THE JOURNAL OF TEACHING ENGLISH FOR SPECIFIC AND ACADEMIC PURPOSES Vol. 12, N° 1, 2024, pp. 175–189

UDC: 376:6

https://doi.org/10.22190/JTESAP231025015E

**Review research paper** 

# INCORPORATING CHATGPT IN THE ACADEMIC RESEARCH PROCESS: AVOIDING STUDENT STIGMATIZATION

#### Tharwat M. EL-Sakran

English Department, American University of Sharjah, Sharjah, United Arab Emirates

Abstract. ChatGPT, a potent and readily accessible technological tool, has recently raised concerns regarding its potential for fostering plagiarism within educational contexts. With its emergence, academic institutions have begun disseminating cautionary advisories to educators, urging them to incorporate notifications in their syllabi to apprise students that the utilization of this application could impinge upon their academic integrity, potentially resulting in a failing grade for their submitted work. While these apprehensions possess a certain degree of validity, university professors had anticipated that their institutions would furnish them with comprehensive training sessions on the utilization of ChatGPT and its pertinent functionalities for pedagogical purposes. The primary objective of this research is to introduce ChatGPT and elucidate how it can be harnessed to encourage tertiary-level students in the composition and refinement of their academic research papers, thereby aiding them in attaining the prescribed learning outcomes delineated in their respective syllabi and the guidelines governing academic writing courses. Furthermore, rather than resorting to punitive measures and undue stress imposition, educational institutions should endeavor to evince genuine concern for their students' well-being. The author posits that the extent of plagiarism facilitated by ChatGPT is contingent upon the nature of the course in which it is employed. Consequently, course instructors should consider implementing tailored instructional and assessment strategies, which will be expounded upon in this study. The research culminates by offering recommendations for the preservation of students' well-being and the mitigation of distrust.

**Key words**: *ChatGPT*, *student wellbeing, academic institutions, pedagogical applications, mistrusting students, plagiarism and ChatGPT* 

#### 1. INTRODUCTION

Academic writing and publishing pose formidable challenges for university professors, necessitating substantial time and effort to produce works of exceptional quality. This challenge is even more exacting for university students, who are tasked with generating research as a testament to their educational journey. Consequently, there arises the question of how academic writing can be rendered more accessible, efficient, and engaging for these students. One prospective solution lies in the utilization of ChatGPT, an artificial intelligence (AI) tool designed to enhance the quality of manuscripts and documents produced by students.

Submitted October 25<sup>th</sup>, 2023, accepted for publication January 10<sup>th</sup>, 2024

*Corresponding author*: Tharwat M. EL-Sakran, English Department, American University of Sharjah, Sharjah, United Arab Emirates

E-mail: telsakran@aus.edu

<sup>© 2024</sup> by University of Niš, Serbia | Creative Commons License: CC BY-NC-ND

ChatGPT is a derivative of the Generative Pre-trained Transformer 3 (GPT-3), an AI language model developed by OpenAI, renowned for its widespread adoption in natural language processing tasks, encompassing translation, summarization, question answering, and text generation, among others. In this context, Kalla and Smith (2023, p. 827) have expounded:

The working of ChatGPT can be broken down into several steps. First, the user inputs a prompt or question into the system. The model processes this prompt, which uses its knowledge of language patterns and relationships to generate a response. The response is then returned to the user, who can continue the conversation or ask another question.

ChatGPT has garnered substantial attention and generated considerable controversy owing to its capacity to generate authentic and coherent textual content (Zohery, 2023), thereby engendering concerns regarding its potential implications and applications within the domain of language processing (Debby et al., 2023; Liu et al., 2021; Scanlon, Nikkel & Geradts, 2023; Thorp, 2023). ChatGPT is capable of writing entire scholarly essays by breaking a main topic into subtopics and having ChatGPT write each section, it is possible to create an entire article using the tool (Lund & Wang, 2023). It could write an entire paper in a matter of seconds with minimal input from a researcher (Lund and Wang, 2023).

In light of the pervasive issue of online plagiarism confronting academia (Khalil & Er, 2023), a significant contingent of scholars (Bertram, 2019; Chechitelli, 2023; Crawford, Cowling & Allen, 2023; Liebrenz, 2023; Lund et al., 2023; Stokel-Walker, 2022; Wilcox, 2023) within the academic community harbor apprehensions concerning the potential proliferation of plagiarism and the erosion of ethical standards associated with the use of ChatGPT. Although, as illustrated by the aforementioned experts in academic institutions, concerns are mounting regarding the rapid dissemination of ChatGPT-3 and the recent iteration, GPT-4, in light of their extensive accessibility and ability to provide responses akin to those generated by humans, several researchers (e.g., Govindarajan & Christuraj, 2023 & Shoufan, 2023) have extolled the positive contributions of ChatGPT in the realm of scientific research and academic endeavors, as elucidated below.

### 2. OBJECTIVE OF THE RESEARCH

While ChatGPT presents several challenges and concerns, particularly concerning academic integrity and plagiarism, universities must carefully assess the potential risks and benefits associated with the utilization of these tools and take measures to ensure their ethical and responsible deployment. These measures may entail the development of comprehensive policies and procedures governing their use, the provision of training and support for both students and faculty, and the adoption of a diverse range of pedagogical strategies to deter academic dishonesty. By addressing these challenges, universities can harness the opportunities presented by ChatGPT while concurrently upholding the integrity of their assessments and the overall quality of their educational programs. Consequently, the objective of this paper is to dispel apprehensions and reservations surrounding ChatGPT and plagiarism, offering assurances regarding its advantages when applied throughout various stages of academic research paper composition.

#### 2.1. Background information

However, before proceeding any further, the present writer reviewed the outcomes for teaching academic writing courses at the American University of Sharjah (AUS) and found out the following:

Academic writing courses develop critical thinking and academic writing competencies and help students produce a research paper in which the students' arguments demonstrate analytical and critical thinking skills.

Furthermore, examining the guidelines for writing a research paper, it is found that they focus on the production of a well-structured and argued research paper through stages, with clear section headings. Moreover, they highlight using an academic writing style with opinions supported with citations from the literature in the field of study.

#### 3. BRIEF REVIEW OF RELATED LITERATURE

The proliferation of AI technology and its influence on education has emerged as a subject of escalating concern in recent years, as evidenced by a growing body of scholarly literature (Brown et al., 2020; Dowling & Lucey, 2023; Okonkwo & Ade-Ibijola, 2021; Roscoe, 2017; Shoufan, 2023). Specifically, the adoption of ChatGPT for the generation of academic content within educational institutions has ignited apprehensions among academics and researchers (Khalil & Er, 2023). These concerns, shared by several scholars, revolve around ChatGPT's ability to generate instant, highly original content with minimal student input. Consequently, these concerns motivated a study aimed at investigating the prevalence of plagiarism in texts generated by ChatGPT and comparing the results with those produced by established plagiarism detection tools. Academic institutions worldwide, including esteemed scholarly journals and educators, are actively engaged in discussions regarding the potential ramifications of AI language models, such as ChatGPT, on the autonomy and creativity of researchers and students (Khalil & Er, 2023). Notably, some educational institutions, including schools in Queensland, Tasmania, New York City, and Seattle, have taken the proactive step of prohibiting the use of ChatGPT on student devices (Zawacki-Richter et al., 2019; Stokel-Walker, 2022; Wilcox, 2023; Zohery, 2023; Tlili et al., 2023). This demonstrates a growing concern for the welfare of students within the academic community and underscores the apprehensions surrounding the potential influence of AI technology, particularly ChatGPT.

In this context, researchers delve into the potential advantages of ChatGPT and its constructive applications within the realm of education (Barrot, 2023; Alexander et al., 2023). For instance, Li and Xing (2021) emphasize that ChatGPT serves as a platform for asynchronous communication, enhancing student engagement and collaborative interaction by enabling students to pose questions and engage in discussions without the constraint of real-time presence. Furthermore, ChatGPT utility extends to facilitating remote learning, particularly benefiting students who face physical or mental health challenges that hinder their attendance in traditional classroom settings (Barber et al., 2021). Another significant merit of ChatGPT in education pertains to the creation of customized assessments. It has the potential to generate tailored exams or quizzes tailored to each student's unique needs and capabilities (Barber et al., 2021; Zawacki-Richter et al., 2019). This feature holds particular promise in courses emphasizing language proficiency or critical thinking, as ChatGPT can

craft questions aligned with individual students' skill levels, challenging them to exhibit their knowledge and abilities (Bommasani et al., 2021).

Moreover, ChatGPT offers the advantage of furnishing students with instantaneous feedback and personalized responses to their inquiries (Perez et al., 2017). Along the same lines, Gao (2021), Roscoe et al. (2017), and Zawacki-Richter et al. (2019) advocate for ChatGPT potential role in grading students' assignments and providing real-time feedback. For instance, ChatGPT can be employed to assess student work, thereby freeing instructors to concentrate on higher-level responsibilities such as offering guidance and support to students.

#### 4. RESEARCH DESIGN STEPS TO SAFEGUARDING THE INSTITUTION'S INTEGRITY

ChatGPT application was used for two consecutive semesters since 2023 with 46 third year university students at a private university in the MENA area for a research writing process within a communication based course. When? In this section, the researcher assessed the capability of ChatGPT in academic research by providing several commands to write different sections of the demo research topic. The prompts given to ChatGPT revolved around the following:

- Generating research ideas
- Writing up the introduction (including problem statement and research gaps)
- Preparing a literature review with citations and references
- Writing up the methodology section
- Writing up the results, discussions and conclusion sections

### 5. FINDINGS AND DISCUSSION

In an academic context, students, under the direct supervision of their professors, have the opportunity to employ ChatGPT applications in various stages of their research process, including brainstorming research topics and composing research articles encompassing elements such as the research proposal, research working draft, and final research paper. An illustrative instance of this approach is demonstrated through the work of a student at AUS, who selected a research topic entitled "Fundamentals of starting a new business." This choice not only serves to exemplify the utility of ChatGPT but also aims to elucidate the critical challenges associated with its application in academic research.

ChatGPT, as a tool, exhibits its capacity to assist researchers in generating novel research ideas through the provision of suggestions grounded in user inputs, as observed in the study by Lund and Wang (2023). For instance, when students input a specific topic into ChatGPT, the application promptly generates a list of prospective research ideas that are pertinent to the chosen subject matter. This particular feature assumes paramount significance in the research process, as it aids scholars in their pursuit of innovative research avenues. To illustrate this point, an example generated by ChatGPT is provided below:

# Prompt

Give ideas for an academic research on: Fundamentals of starting new businesses

### **ChatGPT Generated Response**

Certainly! Research on the fundamentals of starting new businesses is a valuable area of study that can contribute to our understanding of entrepreneurship and business development. Here are some research ideas in this domain:

- 1. **The Role of Entrepreneurial Education in Business Success**: Investigate the impact of formal and informal entrepreneurial education on the success and sustainability of new businesses. Analyze the effectiveness of different types of training programs and their long-term outcomes.
- 2. Entrepreneurial Mindset and Decision-Making: Examine how the mindset of entrepreneurs influences their decision-making during the early stages of business development. Explore factors like risk tolerance, resilience, and adaptability.
- 3. Access to Capital for New Businesses: Research the challenges and opportunities entrepreneurs face when seeking financial resources to start and grow their businesses. Explore traditional and innovative funding sources, such as venture capital, crowdfunding, and microloans.
- 4. Entrepreneurial Ecosystems and Regional Development: Investigate the role of entrepreneurial ecosystems in fostering the growth of new businesses in specific regions or cities. Analyze the key components of successful ecosystems and their impact on local economies.
- 5. **Technology and Innovation in New Ventures**: Explore the ways in which technology and innovation drive the formation of new businesses. Focus on emerging technologies like artificial intelligence, blockchain, and biotechnology and their applications in entrepreneurship.
- 6. Social Entrepreneurship and Sustainable Business Models: Study the rise of social entrepreneurship and its impact on addressing societal and environmental challenges. Analyze sustainable business models and their role in new venture creation.
- 7. **Failure and Learning in Entrepreneurship**: Investigate the role of failure in the entrepreneurial process. Examine how entrepreneurs perceive and learn from failure, and how these experiences shape future business endeavors.
- 8. Gender and Diversity in Entrepreneurship: Analyze the challenges and opportunities faced by underrepresented groups, such as women and minorities, in starting and growing businesses. Explore the impact of diversity on innovation and business success.
- Regulatory Environment and Entrepreneurship: Examine the regulatory barriers and incentives that influence entrepreneurship. Investigate the impact of government policies, tax incentives, and intellectual property protection on new venture creation.
- 10. Market Entry Strategies for New Businesses: Research the strategies and approaches that new businesses use to enter and compete in established markets. Compare the success of disruptive innovation versus incremental innovation in market entry.
- 11. **Networking and Social Capital in Entrepreneurship**: Explore the role of networking and social capital in the early stages of business development. Analyze how entrepreneurs build and leverage networks for resources, mentorship, and partnerships.
- 12. **Internationalization of New Ventures**: Investigate the challenges and strategies involved in taking new businesses global. Explore the factors that influence international expansion decisions and the impact on business performance.

These research ideas cover a wide range of topics within the fundamentals of starting new businesses, and you can tailor them to your specific interests and expertise. Conducting indepth research in any of these areas can contribute valuable insights to the field of entrepreneurship and provide practical guidance for aspiring entrepreneurs and policymakers.

It has been observed that the software has supplied student researchers with diverse ideas that possess potential for further elaboration. However, these suggestions lack the incorporation of academic citations and references, thereby rendering the resultant content non-academic in nature. Consequently, students are required to invest additional effort in refining the suggestions, as the output generated by ChatGPT does not constitute a final product suitable for submission within a research context. An additional advantage offered by ChatGPT lies in its capacity to assist researchers in the identification of pertinent scholarly literature through the analysis of user input, subsequently generating a curated list of associated articles. Below is a reproduction of the content provided by ChatGPT:

#### Prompt

Give references/sources for an academic research on: Fundamentals of starting new businesses

# **ChatGPT Generated Response**

Certainly, here are some academic references and sources that you can use for research on the fundamentals of starting new businesses. These sources cover a wide range of topics related to entrepreneurship, business planning, and startup management:

## 1. Books:

- a. "The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses" by Eric Ries.
- b. "Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers" by Alexander Osterwalder and Yves Pigneur.
- c. "The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail" by Clayton Christensen.
- d. "Zero to One: Notes on Startups, or How to Build the Future" by Peter Thiel and Blake Masters.
- e. **"Foundations of Entrepreneurship and Economic Development"** by David A. Harper and Robert M. Solow.

#### 2. Academic Journals:

- a. **Journal of Business Venturing**: This journal covers a wide range of topics related to entrepreneurship, including startup strategies, innovation, and entrepreneurial finance.
- b. Entrepreneurship Theory and Practice: This journal publishes research articles on various aspects of entrepreneurship, from the creation of new ventures to the management of established small businesses.
- c. **Strategic Management Journal**: While not exclusively focused on startups, this journal often features articles on entrepreneurial strategies and business creation.
- d. **Small Business Economics**: A journal that explores the economic aspects of small businesses and startups, including topics like financing, growth, and innovation.
- e. Academy of Management Journal: This journal covers management topics, including entrepreneurship, and can provide valuable insights into the management aspects of startups.

### 3. Online Resources:

- a. **Kauffman Foundation**: The Kauffman Foundation is a leading organization in entrepreneurship research. Their website offers a wealth of reports, articles, and data on various aspects of starting and running businesses.
- b. **Harvard Business Review**: The HBR website contains numerous articles and case studies related to entrepreneurship and startup management.

### 4. Government and Industry Reports:

- a. U.S. Small Business Administration (SBA): The SBA provides a wealth of resources and reports on small business and entrepreneurship in the United States.
- b. Global Entrepreneurship Monitor (GEM): GEM publishes an annual report on entrepreneurship and offers valuable insights into global startup trends.
   5. Dissertations and Theses:
- a. Consider searching academic databases like ProQuest, JSTOR, and Google Scholar for relevant dissertations and theses on the fundamentals of starting new businesses.

When conducting your research, remember to evaluate the credibility and relevance of your sources, and cite them properly following the citation style required for your academic work (e.g., APA, MLA, Chicago). Additionally, you may want to look for more recent sources or updates to these references, as the field of entrepreneurship is constantly evolving.

While this feature undeniably offers a notable advantage by saving researchers a substantial amount of time in comparison to the manual search for sources relevant to the research topic, it is essential to acknowledge that ChatGPT provides suggestions for books and journal titles that researchers should consult. Additionally, even when the software provides specific citations, these must be meticulously validated due to the possibility that the sources indicated may be spurious or nonexistent, as evidenced by recent studies (Cotton et al., 2023; Qasem, 2023), despite the presence of purported author names online in unrelated contexts. Consequently, professors can ascertain the use of ChatGPT in generating the article by conducting online searches for the provided sources and references, leading to the identification of the automated content generation. Subsequently, students can be summoned for a candid discussion session to address the matter, followed by guidance to seek authentic online sources for their research.

Research design constitutes a crucial facet of any research endeavor, necessitating a methodical and systematic approach. ChatGPT consistently presents input in an academic format, and it further aids authors in selecting optimal research methodologies and identifying the most suitable research methods in alignment with their research inquiries and the available dataset. An illustrative example is provided below:

### **ChatGPT Generated Example:**

To conduct research on this topic, a combination of methods could be used, including surveys, interviews, focus groups, observation of classroom behaviors, and analysis of academic integrity policies and practices in UAE schools. It's no short forms important to ensure ethical considerations are taken into account while researching sensitive topics like cheating among students

ChatGPT can also assist in preparing the required research questions.

#### Prompt

# Give research questions on :Fundamentals of starting new businesses

Certainly, here are several research questions related to the fundamentals of starting new businesses:

- 1. \*\*What are the key factors that influence the decision to start a new business, and how have these factors evolved over time?
- 2. \*\*How do different types of entrepreneurs, such as necessity-driven entrepreneurs and opportunity-driven entrepreneurs, approach the process of starting a new business?
- 3. \*\*What is the role of entrepreneurial education and training in improving the success rate of new businesses, and how effective are different educational programs in this regard?
- 4. \*\*What are the most common challenges and barriers that entrepreneurs face when starting new businesses, and how do they navigate and overcome these obstacles?
- 5. \*\*How does access to financial resources, including venture capital, angel investors, and crowdfunding, impact the growth and sustainability of new businesses?
- 6. \*\*What is the relationship between business planning and the success of new ventures, and how do different types of business plans (e.g., traditional vs. lean startup) affect outcomes?
- 7. \*\*What strategies and tactics do entrepreneurs employ to identify and evaluate market opportunities for their new businesses, and how do these strategies vary across industries and regions?
- 8. \*\*What role does innovation play in the development and growth of new businesses, and how do entrepreneurs foster a culture of innovation within their startups?
- 9. \*\*How do social and cultural factors influence the choice of business ideas and models among aspiring entrepreneurs, and what are the implications for diversity and inclusion in entrepreneurship?
- 10. \*\*What are the long-term impacts of new businesses on local economies, including job creation, economic growth, and community development?
- 11. \*\*How can public policy and government initiatives better support and promote the creation of new businesses, particularly in underserved communities?
- 12. \*\*What are the ethical considerations that entrepreneurs should take into account when starting and running new businesses, and how do these considerations impact decision-making?
- 13. \*\*How do global trends, such as digital transformation and environmental sustainability, shape the strategies and goals of new businesses in different industries?
- 14. \*\*What are the critical success factors for achieving sustainability and resilience in new businesses, especially in the face of economic downturns or unexpected challenges?
- 15. \*\*How does the use of technology, including artificial intelligence and blockchain, influence the operations and competitiveness of new businesses in various sectors?

182

These research questions cover a broad spectrum of topics related to the fundamentals of starting new businesses. Depending on your specific research interests and objectives, you can narrow down or adapt these questions to suit your study's focus.

Based on the foregoing analysis, it is apparent that the proliferation of research inquiries poses a formidable challenge for students, impeding their ability to comprehensively address them. Consequently, this predicament underscores the imperative for academic instructors to intervene collaboratively with their students, with the aim of culling the myriad of questions and identifying those of utmost relevance. In accordance with the aforementioned directives for scholarly writing, there exists a pronounced emphasis on organizing the research manuscript into well-defined sections. In this regard, ChatGPT can serve as a valuable resource for the production of these textual components, ensuring precision, brevity, and adherence to the established conventions of scientific discourse. It can be employed to generate content for various segments of the article, encompassing the introduction, literature review, methodology, results, discussion, and conclusion. A representative exemplar generated by ChatGPT is provided below:

#### Prompt

# Write a research paper on: Fundamentals of starting new businesses ChatGPT Generated Response

Writing a complete research paper on the fundamentals of starting new businesses is beyond the scope of a single response. However, I can provide you with an outline for a research paper on this topic. You can use this outline as a guide to structure your research paper and expand on each section with detailed content.

### **Title: Fundamentals of Starting New Businesses**

**Abstract:** Provide a concise summary of the research paper, including the main objectives, methods used, and key findings.

# **1. Introduction:**

- Provide an overview of the significance of entrepreneurship and new businesses in the global economy.
- State the research objectives and the research questions addressed in the paper.
- Explain the structure of the paper.

#### 2. Literature Review:

- Define entrepreneurship and its role in economic development.
- Discuss the historical evolution of entrepreneurship theories and concepts.
- Review key theories related to starting new businesses (e.g., opportunity recognition, resource-based view, effectuation).
- Explore the factors influencing entrepreneurial intentions and the decision to start a new business.

#### 3. Methodology:

- Describe the research methods used (e.g., literature review, surveys, case studies, interviews).
- Explain the criteria for selecting the research sample or sources.
- Discuss any data collection and analysis techniques employed.

### 4. Key Factors in Starting New Businesses:

- Identify and analyze the critical factors that influence the decision to start a new business.
- Discuss the role of innovation, market research, and feasibility analysis in business idea development.
- Examine the importance of a well-defined business model and business plan.

# 5. Challenges and Barriers:

- Investigate the common challenges and barriers faced by entrepreneurs when starting new businesses.
- Discuss financial challenges, regulatory hurdles, and market entry challenges.
- Explore strategies for overcoming these challenges.

# 6. Resources and Financing:

- Analyze the various sources of funding available to entrepreneurs (e.g., bootstrapping, angel investors, venture capital).
- Discuss the role of financial planning and management in the early stages of a new business.
- Examine government support programs and incentives for startups.

# 7. Business Growth and Sustainability:

- Explore strategies for scaling up a new business and achieving sustainable growth.
- Discuss the importance of building a strong organizational culture.
- Examine the challenges of maintaining innovation and competitiveness over time.

#### 8. Case Studies:

- Include real-world case studies of successful and unsuccessful startups to illustrate key concepts and challenges.
- Analyze the strategies and decisions made by entrepreneurs in these cases.

#### 9. Conclusion:

- Summarize the key findings from the research paper.
- Highlight the implications of the research for entrepreneurs, policymakers, and researchers.
- Discuss potential areas for future research in entrepreneurship.

#### **10. References:**

• List all the sources, books, articles, and studies cited in the paper, following the citation style guidelines.

Remember to use proper formatting, citations, and a consistent style throughout your research paper. Additionally, ensure that your paper presents a cohesive argument and supports your findings with relevant evidence from the literature and any empirical research conducted.

It is noticed from the above that the tool has provided the user with a good format of the research manuscript that they still need to work on.

184

### Here is another example generated from ChatGPT:

### Prompt

Write me an academic research paper with citations and references on Fundamentals of Starting New Businesses

ChatGPT Generated Example

### FUNDAMENTALS OF STARTING NEW BUSINESSES

### Abstract

This research manuscript explores the fundamental concepts and principles associated with starting new businesses. Entrepreneurs play a crucial role in driving economic growth and innovation, making it imperative to understand the key factors that contribute to successful business initiation. This manuscript reviews the essential components of entrepreneurship, including identifying opportunities, business planning, financing, and legal considerations. Additionally, it examines the role of innovation, risk management, and entrepreneurial mindset in the process of launching and sustaining new businesses. Through an in-depth analysis of relevant literature and case studies, this manuscript provides a comprehensive overview of the fundamentals necessary for aspiring entrepreneurs to embark on their entrepreneurial journey.

### Introduction

Entrepreneurship is the engine of economic development and innovation, creating jobs, fostering competition, and driving technological advancements. Starting a new business is an exciting and challenging endeavor that requires a solid foundation in various aspects of entrepreneurship. This manuscript aims to explore the fundamentals of starting new businesses, shedding light on key concepts, strategies, and considerations that aspiring entrepreneurs must understand and embrace.

#### **Identifying Opportunities**

The first step in starting a new business is identifying opportunities. Entrepreneurs often spot gaps in the market or recognize unmet consumer needs. A comprehensive understanding of market trends, consumer behavior, and industry dynamics is essential for recognizing viable opportunities (Shane & Venkataraman, 2000). Furthermore, conducting market research, competitive analysis, and feasibility studies can help refine the business idea and validate its potential for success (Hisrich, Peters, & Shepherd, 2017).

# **Business Planning**

Effective business planning is critical to the success of any new venture. A wellstructured business plan serves as a roadmap, outlining the company's mission, vision, goals, and strategies for achieving them (Kuratko, Hornsby, & Goldsby, 2017). It also includes financial projections, marketing strategies, and an analysis of potential risks and challenges. Entrepreneurs must continuously revise and update their business plans to adapt to changing market conditions (Baron, Shane, & Gregoire, 2019).

### Financing

Securing adequate financing is often a significant challenge for new businesses. Entrepreneurs can explore various sources of funding, including personal savings, loans, venture capital,

angel investors, and crowdfunding (Mason & Stark, 2004). The choice of funding depends on the nature of the business, its growth potential, and the entrepreneur's risk tolerance. Proper financial management is crucial to ensure the sustainability and growth of the new venture (Brinckmann, Grichnik, & Kapsa, 2010).

# Legal Considerations

Navigating the legal landscape is another essential aspect of starting a new business. Entrepreneurs must choose the appropriate legal structure for their venture, such as sole proprietorship, partnership, corporation, or LLC, considering factors like liability, taxation, and management (Bagley & Dauchy, 2019). Additionally, compliance with local, state, and federal regulations, intellectual property protection, and contracts with suppliers, customers, and employees must be carefully managed to avoid legal pitfalls.

### **Innovation and Competitive Advantage**

Innovation plays a pivotal role in gaining a competitive edge in the market. Entrepreneurs should continuously seek ways to innovate their products, services, processes, and business models (Tidd & Bessant, 2018). Staying ahead of the competition often requires a culture of innovation within the organization and a willingness to embrace change. Case studies of successful startups, such as Apple and Tesla, demonstrate how innovation can drive rapid growth and market leadership (Malerba, 2006).

# **Risk Management**

Entrepreneurship inherently involves risk. Managing and mitigating these risks is crucial for the sustainability of new businesses. Risk assessment should be an integral part of the business planning process, identifying potential threats and developing strategies to address them (Kaplan & Warren, 2016). Adequate insurance coverage, contingency plans, and financial reserves can provide a safety net during challenging times.

#### **Entrepreneurial Mindset**

The entrepreneurial mindset is a key factor that distinguishes successful entrepreneurs from others. It encompasses traits such as resilience, creativity, adaptability, and a willingness to learn from failures (Rauch & Hulsink, 2015). Developing an entrepreneurial mindset is an ongoing process that involves continuous self-improvement and a commitment to personal and professional growth.

# Conclusion

Starting a new business is a complex and multifaceted process that requires a deep understanding of the fundamentals of entrepreneurship. Identifying opportunities, effective business planning, securing financing, managing legal considerations, fostering innovation, mitigating risks, and developing an entrepreneurial mindset are all critical components of the entrepreneurial journey. By embracing these fundamentals and continually learning and adapting, aspiring entrepreneurs can increase their chances of not only launching a successful business but also contributing to economic growth and innovation.

### 6. CONCLUSION, SUGGESTIONS FOR FURTHER RESEARCH AND PEDAGOGICAL RECOMMENDATIONS

In recent times, scholars and professionals across the globe have exhibited a profound interest in ChatGPT, as evidenced by the works of Rahaman et al. (2023) and Shoufan (2023). This growing fascination stems from the compelling potential of ChatGPT as a tool for enhancing the efficiency of research manuscript development. The core aim of the present study was to underscore the application of ChatGPT in the context of academic research among students, offering a practical illustration along with pertinent recommendations. This investigation revolves around a demonstration research topic, delving into both the capabilities and constraints of ChatGPT in the creation and composition of academic research papers. The findings of the study shed light on the manifold advantages that ChatGPT affords researchers, including its utility in idea generation, research topic structuring, and even the crafting of abstracts through the utilization of prompts. Nonetheless, it is imperative to acknowledge that ChatGPT occasionally leads astray when formulating research problems, questions, and identifying gaps, often generating hypothetical problem statements and fictitious references (Walters & Wilder, 2023).

The study's outcomes underscore the substantial potential of ChatGPT when harnessed judiciously and ethically within academic settings. Furthermore, it is recommended that educators instructing academic writing persist in the practice of soliciting draft submissions from students for review prior to final submission. This approach compels students to amend and refine their submissions based on the feedback provided by their professors, thereby discouraging the use of ChatGPT to generate entirely new versions of their research. Professors should also maintain a mechanism for comparing the previous submissions with the revised ones to ensure consistency. Additionally, it is advisable to decline submissions that incorporate writing elements not yet covered in the course, such as proposals or working drafts that include abstracts.

Moreover, the inclusion of oral progress reports and question-answer sessions within writing courses serves the purpose of identifying the true authorship of research. A distinctive feature of ChatGPT-generated texts lies in their formulaic and machine-like quality upon reading, enabling the verification of references as either authentic or counterfeit (Haman & Školník, 2023; Tlili et al., 2023). It is imperative to impress upon students that technology should be leveraged as a tool for enhancing their skills and learning, rather than as a substitute for original thought and expression (Khalil & Er, 2023). This imperative arises in response to the continuous emergence of software packages that may tempt students into plagiarism, exemplified by the website mentioned below:

"The UNDETECTABLE AI Writing Tool That Bypasses AI Detectors"

Hence, there exists an urgent necessity to formulate academic tasks that demand heightened critical thinking to align with the learning objectives of the course and to uphold academic integrity. As Alexander et al. (2023) have asserted, educators require digital training concerning the utilization of AI tools in the ESL classroom, as well as proficiency in advanced detection tools. Furthermore, a revisitation of assessment policies and procedures is warranted, along with the development of suitable rubrics and assessment criteria (Alexander et al., 2023, p. 41).

In conclusion, instructing faculty members should undertake the following measures:

- Design intricate cloze test questions that correspond with the course content.
- Endeavor to avoid yes-no questions, paraphrasing, and summarization statements in assessments.
- Recognize that the nature of the course dictates the susceptibility to plagiarism; content-based courses may be more vulnerable than task-based ones.
- Minimize the use of online tests, even with the deployment of lockdown browser mechanisms.
- Ensure that students attain the intended skills so that they can competently assess responses generated by ChatGPT. It is evident that students lacking requisite writing skills may struggle to gauge the appropriateness of ChatGPT generated responses (Shoufan, 2023).

The quote below underscores this point:

To utilize ChatGPT effectively, students must have an adequate background in the relevant field of study so that they can generate appropriate prompts and critically evaluate the responses provided by the system (Shoufan, 2023, p. 38814). In other words, educators ought to foster students' exploration of the potential benefits and drawbacks associated with ChatGPT, thereby equipping them with the ability to conduct a thorough and impartial assessment of the outcomes of their actions. This approach aids students in responding thoughtfully to their investigative encounters (El-Sakran, 2023). In summary, while ChatGPT may appear to simplify students' lives, it has concurrently engendered additional responsibilities for instructors, a phenomenon that warrants further exploration.

#### REFERENCES

- Alexander, K., Savvidou, C., & Alexander, C. (2023). "Who wrote this essay? Detecting AI-generated writing in second language education in higher education." Teaching English with Technology, 23(2), 25–43.
- Barber, M., Bird, L., Fleming, J., Titterington-Giles, E., Edwards, E., and Leyland, C. (2021). "Gravity assist: Propelling higher education towards a brighter future." Office for Students. Online
- Barrot, J. S. (2023). "Using ChatGPT for second language writing: Pitfalls and potentials." Assessing Writing, 57.
- Bertram Gallant, T., Picciotto, M., Bozinovic, G., Tour, E. (2019). "Plagiarism or not? Investigation of Turnitin®detected similarity hits in biology laboratory reports." Biochem. Mol. Biol. Educ., 47(4), 370–379.
- Bommasani, R., Hudson, D. A., Adeli, E., Altman, R., Arora, S., von Arx, S., Bernstein, M.S., Bohg J. et al. (2021). "On the opportunities and risks of foundation models." arXiv preprint arXiv:2108.07258.
- Brown, T., Mann, B., Ryder, N., Subbiah, M., Kaplan, J. D., Dhariwal, P., et al. (2020). "Language models are few-shot learners." Advances in Neural Information Processing Systems, 33, 1877-1901.
- Caren, C. (2022). "AI writing: the challenge and opportunity in front of education now." Turnitin. Online. Accessed 6 Feb 2023.
- Chechitelli, A. (2023). "Sneak preview of Turnitin's AI writing and ChatGPT detection capability." Turnitin. Online. Accessed 6 Feb 2023.
- Crawford, J., Cowling, M., & Allen, K. (2023). "Leadership is needed for ethical ChatGPT: Character, assessment, and learning using artificial intelligence (AI)." Journal of University Teaching & Learning Practice, 20(3).

Cotton, D. R. E., Cotton, P. A. & Shipway, J. R. (2023). "Chatting and cheating: Ensuring academic integrity in the era of ChatGPT." Innovations in Education and Teaching International.

Dowling, M., & Lucey, B. (2023, May). "ChatGPT for (Finance) research: The Bananarama Conjecture." Finance Research Letters, 53.

EL-Sakran, T. M. (2023). Enhancing business students' employability skills awareness. The Journal of Teaching English for Specific and Academic Purposes, 11 (3), 687-708.

188

- Gao, J. (2021). "Exploring the Feedback Quality of an Automated Writing Evaluation System Pigai." International Journal of Emerging Technologies in Learning (iJET), 16(11), 322-330.
- Gierl, M., Latifi, S., Lai, H., Boulais, A., and Champlain, A. (2014). "Automated essay scoring and the future of educational assessment in medical education." Medical Education, 48(10), 950–962.
- Govindarajan, Ramesh, and Gali Christuraj. "Opportunities and Challenges of Using ChatGPT in the ELT Scenario of UTAS, Nizwa, Oman." Journal of Teaching English for Specific and Academic Purposes 11, no. 3 (2023): 593-605.
- Kalla, D. & Smith, N. (2023). "Study and analysis of Chat GPT and its impact on different fields of study." International Journal of Innovative Science and Research Technology, 8, 3. Online
- Khalil, M., Rambech, M. (2022). "Eduino: A telegram learning-based platform and chatbot in higher education." In: Zaphiris, P., Ioannou, A. (eds.) "Learning and Collaboration Technologies. Novel Technological Environments." Springer, Cham.
- Khalil, M., Er, E. (2023). "Will ChatGPT Get You Caught?" In: Zaphiris, P., Ioannou, A. (eds) "Learning and Collaboration Technologies." HCII 2023. Lecture Notes in Computer Science, vol 14040. Springer, Cham.
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). "ChatGPT for Language Teaching and Learning." RELC Journal, 0(0).
- Liebrenz, M., Schleifer, R, Buadze, A., Bhugra, D, & Smith, A. (2023, March). "Generating scholarly content with ChatGPT: ethical challenges for medical publishing." The Lancet Digital Health, 5(3), e105-e106. Online.
- Liu, X., Zheng, Y., Du, Z., Ding, M., Qian, Y., Yang, Z. and Tang, J. (2021). "GPT understands, too." arXiv.
- Li, C., and Xing, W. (2021). "Natural language generation using deep learning to support MOOC learners." International Journal of Artificial Intelligence in Education, 31(2), 186-214.
- Lund, Brady and Ting, Wang (2023). "Chatting about ChatGPT: How may AI and GPT Impact Academia and Libraries?" Library Hi Tech News.
- Haman, M. & Školník, M. (2023). "Using ChatGPT to conduct a literature review." Accountability in Research. Qasem, F. (2023). "ChatGPT in scientific and academic research: future fears and reassurances." Library Hi
- Tech News, 40(3). Okonkwo, C.W., Ade-Ibijola, A. (2021). "Chatbots applications in education: a systematic review." Comput.
- Educ. Artif. Intell., 2, 100033.
- Perez, S., Massey-Allard, J., Butler, D., Ives, J., Bonn, D., Yee, N., and Roll, I. (2017). "Identifying productive inquiry in virtual labs using sequence mining." In E. André, R. Baker, X. Hu, M. M. T. Rodrigo, and B. du Boulay (Eds.), "Artificial intelligence in education," 10 (331), 287–298.
  Selwyn, N. (2008). "'Not necessarily a bad thing...': a study of online plagiarism among undergraduate
- Selwyn, N. (2008). "'Not necessarily a bad thing...': a study of online plagarism among undergraduate students." Assess. Eval. High. Educ., 33(5), 465–479.
- Roscoe, R. D., Wilson, J., Johnson, A. C., and Mayra, C. R. (2017). "Presentation, expectations, and experience: Sources of student perceptions of automated writing evaluation." Computers in Human Behavior, 70, 207-221.
- Scanlon, M., Nikkel, B. and Geradts, Z. (2023). "Digital forensic investigation in the age of ChatGPT." Forensic Science International: Digital Investigation, 44.
- Stokel-Walker, C. (2022). "AI bot ChatGPT writes smart essays-should academics worry?" Nature.
- Shoufan, A. (2023). "Exploring students' perceptions of ChatGPT: Thematic analysis and follow-up survey." IEEE Access, 11, 38805-38818.
- Tlili, A., Shehata, B., Adarkwah, M.A. et al. (2023). "What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education." Smart Learn. Environ., 10, 15.
- Zawacki-Richter, O., Marín, V. I., Bond, M., and Gouverneur, F. (2019). "Systematic review of research on artificial intelligence applications in higher education-where are the educators?" International Journal of Educational Technology in Higher Education, 16(1), 1-27.
- Zohery, Medhat. (2023). "ChatGPT in Academic Writing and Publishing: A Comprehensive Guide." In Artificial Intelligence in Academia, Research and Science: ChatGPT as a Case Study (First Edition). Achtago Publishing.
- Walters, W.H., and Wilder, E.I. "Fabrication and Errors in the Bibliographic Citations Generated by ChatGPT." Scientific Reports 13 (2023): 14045.
- Wilcox, H. (2023). "Cheating Aussie student fails uni exam after being caught using artificial intelligence chatbot to write essay - now Australia's top universities are considering a bizarre solution to stop it happening again." Online
- Lo, C. K. (2023). "What Is the impact of ChatGPT on education? A rapid review of the literature." Education Sciences, 13(4), 410.
- Thorp, H. (2023). "ChatGPT is fun, but not an author." Science, 379(6630), 313.