# **CHAPTER TWO: LITERATURE REVIEW**

## **2.0 Overview**

This chapter explores the significance of practical experience, the challenges encountered by students, and existing systems and solutions designed to bridge this crucial gap. Furthermore, it delves into the role of educational institutions and their collaboration with industries, setting the stage for the introduction of the proposed Career & Attachment Linking System.

## **2.1 The Transition from Education to Practical Experience**

Practical experience, notably through internships and attachments, holds a significant role in bridging the often-substantial gap between the theoretical knowledge acquired in the classroom and its application in the actual work (Dondofema et al., 2020). These experiential opportunities serve as a critical component of the educational journey, offering several key benefits to students. It contributes significantly to skill development, serves as a vital element of career preparation allowing students to make informed career decisions and finally it improves students' employability. Graduates with a robust background in practical applications of their knowledge tend to be more attractive to employers, as they often possess the skills and confidence needed to excel in their roles.(Spanjaard et al., 2018).

Despite its significance in education, students encounter challenges as they make this transition (Dasmani, 2011). These challenges often present substantial barriers to securing meaningful attachment opportunities and include limited access to these opportunities and the existence of a significant mismatch between the opportunities available and the career aspirations of students. This mismatch poses a significant challenge, as it can lead to disillusionment among students and hinder the development of a clear and coherent career path. Understanding these challenges is crucial, as they provide the context in which the proposed Career & Attachment Linking System aims to operate, offering solutions to address these obstacles and enhance the overall transition experience for students.

## **2.2 Existing Systems and Solutions**

One approach to addressing the challenges faced by students during their transition from education to practical experience is the development of centralized platforms designed to facilitate attachment placement (Matsika & Zhou, 2021). These platforms act as intermediaries, connecting students with attachment opportunities offered by various organizations. A review of these centralized systems reveals their potential in streamlining the attachment process for students. This subsection assesses the structure and functioning of such platforms and examines their effectiveness in addressing the challenges identified earlier

Communication tools and features embedded within attachment systems play a pivotal role in shaping the overall experience of students. This system will use various tools and functionalities incorporated into attachment platforms, such as messaging systems, notifications, and matching algorithms. It explores the impact of these tools on user experience, focusing on their role in facilitating efficient communication in the system (Simin Ghavifekr et al., 2015).

Data privacy and security explores into the critical aspects of data protection within existing platforms. It discusses the importance of safeguarding user information and maintaining the confidentiality of attachment-related data (Hawamleh, 2020). By evaluating the measures and technologies employed by these systems to protect sensitive information, we can assess their commitment to ensuring data privacy and security. The system will explore in use of different techniques like encryption and secure communication, user authentication and access control to ensure data is protected from unauthorized access.

## **2.3 Bridging the Gap Between Education and Industry**

The role of educational institutions in the career development of students is multifaceted and crucial. This subsection examines the various ways in which educational institutions contribute to the preparation of students for their future careers (V. Vijaya Lakshmi Et Al., & TJPRC, 2018). It explores into the best practices employed by these institutions in areas such as curriculum design, career counseling, and fostering the skills needed for successful transitions to the workforce. By exploring the efforts and strategies employed by educational institutions to guide students effectively, we gain insights into the means by which they bridge the gap between education and industry, setting the stage for the proposed Career & Attachment Linking System's integration into this educational ecosystem.

Collaboration between educational institutions and industries is a dynamic and evolving partnership that significantly impacts students' practical experience and their readiness for the workforce (Thang Quyet NGUYEN & Hoa Thi Thu NGUYEN, 2020). In this subsection, we delve into the intricate interplay between these two entities in facilitating practical experience opportunities for students. It explores the collaborative efforts undertaken to bridge the gap between education and industry and assesses the benefits of aligning educational programs with the evolving needs of industries. By exploring how these collaborations contribute to workforce readiness, we gain an understanding of the symbiotic relationship between educational institutions and industries, which the proposed Career & Attachment Linking System aims to facilitate and strengthen.

### **2.4 Conclusion**

In summary, this chapter underscores the pivotal role of practical experience, like internships and attachments, in bridging theoretical learning with real-world application, offering students invaluable skill development and career preparation. Despite its significance, challenges persist, such as limited access and mismatched opportunities. Centralized platforms and robust communication tools, aim to streamline attachment placements, with data privacy being a critical concern. Educational institutions play a vital role in guiding students toward successful careers by incorporating best practices in curriculum design, career counseling, and industry engagement. Collaborative efforts between educational institutions and industries are crucial in preparing graduates for the workforce, aligning educational programs with industry needs.