity. Liu et al. (2021) emphasize that innovative intentions are influenced by educational experiences and environmental support, while Xu et al. (2022) assert that the tendency to innovate is closely related to attitudes toward innovation and self-control over creativity and problem solving. Furthermore, innovation is understood as a creative thinking process that produces new solutions, original ideas, or different approaches in facing entrepreneurial challenges. Xu et al. (2022) refer to innovation as the ability of individuals or organizations to develop new ideas that can be applied practically, while Zhang et al. (2023) emphasize the exploration of new ideas and the implementation of new technologies or strategies to improve efficiency and product differentiation. In line with this, Liu et al. (2021) assess innovation as an important element in entrepreneurship because it reflects the courage to leave conventional patterns behind in favor of more productive and adaptive ways of working.

The benefits of innovation in entrepreneurship are not only related to the creation of new products, but also to its role in building sustainable competitive advantage (Saraswati & Sudamiatin, 2024). Xu et al. (2022) mention that innovation drives business efficiency and creates long-term growth opportunities, while Zhang et al. (2023) emphasize that innovation makes entrepreneurs more adaptive to technological developments and consumer preferences. Liu et al. (2021) add that innovation creates added value that differentiates products from competitors, thereby strengthening the market position of the business. To measure the level of innovation, the indicators used include product, process, marketing, and organizational innovation. Lee et al. (2023) emphasize the importance of product innovation in the form of development and quality improvement, Zhou et al. (2022) highlight process innovation as an effort to improve production methods, and Chen et al. (2021) explain that marketing innovation includes new promotion and distribution strategies. Organizational innovation includes changes in structure and managerial practices that support the company's flexibility in responding to change (Chen et al., 2021). Thus, innovation can be measured comprehensively and understood as a key strength in supporting growth, sustainability, and entrepreneurial success.

## Digital Literacy

Within the framework of the Theory of Planned Behavior (TPB) developed by Ajzen (1991), digital literacy can be positioned as a factor that influences entrepreneurial intention and behavior, particularly in a digital context. TPB explains that individual intentions are influenced by attitudes toward behavior, subjective norms, and perceived behavioral control. Digital literacy strengthens perceived control by providing the technological skills and





knowledge necessary to adapt and innovate.

Nurwahyuni et al. (2022) emphasize that digital literacy increases confidence and ability in using digital technology, thereby encouraging entrepreneurial intention. Utami et al. (2025) add that digital literacy not only shapes positive attitudes toward the use of technology but also influences social norms through environmental expectations that digital mastery is essential. Conceptually, digital literacy includes skills in understanding, accessing, evaluating, and critically processing digital information (Agustina & Budimansyah, 2020; Priatmoko & Suryani, 2022). It is also understood as the capacity to use technology intelligently, ethically, and productively (Nasution & Ulfah, 2021), as well as the readiness to face rapidly changing information challenges while maintaining digital ethics (Fadillah & Asyhari, 2021; Nurwahyuni et al., 2022). Thus, digital literacy is not only a technical skill, but also an important foundation in building adaptability, ethics, and the utilization of technology-based entrepreneurial opportunities.

In line with this, the goal of digital literacy is to improve individuals' ability to access, understand, evaluate, and utilize digital information ethically in their daily activities. Digital literacy also has dimensions of critical thinking, digital security, and communication and collaboration skills through digital media (Ip, 2024). This plays an important role in shaping a young generation that is adaptive, creative, and innovative in digital entrepreneurship (Utami et al., 2025). Digital literacy provides tangible benefits in the form of increased business efficiency, strengthening a resilient entrepreneurial mindset, and expanding access to information and collaboration through digital platforms (Onwubuya & Odogwu, 2023). Its strategic role makes digital literacy a key foundation in facing the Industrial Revolution 4.0 and Society 5.0 (Utami et al., 2025), so that it is no longer an additional skill, but an essential requirement for competitiveness and success in modern entrepreneurship. To measure the level of digital literacy, the indicators used include the ability to search for, evaluate, and use digital information, technical skills on digital devices, understanding of security and data protection, and digital communication ethics (Inanna et al., 2023). Utami et al. (2025) emphasize that security and data protection indicators are crucial aspects for Generation Z in optimizing digital business opportunities. With these indicators, digital literacy can be comprehensively assessed as a core competency that supports technology-based entrepreneurial intent and behavior.

## The Influence of Entrepreneurial Education on Entrepreneurial Intention

Entrepreneurship education plays an important role in shaping the mindset, attitudes, and skills needed to start and manage a business, by providing knowledge, experience, and training that strengthen self-efficacy and perceptions of entrepreneurship (Wang et al., 2021).





Through collaborative approaches, hands-on practice, and project-based learning, entrepreneurship education can foster motivation, a positive attitude toward risk, and the belief that entrepreneurship is a realistic career choice (Kusumojanto et al., 2021). Recent studies also confirm that this education not only equips students with an understanding of business processes, but also with skills in innovation, risk management, and market opportunity utilization that significantly increase entrepreneurial intention (Yahya et al., 2023). Thus, entrepreneurship education contributes positively to entrepreneurial intention by strengthening the cognitive, affective, and practical aspects that support an individual's readiness to become an entrepreneur

H1: Entrepreneurial Education Influences Entrepreneurial Intention

## **The Influence of Entrepreneurial Education on Innovation**

Entrepreneurship education plays an important role in fostering creativity and innovation by directing students toward project-based learning, problem solving, and understanding market dynamics and technological developments (Jiang et al., 2022). This approach encourages the emergence of new ideas, creative solutions, and sustainable innovation in products, processes, and business models through the interaction between entrepreneurial experiences and a stimulating learning environment (Emami & Dimov, 2017). Furthermore, entrepreneurial education builds an experimental and adaptive mindset, making individuals more open to risk and change, which are key to creating innovation (Yahya et al., 2023). Thus, it can be concluded that entrepreneurial education contributes positively to innovation by strengthening creative capacity, the courage to try new things, and the ability to respond to challenges in a solution-oriented manner.

H2: Entrepreneurial Education and Innovation

## **The Influence of Entrepreneurial Education on Digital Literacy**

Entrepreneurial education today is developing not only to instill an entrepreneurial spirit, but also to improve digital skills that are highly relevant in the era of industry 4.0. Ganefri et al. (2024) emphasize that digital literacy is an important part of entrepreneurial education because modern business activities are inseparable from digital technology, from business plan preparation to online marketing. Utami et al. (2025) add that through digital business simulations, the use of social media, and e-commerce, students are trained to access, process, and utilize digital information critically and creatively. In line with this, Mugiono et al. (2020) emphasize that digital literacy instilled in entrepreneurship education not only supports learning





but also prepares the younger generation to face the challenges of digital business by understanding digital productivity, security, and ethics. Thus, entrepreneurship education contributes significantly to improving digital literacy while strengthening individuals' readiness to face technology-based business transformation.

H3: Entrepreneurial Education Influences Digital Literacy

### **The Influence of Innovation on Entrepreneurial Intention**

Innovation has proven to be a fundamental factor that drives entrepreneurial intention, especially for young people living in a dynamic and challenging business ecosystem. Paiva et al. (2023) explain that innovation triggers new ideas and creative perspectives in seeing business opportunities, thereby increasing individuals' self-confidence because they have a competitive advantage. Noreña-Chavez (2020) adds that innovative behavior acts as an important mediator between self-efficacy (entrepreneurial self-efficacy) and the intention to start a business, because innovation fosters internal motivation and positive perceptions of the chances of success. In line with this, Tapia Mejia and Pico Gonzalez (2023) emphasize that creativity and disruptive innovation are highly relevant in shaping entrepreneurial intentions in the digital age. Furthermore, Jiang et al. (2022) found that students with high levels of innovation have stronger entrepreneurial intentions because they feel prepared to face risks and uncertainties. Thus, innovation is not merely the result of a business process, but also a foundation that strengthens self-confidence, vision, and future orientation in building entrepreneurial intentions.

H4: Innovation Influences Entrepreneurial Intention

### **The Influence of Digital Literacy on Entrepreneurial Intention**

Digital literacy is a crucial factor in shaping entrepreneurial intention in the digital era, as this ability allows individuals to access, evaluate, and utilize technology effectively in business activities. Ip (2024) emphasizes that individuals with high digital literacy find it easier to discover business opportunities, manage marketing, and develop businesses through digital platforms. The findings of Inanna et al. (2023) also show that digital literacy contributes significantly to entrepreneurial intention, especially among millennials who are familiar with technology. In line with this, Suryani and Chaniago (2023) explain that students with good digital skills have a positive view of digital entrepreneurship because they feel competent to compete in the global market. In fact, Ganefri et al. (2024) emphasize that digital literacy not only improves technical aspects but also encourages creativity, confidence, and readiness to take concrete steps in starting a business. Thus, the higher the digital literacy, the stronger the individual's intention to



become an entrepreneur in the face of a technology-based economy.

H5: Digital Literacy Affects Entrepreneurial Intention

## **The Influence of Entrepreneurial Education on Entrepreneurial Intention Through Innovation**

Entrepreneurial education not only shapes entrepreneurial intention directly, but also fosters innovative abilities that serve as a bridge to entrepreneurial intention. Jiang et al. (2022) emphasize that through entrepreneurial education, individuals acquire business strategies, problem-solving skills, and innovative product development that increase their confidence to start a business. The innovation that arises from this process becomes the result of internalizing entrepreneurial values as well as reinforcing entrepreneurial intention. Paiva et al. (2023) show that formal education encourages the creation of creative solutions and new products, which fosters a sense of competence and strengthens entrepreneurial intention. Yahya et al. (2023) also found that students with an understanding of entrepreneurship are more likely to produce applicable creative ideas, making them more confident in choosing the entrepreneurial path. In line with this, Noreña-Chavez (2020) emphasizes that innovative behavior is a link between self-efficacy and the intention to do business. Thus, the influence of entrepreneurial education on entrepreneurial intention largely works through the strengthening of innovation as a mediating variable.

H6: Entrepreneurial Education Influences Entrepreneurial Intention Through Innovation

## **The Influence of Entrepreneurial Education on Entrepreneurial Intention Through Digital Literacy**

Entrepreneurship education plays an important role in shaping students' entrepreneurial intentions. Entrepreneurship education in the digital era not only instills business fundamentals but also equips students with digital skills that are crucial for modern entrepreneurs. Utami et al. (2025) assert that digital-based entrepreneurship education can improve digital literacy, which serves as an important bridge to entrepreneurial intention. Ip (2024) states that the higher a person's digital literacy, the greater their ability to access and utilize technology to support their business. Inanna et al. (2023) even found that digital literacy mediates the influence of entrepreneurship education on entrepreneurial intention, because students with digital skills are more confident in designing businesses. In line with this, Ganefri et al. (2024) add that digital literacy helps the younger generation to be more adaptive to technological changes, making them more creative and realistic in seeing business opportunities. Thus, digital literacy plays a strategic role as a mediating variable that strengthens the contribution of entrepreneurial

education to entrepreneurial intention.

H7: Entrepreneurial Education Influences Entrepreneurial Intention Through Digital Literacy

## METHOD

This study uses a quantitative approach. The type of research is descriptive explanatory. The research design used can be explained as follows:

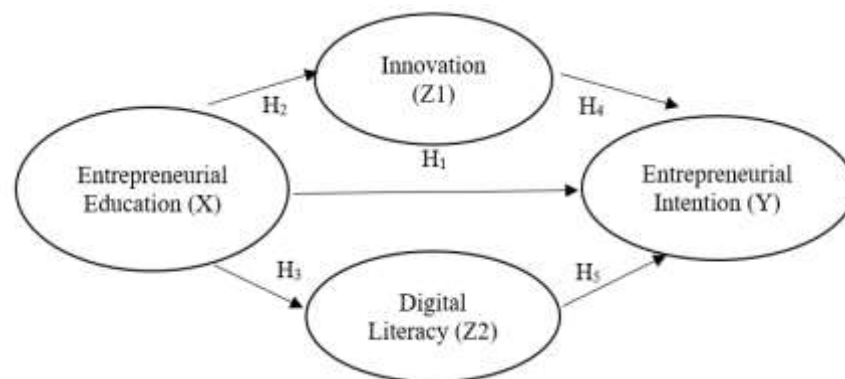


**Figure 1. Research Design**  
**Source: Processed by the researcher (2025)**

The research location was at public high schools in Mojokerto Regency, with a population consisting of all students from SMAN 1 Sooko, SMAN 1 Bangsal, SMAN 1 Dawar Balndong, SMAN 1 Gedeg, SMAN 1 Gondang, SMAN 1 Kutorejo, SMAN 1 Mojosari, SMAN 1 Ngoro, SMAN 1 Pacet, MSAN 1 Puri, and SMAN 1 Trawas who took entrepreneurship education courses, with a total population of 4021 students. The research sample used probability sampling techniques. The type used in this study was Proportional Random Sampling, which resulted in a sample of 351 students.

In this research process, the instrument used was a questionnaire. Data collection was in the form of a questionnaire using a Likert scale. Data collection in this study used primary data sources. The analysis technique used Structural Equation Modeling Partial Least Squares (SEM-PLS). Hypothesis testing ( $\beta$ ,  $\gamma$ , dan  $\lambda$ ) in this study was conducted using the Bootstrap resampling method.

## RESULT AND DISCUSSION

### Respondent Data Description

The research subjects were high school students in Mojokerto Regency. The sample consisted of 351 students from grade XII, including 111 males and 240 females, with details as follows: SMAN 1 Bangsal had 37 students, SMAN 1 Dawar Blandong had 28 students, SMAN 1 Gedeg had 37 students, SMAN 1 Godang had 27 students, SMAN 1 Kutorejo with 31 students, MSAN 1 Mojosari with 38 students, SMAN 1 Ngoro with 28 students, SMAN 1 Pacet with 27 students, SMAN 1 Puri with 38 students, SMAN 1 Sooko with 37 students, and SMAN 1 Trawas with 23 students. The results of the average calculation of the entrepreneurial education variable were classified as good. The innovation variable was classified as good. The digital literacy variable was classified as good. The entrepreneurial intention variable was classified as good.

Next, SEM-PLS testing was conducted with an outer model and inner model. The measurement model, also known as the outer model, aims to assess the validity and reliability of the model. The data analysis technique using SmartPLS to assess the outer model is through Convergent Validity, Discriminant Validity, and Composite Reliability.

**Table 1 Results of the Outer Model Smart PLS 3.0 Loading Factor Test**

| Variable                      | DL (Z2) | EE (X) | EI (Y) | IN (Z1) |
|-------------------------------|---------|--------|--------|---------|
| Digital Literacy Z2.1         | 0,769   |        | 0.778  |         |
| Digital Literacy Z2.2         | 0,893   |        | 0.797  |         |
| Digital Literacy Z2.3         | 0,904   |        | 0,701  |         |
| Digital Literacy Z2.4         | 0,888   |        | 0,766  |         |
| Entrepreneurial Education X.1 |         | 0,805  | 0,800  |         |
| Entrepreneurial Education X.2 |         | 0,812  | 0,808  |         |
| Entrepreneurial Education X.3 |         | 0,837  |        |         |
| Entrepreneurial Education X.4 |         | 0,793  |        |         |
| Entrepreneurial Education X.5 |         | 0,752  |        |         |
| Entrepreneurial Education X.6 |         | 0,814  |        |         |
| Entrepreneurial Intention Y.1 |         |        |        |         |
| Entrepreneurial Intention Y.2 |         |        |        |         |
| Entrepreneurial Intention Y.3 |         |        |        |         |
| Entrepreneurial Intention Y.4 |         |        |        |         |
| Entrepreneurial Intention Y.5 |         |        |        |         |
| Entrepreneurial Intention Y.6 |         |        |        |         |
| Innovation Z1.1               |         |        |        | 0.717   |

|                                       |  |  |  |       |
|---------------------------------------|--|--|--|-------|
| Innovation Z1.2                       |  |  |  | 0.809 |
| Innovation Z1.3                       |  |  |  | 0.843 |
| Innovation Z1.4                       |  |  |  | 0,785 |
| Source: processed by researcher, 2025 |  |  |  |       |

Based on Table 1, it can be concluded that overall, the research variable indicators have an outer loading >0.7. Therefore, all indicators are declared valid.

Source: processed by researcher, 2025

| Tabel 2: Nilai Validitas Diskriminan (Cross Loading) |         |       |        |         |
|------------------------------------------------------|---------|-------|--------|---------|
| Variable                                             | DL (Z2) | EE(X) | EI (Y) | IN (Z1) |
| Digital Literacy Z2.1                                | 0,769   | 0,344 | 0,465  | 0,404   |
| Digital Literacy Z2.2                                | 0,893   | 0,375 | 0,462  | 0,373   |
| Digital Literacy Z2.3                                | 0,904   | 0,380 | 0,484  | 0,376   |
| Digital Literacy Z2.4                                | 0,888   | 0,394 | 0,531  | 0,355   |
| Entrepreneurial Education X.1                        | 0,378   | 0,805 | 0,530  | 0,408   |
| Entrepreneurial Education X.2                        | 0,341   | 0,812 | 0,472  | 0,360   |
| Entrepreneurial Education X.3                        | 0,339   | 0,837 | 0,513  | 0,362   |
| Entrepreneurial Education X.4                        | 0,289   | 0,793 | 0,474  | 0,320   |
| Entrepreneurial Education X.5                        | 0,350   | 0,752 | 0,458  | 0,367   |
| Entrepreneurial Education X.6                        | 0,373   | 0,814 | 0,701  | 0,439   |
| Entrepreneurial Intention Y.1                        | 0,542   | 0,446 | 0,778  | 0,436   |
| Entrepreneurial Intention Y.2                        | 0,436   | 0,454 | 0,797  | 0,446   |
| Entrepreneurial Intention Y.3                        | 0,373   | 0,814 | 0,701  | 0,439   |
| Entrepreneurial Intention Y.4                        | 0,414   | 0,422 | 0,766  | 0,383   |
| Entrepreneurial Intention Y.5                        | 0,431   | 0,399 | 0,800  | 0,341   |
| Entrepreneurial Intention Y.6                        | 0,414   | 0,402 | 0,808  | 0,358   |
| Innovation Z1.1                                      | 0,333   | 0,333 | 0,383  | 0,717   |
| Innovation Z1.2                                      | 0,346   | 0,369 | 0,379  | 0,809   |
| Innovation Z1.3                                      | 0,317   | 0,434 | 0,460  | 0,843   |
| Innovation Z1.4                                      | 0,383   | 0,351 | 0,434  | 0,785   |

Based on Table 2, it can be seen that the cross-loading indicators of the latent variables have greater cross-loading values than the other variables. Therefore, it can be concluded that

the latent variables have good discriminant validity.

**Table 3. Composite reliability values**

|                               | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|-------------------------------|------------------|-------|-----------------------|----------------------------------|
| Digital Literacy (Z2)         | 0,886            | 0,890 | 0,922                 | 0,748                            |
| Eentreprenurial Education (X) | 0,890            | 0,897 | 0,916                 | 0,644                            |
| Entrepreneurial Intention (Y) | 0,869            | 0,874 | 0,901                 | 0,602                            |
| Innovation (Z1)               | 0,798            | 0,806 | 0,869                 | 0,624                            |

Source: processed by researcher, 2025

The AVE values for the four constructs are greater than 0.5, so it can be concluded that the model measurement evaluation has good discriminant validity. In addition to the construct validity test, a construct reliability test was also conducted, measured using the criteria test, namely composite reliability and Cronbach's alpha from the indicator block measuring the construct. A construct is considered reliable if the composite reliability and Cronbach's alpha values are above 0.70. Therefore, it can be concluded that the construct has good reliability.

After evaluating the measurement model or outer model, the next step is to evaluate the inner model, also known as the structural model evaluation. The structural model testing procedure includes: 1) testing collinearity; 2) testing the level of R-Square or R<sup>2</sup>; 4) testing the f<sup>2</sup> effect; and 5) testing the relevant prediction of Q<sup>2</sup>.

**Table 4. VIF Measurement Results**

|                               | Digital Literacy (Z2) | Eentreprenurial Education (X) | Entrepreneurial Intention (Y) | Innovation (Z1) |
|-------------------------------|-----------------------|-------------------------------|-------------------------------|-----------------|
| Digital Literacy (Z2)         |                       |                               | 1,343                         |                 |
| Eentreprenurial Education (X) | 1,000                 |                               | 1,404                         | 1,000           |
| Entrepreneurial Intention (Y) |                       |                               |                               |                 |
| Innovation (Z1)               |                       |                               | 1,407                         |                 |

Source: processed by researcher, 2025

Based on the VIF measurement results in Table 5, it can be seen that all research variables have a VIF value < 5. This means that the structural model can be considered good or that there is no multicollinearity.

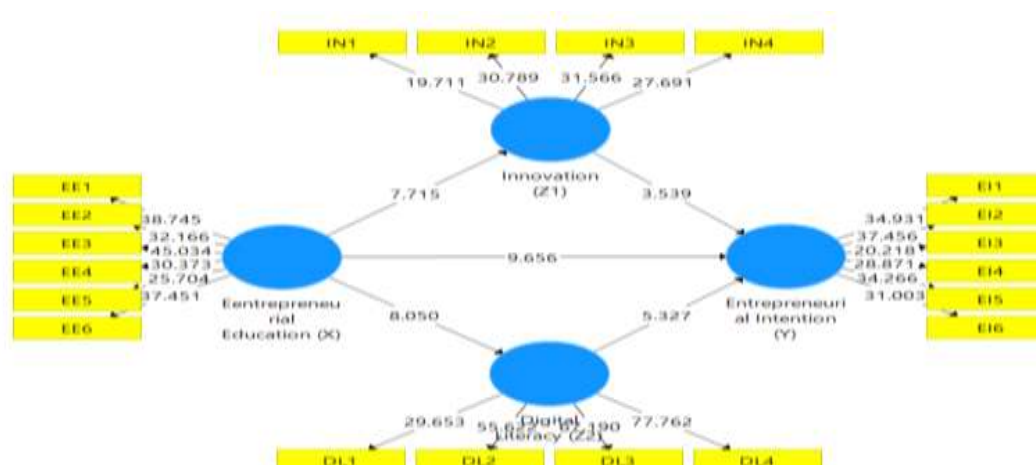
**Table 5. R-Square**

| Variabel                      | R-Square | Adjusted R-Square |
|-------------------------------|----------|-------------------|
| Digital Literacy (Z2)         | 0,187    | 0,185             |
| Innovation (Z1)               | 0,224    | 0,222             |
| Entrepreneurial Intention (Y) | 0,560    | 0,557             |

Source: processed by researcher, 2025

Based on the data in Table 5, it can be seen that the R-Square value of the Entrepreneurial Intention variable is 0.560 or equivalent to 56.0%. This shows that the variables of Digital Literacy, Innovation, and Entrepreneurial Education contribute to the influence of Entrepreneurial Intention by 56.0%, while the remaining 44.0% is influenced by other variables not explained in this study.

Based on the predictive relevance (Q2) calculation results, the values are 0.035, 0.050, and 0.314. In this research model, the endogenous latent variables have a predictive relevance (Q2) value that is greater than 0 (zero), so that the exogenous latent variables as explanatory variables are able to predict the endogenous variables, namely Y (Entrepreneurial Intention) and Z1 (innovation) and Z2 (digital literacy), or in other words, prove that this model is considered to have good predictive relevance.


**Figure 2. Bootstrapping Results**

Source: Processed primary data, 2025

Next, hypothesis testing was conducted using t-statistical analysis or t-test (calculated t must be  $\geq 1.96$ ), and the P-value (probability) must be less than 0.05. If the research results meet

these requirements, then the proposed research hypothesis can be declared accepted. The results of hypothesis testing in this study are described as follows:

**Table 6. Hypothesis Testing Result**

| Variable                                                                                   | B     | t-value | P-values | Decision       |
|--------------------------------------------------------------------------------------------|-------|---------|----------|----------------|
| Digital Literacy (Z2) > Entrepreneurial Intention (Y) (H5)                                 | 0,285 | 5,327   | 0,000    | H0 is accepted |
| Entrepreneurial Education (X) > Digital Literacy (Z2) (H3)                                 | 0,433 | 8,050   | 0,000    | H0 is accepted |
| Entrepreneurial Education (X) > Entrepreneurial Intention (Y) (H1)                         | 0,453 | 9,656   | 0,000    | H0 is accepted |
| Entrepreneurial Education (X) > Innovation (Z1) (H2)                                       | 0,473 | 7,715   | 0,000    | H0 is accepted |
| Innovation (Z1) > Entrepreneurial Intention (Y) (H4)                                       | 0,188 | 3,539   | 0,000    | H0 is accepted |
| Entrepreneurial Education (X) > Innovation (Z1) > Entrepreneurial Intention (Y) (H6)       | 0,089 | 3,494   | 0,001    | H0 is accepted |
| Entrepreneurial Education (X) > Digital Literacy (Z2) > Entrepreneurial Intention (Y) (H7) | 0,123 | 4,850   | 0,000    | H0 is accepted |

Source: processed by researcher, 2025

Table 6 shows that there is a positive and significant effect of Entrepreneurial Education (X) on Entrepreneurial Intention (Y), where the original sample (O) value is significantly positive at 0.453, indicating that the relationship between variables X and Y is accepted with a T-statistics value of 9.656 and a P-value of 0.000. Therefore, in this study, H1 is accepted. There is a positive and significant effect of Entrepreneurial Education (X) on Innovation (Z1), where the original sample (O) value is significantly positive at 0.473, indicating that the relationship between variables X and Z is accepted with a T-statistic value of 7.715 and a P-value of 0.000. Thus, in this study, H2 is accepted.

There is a direct positive and significant effect of Entrepreneurial Education (X) on Digital Literacy (Z2), where the original sample (O) value is positive at 0.433, indicating that the

relationship between variables X and Z is positive and significant with a T-statistics value of 8.050 and a P-value of 0.000. Thus, in this study, H3 is accepted.

There is a direct, positive, and significant effect between the Innovation (Z1) variable and Entrepreneurial Intention (Y), where the original sample (O) value is positive at 0.188, indicating that the relationship between variables X and Y is positive and significant with a T-statistic value of 3.539 and a P-value of 0.000. Thus, in this study, H4 is accepted.

There is a direct, positive, and significant effect of Digital Literacy (Z2) on Entrepreneurial Intention (Y), where the original sample (O) value is 0.285, indicating that the relationship between variables Z and Y is positive and significant with a T-statistic value of 5.327 and a P-value of 0.000. Thus, in this study, H5 is accepted.

There is a direct, positive, and significant effect of Entrepreneurial Education (X) on Entrepreneurial Intention (Y) through Innovation (Z1), where the Original Sample value is positive at 0.089, indicating that the relationship between X, Y, and Z1 is positive and significant with a T-statistic value of 3.494 and a P-value of 0.001. Therefore, in this study, H6 is accepted.

There is a direct, positive, and significant influence of Entrepreneurial Education (X) on Entrepreneurial Intention (Y) through Digital Literacy (Z2), where the Original Sample value is positive at 0.123, indicating that the relationship between X, Y, and Z2 is positive and significant with a T statistics value of 4.850 and a P value of 0.000. Therefore, in this study, H7 is accepted.

## DISCUSSION

### The Influence of Entrepreneurial Education on Entrepreneurial Intention

The results of the study show that various practice-based entrepreneurship programs run by schools, such as simple business projects, cooperation with local MSMEs, and digital marketing training. These activities enable students to not only understand theory but also gain direct experience in the business world. In addition, student involvement in entrepreneurial learning and family backgrounds that are heavily involved in small businesses further strengthen the relevance of entrepreneurial education to real life. A supportive school environment and the active role of teachers further encourage students to develop an interest in entrepreneurship as a future career choice. These findings are in line with the research by Wang et al. (2021), which confirms that entrepreneurship education increases knowledge and confidence to start a business, and Li and Wu (2019), which emphasizes the importance of project-based learning in fostering entrepreneurial motivation. Yousaf et al. (2020) also showed that entrepreneurship education influences entrepreneurial intention through increased self-efficacy. Theoretically, these results can be explained through the Theory of Planned Behavior (Ajzen, 1991), in which entrepreneurship



education shapes positive attitudes toward entrepreneurship, fosters social support, and increases perceived control through practical skills. Thus, the results of this study empirically and theoretically confirm that entrepreneurship education at the secondary school level plays a strategic role in shaping a young generation with a strong intention to become entrepreneurs in the digital era.

## **The Influence of Entrepreneurial Education on Innovation**

The results of the study show that entrepreneurial education in this school not only emphasizes theoretical aspects but also practical aspects through business projects, business simulations, e-commerce training, and social media-based marketing. These activities encourage students to think creatively, generate new ideas, and develop product innovations and simple business strategies. A supportive school environment and a family background with small businesses further strengthen students' understanding of the importance of innovation to increase competitiveness. Thus, the acceptance of this hypothesis reflects the role of entrepreneurship education in fostering students' innovative abilities.

These findings are consistent with the research by Jiang et al. (2022), which confirms that the quality of entrepreneurship education is closely related to creative and innovative skills. Paiva et al. (2023) add that entrepreneurship education provides a practical foundation for sustainable innovation, while Tapia Mejia and Pico Gonzalez (2023) highlight that disruptive creativity arises from entrepreneurial experiences supported by the educational environment. Theoretically, these results can be explained through the Theory of Planned Behavior (Ajzen, 1991), in which positive attitudes toward innovation, social norm support, and perceived control through skills acquired from entrepreneurial education encourage innovative behavior. Therefore, the findings of this study reinforce that innovation is one of the strategic outcomes of entrepreneurial education that is relevant to preparing students to face entrepreneurial challenges in the digital age.

## **The Influence of Entrepreneurial Education on Digital Literacy**

The results of the study show that students gain learning experiences integrated with digital technology through the use of e-learning platforms, online business simulations, and digital application-based marketing training. This learning changes the orientation of students in using technology, which was previously more dominant for entertainment or social media, to become more productive, such as market research, digital content creation, and online branding strategies. With the support of school facilities such as computers, internet access, and digital training, students not only understand the concept of entrepreneurship but are also able to





process technology-based information to support business activities. This condition shows that entrepreneurial education plays a strategic role in strengthening students' digital literacy while preparing them to face the challenges of modern entrepreneurship.

This finding is consistent with Ip's (2024) research, which emphasizes that digital literacy enables individuals to utilize technology effectively in entrepreneurship. Inanna et al. (2023) also assert that digital literacy contributes to the formation of entrepreneurial intent among the younger generation, while Suryani and Chaniago (2023) found that students with good digital skills have a more positive view of technology-based entrepreneurship. Furthermore, Ganefri et al. (2024) stated that digital literacy not only strengthens creativity but also increases confidence in business decision-making. Theoretically, these results can be explained through the Theory of Planned Behavior (Ajzen, 1991), in which entrepreneurial education strengthens students' perceived behavioral control through the mastery of digital skills. When students feel capable of mastering technology, a positive attitude toward digital utilization is formed, social norms are supportive, and ultimately, entrepreneurial intention is encouraged. Thus, these findings confirm that digital literacy is one of the important outcomes of entrepreneurship education that is relevant to the needs of the digital era.

## **The Influence of Innovation on Entrepreneurial Intention**

The results show that students at SMAN Mojokerto Regency who are able to generate creative ideas and new solutions have a greater tendency to intend to become entrepreneurs. Innovations that emerge in the form of product development, digital marketing strategies, and simple business process efficiencies make students more confident about the chances of success of their business ventures. In adolescence, creativity and the courage to try new things are at their peak, so the ability to innovate allows students to see opportunities from different perspectives, take advantage of local trends, and use social media for promotion. This condition shows that the higher the level of student innovation, the greater their intention to choose entrepreneurship as a career path.

These findings are consistent with the research by Paiva et al. (2023), which states that innovation triggers new ideas that open up business opportunities, and Noreña-Chavez (2020), which emphasizes that innovative behavior is an important intermediary between self-confidence and entrepreneurial intent. Tapia Mejia and Pico Gonzalez (2023) add that creativity and disruptive innovation play an important role in shaping entrepreneurial intention in the digital age, while Jiang et al. (2022) find that individuals with high levels of innovation





are better prepared to deal with business uncertainty. Theoretically, these results can be explained through the Theory of Planned Behavior (Ajzen, 1991), in which innovation shapes positive attitudes toward entrepreneurship, increases perceived behavioral control through a sense of being able to face challenges, and is reinforced by subjective norms from a school environment that supports creativity. Thus, innovation is not only an outcome of entrepreneurship learning, but also a psychological and practical foundation that strengthens students' intentions to enter the business world.

### **The Influence of Digital Literacy on Entrepreneurial Intention**

The results of the study show that high school students in Mojokerto Regency who have higher digital literacy skills tend to have a greater intention to become entrepreneurs. Mastery of technology, such as social media for promotion, e-commerce platforms, and digital financial management applications, gives them the confidence that doing business in the digital era is realistic. This condition is relevant to the characteristics of students as digital natives, who are accustomed to using technology on a daily basis. When digital skills are directed towards entrepreneurship, they are able to see broader business opportunities, understand consumer trends, and be more confident in designing a business.

These findings are in line with Ip's (2024) research, which states that digital literacy enables individuals to utilize technology effectively in entrepreneurship, as well as Inanna et al. (2023), who emphasize its contribution to entrepreneurial intention among the younger generation. Suryani and Chaniago (2023) also show that students with good digital literacy have a positive view of digital entrepreneurship because they feel capable of competing in the global market, while Ganefri et al. (2024) add that digital literacy encourages creativity and confidence in business decision-making. Theoretically, these findings are consistent with the Theory of Planned Behavior (Ajzen, 1991), in which digital literacy shapes positive attitudes toward entrepreneurship, increases perceived behavioral control through belief in technological capabilities, and is reinforced by subjective norms from the school and social environment. Thus, digital literacy functions not merely as an additional skill, but as a key foundation that strengthens students' intention to become entrepreneurs in the technological era.

### **The Influence of Entrepreneurial Education on Entrepreneurial Intention Through Innovation**

The results show that the entrepreneurial education implemented at SMAN Mojokerto Regency not only equips students with business knowledge but also encourages creativity, product development, and solution-oriented thinking. Through project-based learning,





entrepreneurial competitions, and business simulations, students become accustomed to generating innovative ideas, even on a simple scale. This innovation then strengthens their confidence, makes them more optimistic about business opportunities, and bridges entrepreneurial education with the formation of entrepreneurial intention.

These findings are consistent with Paiva et al. (2023), who assert that entrepreneurship education encourages the creation of creative solutions that impact entrepreneurial intention, and Jiang et al. (2022), who found that the innovative capacity of formal education is related to entrepreneurial intention. Yahya et al. (2023) also add that entrepreneurship education effectively shapes an experimental mindset that encourages innovation. Theoretically, these results are in line with the Theory of Planned Behavior (Ajzen, 1991), in which innovation strengthens attitudes toward behavior through positive attitudes toward entrepreneurship, increases perceived behavioral control through confidence in creating something new, and is supported by subjective norms from the school environment. Thus, innovation plays an important mediating role that makes entrepreneurship education more effective in shaping entrepreneurial intention among students at SMAN Mojokerto Regency.

## **The Influence of Entrepreneurial Education on Entrepreneurial Intention Through Digital Literacy**

The results show that Mojokerto Regency SMAN students who are accustomed to using social media and digital platforms are then guided through entrepreneurial learning to use them productively, for example in promotion, transactions, or online business development. The integration of entrepreneurial knowledge with digital skills makes it easier for students to see technology-based business opportunities, fostering self-confidence and the belief that a business can be run without large capital. Thus, digital literacy serves as a bridge connecting the entrepreneurial education process with the formation of entrepreneurial intention.

These findings are consistent with Abdullah et al. (2023), who assert that digital literacy strengthens the influence of entrepreneurship education on entrepreneurial intention, and Chen et al. (2022), who show that mastery of digital technology increases confidence in developing innovation-based businesses. Chatterjee et al. (2024) also add that digital literacy is not merely a technical skill, but a strategic factor that mediates the relationship between entrepreneurship education and entrepreneurial intention. Theoretically, these results can be explained through the Theory of Planned Behavior (Ajzen, 1991), in which digital literacy strengthens perceived behavioral control, forms positive attitudes toward technology-based entrepreneurship, and increases subjective norms from peer groups. Thus, the acceptance of





the seventh hypothesis confirms that digital literacy is a significant mediating mechanism that makes entrepreneurship education more effective in building students' entrepreneurial intention at SMAN Kabupaten Mojokerto.

## CONCLUSION

After conducting the research, it can be concluded that (1) The results show that there is a positive and significant effect of entrepreneurial education on entrepreneurial intention, (2) The results show that there is a positive and significant effect of entrepreneurial education on innovation, (3) The results show that there is a direct positive and significant effect of entrepreneurial education on digital literacy. (4) The results show that there is a direct, positive, and significant effect between the variable of innovation and entrepreneurial intention, (5) The results show that there is a direct, positive, and significant effect of digital literacy on entrepreneurial intention, (6) The results show that there is an effect of entrepreneurial education on entrepreneurial intention through innovation, (7) The results show that there is an effect of entrepreneurial education on entrepreneurial intention through digital literacy. The following recommendations are suggested: Schools are expected to strengthen the implementation of entrepreneurship education by integrating digital literacy and innovation in practical ways, for example through technology-based projects, digital business incubation, and collaboration with MSMEs and industry. Teachers should also be given digital literacy training so that they are able to facilitate learning that is relevant to modern business needs. In addition, schools need to prepare adequate digital infrastructure so that students are better prepared to face the challenges of entrepreneurship in the era of industry 4.0. Future research should expand the sample coverage to schools in different regions so that the research results are more generalizable, and consider using a longitudinal design to see the long-term impact of entrepreneurship education.

## REFERENCES

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Al-Mamary, Y. H. (2025). Factors shaping green entrepreneurial intentions towards green innovation: An integrated model. *Future Business Journal*, 11–21. <https://doi.org/10.1186/s43093-025-00443-8>
- Badan Pusat Statistik. (2023). *Keadaan ketenagakerjaan Indonesia Agustus 2023*. <https://www.bps.go.id>





- Bux, S., & Van Vuuren, J. (2019). The effect of entrepreneurship education programmes on the development of self-efficacy, entrepreneurial intention and predictions for entrepreneurial activity. *Acta Commercii*, 19(2), a615. <https://doi.org/10.4102/ac.v19i2.615>
- Civelek, M., et al. (2025). Cross-country differences in the role of innovation performance in the relationship between entrepreneurial intention and access to finance. *International Entrepreneurship and Management Journal*, 21–75. <https://doi.org/10.1007/s11365-025-01092-7>
- Emami, A., & Dimov, D. (2017). Degree of innovation and the entrepreneurs' intention to create value: A comparative study of experienced and novice entrepreneurs. *Eurasian Business Review*, 7(2), 161–182. <https://doi.org/10.1007/s40821-016-0068-y>
- Ganefri, Kamdi, W., Makky, M., Hidayat, H., & Rahmawati, Y. (2024). Entrepreneurship education and entrepreneurial intention among university students: The roles of entrepreneurial mindset, digital literacy, and self-efficacy. *Journal of Social Studies Education Research*, 15(4), 85–134
- Inanna, I., Rahmatullah, R., Dinar, M., Supatminingsih, T., Hasan, M., & Nurtrida, N. (2023). Influence of digital literacy and self-efficacy on entrepreneurial intention of millennial generation. *Quest Journals Journal of Research in Business and Management*, 11(5), 38–48
- Ip, C. Y. (2024). Effect of digital literacy on social entrepreneurial intentions and nascent behaviours among students and practitioners in mass communication. *Humanities and Social Sciences Communications*, 11:34. <https://doi.org/10.1057/s41599-023-02587-w>
- Islami, N. N. (2019). The effect of digital literacy toward entrepreneur behaviors through students' intention entrepreneurship on Economics Education Study Program at Jember. *OP Conf. Series: Earth and Environmental Science*. <https://doi.org/10.1088/1755-1315/243/1/012084>
- Jiang, Y., Pan, J., Liu, M., & Gao, X. (2022). The relationship between college students' entrepreneurial intention and the teaching quality of innovation and entrepreneurship practice. *International Journal of Emerging Technologies in Learning (IJET)*, 17(12), 120–132. <https://doi.org/10.3991/ijet.v17i12.32081>
- Kusumojanto, Djoko Dwi, Wibowo, A., Kustiandi, J., & Narmaditya, B. S. (2021). Do entrepreneurship education and environment promote students' entrepreneurial intention? the role of entrepreneurial attitude. *Cogent Education*, 8(1), 1948660. <https://doi.org/10.1080/2331186X.2021.1948660>





- Li, L., & Wu, D. (2019). Entrepreneurial education and students' entrepreneurial intention: Does team cooperation matter? *Journal of Global Entrepreneurship Research*, 9:35. <https://doi.org/10.1186/s40497-019-0157-3>
- Liu, X., Lin, C., Zhao, G., & Zhao, D. (2019). Research on the effects of entrepreneurial education and entrepreneurial self-efficacy on college students' entrepreneurial intention. *Front. Psychol*, 10:869. <https://doi.org/10.3389/fpsyg.2019.00869>
- Mei, H., Lee, C.-H., & Xiang, Y. (2020). Entrepreneurship education and students' entrepreneurial intention in higher education. *Educ. Sci.* 10, 257. <https://doi.org/10.3390/educsci10090257>
- Mugiono, M., Prajanti, S. D. W., & Wahyono, W. (2020). The effect of digital literacy and entrepreneurship education towards online entrepreneurship intention through online business learning and creativity at Marketing Department in Batang Regency. *JEE: Journal of Economic Education*, 10(1), 21–27
- Mulyono, L. A., Soetjipto, B. E., & Hermawan, A. (2023). The relationship between entrepreneurship education and digital literacy on entrepreneurial intention through self-efficacy as an intervening variable. *International Education Trend Issues*, 1(2)
- Munthe, R. A., Pratikto, H., & Restuningdiah, N. (2024). The Impact of Entrepreneurial Leadership, Business Environment, Digital Literacy, and Religiosity on Msme Performance: The Mediating Role of Innovative Behavior in Pekanbaru. *Journal of Ecohumanism*, 3(8), 139-149.
- Noreña-Chavez, D. (2020). The mediation effect of innovative behavior on the relationship between entrepreneurial self-efficacy and entrepreneurial intention. *Academy of Entrepreneurship Journal*, 26(3), 1–10
- Onwubuya, U. N., & Odogwu, I. C. (2023). Digital literacy and entrepreneurial intentions of business education students in tertiary institutions. *International Journal of Social Sciences and Management Research*, 9(6). <https://doi.org/10.56201/ijssmr.v9.no6.2023.pg101.112>
- Paiva, L. E. B., et al. (2023). Between sustainability and innovation: Relations with an entrepreneurial intention in Brazil and Spain. *Contaduría y Administración*, 69(1), 247–275. <http://dx.doi.org/10.22201/fca.24488410e.2024.5034>
- Paiva, L. E. B., Muñoz-Pascual, L., & Galende, J. (2024). Innovation and sustainability from the perspective of entrepreneurial intention: A cross-cultural approach. *European Business Review*, 36(2). <https://doi.org/10.1108/ET-07-2023-0279>
- Salim, A., Wardhana, E. T. D. R. W., & Restuningdiah, N. (2024). The influence of business





- incubators on interest in entrepreneurship with entrepreneurial attitudes as an intervening variable. *Journal of Applied Business, Taxation and Economics Research*, 3(4), 317-342.
- Saraswati, T. T., & Sudarmiatin, S. (2024). The Role Product Innovation on Business Performance Thought Competitive advantage as Mediation Variable. *International Journal of Business, Law, and Education*, 5(2), 1581-1592.
- Saraswati, T. T., Indrawati, A., & Wardana, L. W. (2021). Do Entrepreneurial Mindset and Perceived Behavioural Control Matter Entrepreneurial Intention?. *Jurnal Pendidikan Ekonomi Dan Bisnis (JPEB)*, 9(2), 131-145.
- Suryani, S., & Chaniago, H. (2023). Digital literacy and its impact on entrepreneurial intentions: Studies on vocational students. *International Journal Administration Business and Organization*, 4(2), 16–22
- Tapia Mejia, & Pico Gonzalez. (2023). Creativity and disruptive innovation in entrepreneurial intention: Mexico and Spain. *Revista Venezolana de Gerencia*, 28(104), 1535–1547. <https://doi.org/10.52080/rvgluz.28.104.10>
- Utami, B., Ibrahim, M. M., Violin, V., Subroto, D. E., Destari, D., & Astuti, E. D. (2025). The role of entrepreneurship education, attitude toward risk, and digital literacy on entrepreneurial intention among Gen Z. *Journal of Social Science and Business Studies*, 3(1), 407–411
- Wahya, M., et al. (2023). Contributions of innovation and entrepreneurship education to entrepreneurial intention with entrepreneurial motivation as an intervening variable in vocational high school students. *PINISI: Journal of Entrepreneurship Review*, 1(1), 42–53
- Wang, J., Murad, M., Fu, B., Tufail, M. S., Mirza, F., & Rafiq, M. (2021). Impact of entrepreneurial education, mindset, and creativity on entrepreneurial intention: Mediating role of entrepreneurial self-efficacy. *Front. Psychol.* <https://doi.org/10.3389/fpsyg.2021.724440>
- Wang, Q., Sun, Z., & Wu, C. (2021). The impact of university innovation and entrepreneurship education on entrepreneurial intention from the perspective of educational psychology. *Front. Psychol.* 12:745976. <https://doi.org/10.3389/fpsyg.2021.745976>
- Wardana, L. W., Narmaditya, B. S., Wibowo, A., Saraswati, T. T., & Indriani, R. (2021). Drivers of entrepreneurial intention among economics students in Indonesia. *Entrepreneurial Business and Economics Review*, 9(1), 61-74.
- Yousaf, U., Ali, S. A., Ahmed, M., Usman, B., & Sameer, I. (2020). From entrepreneurial education





to entrepreneurial intention: A sequential mediation of self-efficacy and entrepreneurial attitude. *International Journal of Innovation Science*.  
<https://doi.org/10.1108/IJIS-09-2020-0133>

