**Chapter 2: Recommendations,Results, Academics and AI Integration**

**2.1 Introduction**

This chapter outlines the recommendations in regards to academic performance, academic variables, and AI integration, in both post-secondary education and high school. Academic performance GPAs and CGPAs are some of the first signals of qualified competitor to scholarship, internship, or future employment opportunity. The Smart CGPA Advisor is the first version of a web-based technology that allows the automation of GPAs, and GPAs that contain academic history for future plans - additional or modified. It was the purpose of this chapter to show the positive impacts of AI to academic performance, support technologies, and how different AI-based technologies can overcome the constraints of GPA and CPGA related manual calculations placed by any GPA / CPGA measurement system.

**2.2 Recommendations Results of Academic Performance**

AI technologies such as Smart CGPA Advisor have demonstrated positive recommendations regarding improvements to the academic performance criteria.

**2.2.1 Recommendations of Improved Academic Performance**

Evidence demonstrated in the literature leads us to believe that students using AI -enabled technologies, out performed (larger GPAs ) students who did not use any regular GPA -enabled technologies (Facey and Neel, 2023) and also larger CGPAs (Neel et al, 2021 ) and for overall effort responsive behaviours (Neel et al, 2019). The Smart CGPA Advisor allows users to 'get around' the specificities of GPA and CGPA and 'fill them (temporarily) with automation.

**2.2.2 Effect on Student Involvement**

The Smart CGPA Advisor promotes a sense of ownership with learning by motivating students to be able to set their own goals and track their progress. This form of self-regulated learning is identified, at best, as promoting motivation and performance and, at worst, predictive of the lack of motivation and performance. The Smart CGPA Advisor contains personalized information, that includes contextual recommendations and feedback, that invites the user to shift to involvement with the learning and improvement of academic performance.

**2.3 Academic Factors Affecting Authoring Performance**

The factors that academics may 'stack' to positively or negatively influence academic performance will include the individual characteristics of the student, the social characteristics of the situation, and the experiences and expectations associated with the learning environment. It is important to establish knowledge of the factors to development effective AI-enabled learning.

**2.3.1 Individual Factors**

Individual student characteristics are just as important as their motivation and self-regulation in being able to learn, when it comes to seeing academic outcomes. The Smart CGPA Advisor is tapping into individual factors by providing each student with relationship-based data feedback that ascertains the students learning styles and needs. An important aspect of the Smart CGPA Advisor will be to support student self-identified areas of improvement and formulate strategies accordingly.

**2.3.2 Social Influences**

There is considerable empirical evidence about the relationship between social networks and peer support and academic performance. The Smart CGPA Advisor has a social aspect of the plugin to allow students to collaborate and to create a community of learners to support themselves and one another during their academic path. Students can remind each other to motivate their learning and create thoughtful curriculum-engaged activities and thereby increase their total academic effort towards their academic outcomes.

**2.3.3 Learning Environment**

The learning environment; access to learning resources, is another noticeable influence on academic performance. The Smart CGPA Advisor creates a rich learning environment for each individual student by providing them with foot loads of information and resources in context to each student's academic performance. The Smart CGPA Advisor can churn out a complete view of a student's current state

**2.4 Infusion of AI in Education**

The infusion of AI into educational contexts (schools and universities) has modernized how academic performance is assessed and improved. The extensive use of educational AI-driven tools, such as the Smart CGPA Advisor, gives students personalized learning tracks consisting of predictive analytics and real-time feedback that can improve student engagement and performance.

**2.4.1 Personalized Learning Experiences**

AI educational technologies respond to personalized learning experiences of students. AI Technology such as the Smart CGPA Advisor assesses individual student data and makes additional recommendations tailored to each student's specific learning needs within an educational institution. The Smart CGPA Advisor utilizes machine learning models developed for determining and modeling the various aspects of historical performance data to evaluate the performance output and apply academic outcome modeling for intervening when a student may fall below at-risk performance outside the model.

**2.4.2 Predictive Analytics**

The predictive analytics core to AI technologies can have significant value, impacting students' academic performance directly and indirectly. Predictive analytics include the various patterns of student data via Smart CGPA Advisor, which provides the AI technology with the ability to identify those students exhibiting educational need and provide planned intervention, thus giving students a chance to avoid academic overload and respond to their academic need. A proactive approach to supportive student learning reduces the potential for underlying academic issue(s) propagating and the negative repercussions.

**2.4.3 Holistic Support**

The Smart CGPA Advisor provides holistic support due to its capacity to account for different performance elements such as habits of study, attendance, and levels of engagement of a student. The holistic nature of the scope of a students' academic experience suggests alternative pathways of precise intervention and recommendation and reinforces a supportive climate for learners.

**Conclusion**

Overall, the combination of AI technologies such as the Smart CGPA Advisor can have a positive impact on academic performance. The evidence suggests that AI has the capacity to enhance academic performance, enhance engagement, and enhance the personalization of student learning. By understanding the academic factors that influence academic performance of academic learning (i.e. individual characteristics, social influences, and learning environment), educators and institutions have the ability to leverage AI to set up students to be successful in their pursuits. Even though the Smart CGPA advisor has provide simplicity in the calculations of GPA and CGPA, it provides students with information but also provides students with actionable insights and personalized recommendations that they can act on. Therefore, the data driven foresight and insights presents authorship of accountablity of student learning that empowers students to take charge of their learning experience to pursue student excellence in learning.

As educational institutions begin to adopt AI technologies, it is important to continue studying their effectiveness, and to continue searching for ways to advance student learning, and student success. As AI technologies develop and diversify, educational researchers should consider the long-term impact of AI-focused tools on student academic performance, and whether or not those tools are capable of supporting pluriversal learning needs in differing contexts.

In conclusion, the Smart CGPA Advisor represents a landmark principle in managing one's academic performance, and offers a response that is not a strict departure from the limits of traditional methods. Although the AI technology promoted a more sustainable and transparent space, it also supports student collaboration, and student success, while potentially preparing students for the future.

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