**Performance review**

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| **Student details** | | |
| **First Name** | **Last Name** | **Date** |
| By | Atary | 1/20/2024 |
| **Centre Name** | **Tutor** |  |
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| **Proposed Title** | Big Data Develops at Pearson | |

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| **Performance review** |
| 1. What did you aim to achieve through your work?  “ما الذي كنت تهدف إلى تحقيقه من خلال بحثك؟”   **This research aims to answer the following questions:**  1- Can the quality of education be improved using big data?  2 - Can the big data framework improve the assessment of educational performance?  3 - How can Pearson develop an automated system for personalized course recommendations using student academic data?  4 - How can big data analytics effectively enhance the quality of Pearson cloud computing courses?   1. Did your work succeed in achieving your aims? How do you know? Specifically, please outline any evaluation and assessment undertaken. " هل نجحت طريقتك في تحقيق أهدافك؟ كيف تأكدت من هذا؟ وعلى وجه التحديد، يرجى توضيح أي تقييم وتقدير للمخرجات تم إجراؤه."   **Research Objective: Improving the quality of education using big data**  **Result**: Ideas were successfully collected on how big data can enhance the quality of education, supported by case studies and literature analysis  **Research Objective: To enhance the evaluation of educational performance within the framework of big data**  **Result:** The effective use of data analytics tools has shown the usefulness of big data in improving educational performance assessment  **Research Objective: Develop an automated system for customized course recommendations using student data**  **Result**: Propose a viable automated system based on comprehensive data analysis  **Research Objective: To improve the quality of Pearson's cloud computing courses through big data analytics**  **Result**: Combine qualitative and quantitative research methods to suggest practical improvements to cloud computing cycles   1. What aspects of your development process do you think worked well and why? Evaluate all aspects of the project (e.g. initial research, concept development, development process, presentation, etc.) from a range of perspectives. " ما هي جوانب عملية البحث التي تعتقد أنها نجحت بشكل جيد ولماذا؟ تقييم جميع أجزاء البحث من وجهات نظر مختلفة."   The initial research phase was effective. The use of a combination of literature review and case studies provided a solid foundation and direction for the project.  The development of this concept, especially the idea of using big data in educational environments, was a strong point. It has been innovative and well aligned with current educational needs.  The development process has been successful, in particular the use of data analysis tools and methodologies for data collection and analysis. It allowed for an in-depth understanding of the subject.  The presentation of research results and proposed solutions was coherent and well-organized, facilitating easy understanding and practical application.   1. What problems emerged during the project and how were they tackled? Was there timely identification of issues and resolution during the project process? " ما هي المشاكل التي ظهرت خلال البحث وكيف تم معالجتها؟ هل تم تحديد المشكلات وحلها في الوقت المناسب أثناء البحث؟"   **Information gaps:** Initially, there was a lack of sufficient information for certain sections of the research. This was addressed by searching for additional sources and expanding the search.  **The complexity of data analysis:** Analyzing academic data, especially grades, was difficult and time-consuming. This problem was addressed by improving analysis techniques and focusing more on goals.  **Time management:** After a break in the search process, resuming work and effectively managing time for different departments was a challenge.   1. What did you learn from undertaking the project? " ماذا تعلمت من تنفيذ البحث؟"   Through the implementation of the project, I learned about the vast potential of big data in education, especially in improving the quality of education and personalization. I gained insight into effective data analysis techniques and the importance of a systematic approach to research. The project also highlighted the importance of adapting to challenges and the value of continuous learning and improving research methodologies. This experience has strengthened my understanding of educational research and the practical application of data analytics in this field.     1. What are the strengths and weaknesses of your process that you have identified? " ما هي نقاط القوة والضعف في كل أجزاء بحثك الاساسية؟"   **Advantages (pros):**  **Diversity of data sources:** The hybrid approach makes it possible to collect information from a range of sources, improving the depth and richness of information.  **Comprehensive understanding: My**  study provides a comprehensive picture of student achievement by integrating quantitative and qualitative methodologies, integrating empirical facts and first-hand experiments.  **Contextual insights:** By highlighting the drivers behind statistics and facilitating focused action, qualitative data, such as interviews, give context to quantitative results.  **Data triangulation:** By enabling cross-verifying results, the use of different data collection methodologies enhances the validity of the research.  **Adaptability:** This strategy is adaptable, allowing adjustments to be made to research techniques as the study continues, in response to initial findings or newly formulated research topics.  **Disadvantages (limitations and difficulties):**  **Resource intensity:** Research using mixed methods may require time and labor-intensive in terms of resources to collect and analyze data.  **Complexity in integration: It**  can be difficult to reconcile data from qualitative and quantitative sources, which can make it difficult to understand contradictory results.  **Potential bias:** Subjective bias in data collection and analysis poses a risk to qualitative research and may distort the objectivity of the results.  **Data overload:** Finding relevant information may require significant filtering due to the abundance of data collected from qualitative and quantitative sources.  **Skill requirements:** If the research team is inexperienced in the qualitative or quantitative analysis approach, this requirement may be a hindrance.  Even if my method of data collection and analysis is comprehensive and in-depth, there are still some difficulties. While this leads to more complexity and resource requirements, the advantages lie in its ability to provide a holistic view of student performance. To ensure that the results of the study are trustworthy and viable, it is necessary to be careful when it comes to potential biases and the integration of different data types.   1. How could your process improve for the future? "How can your way of searching improve in the future?"   **Improve data collection:** Scale up data collection methods to obtain a wide range of detailed data.  **Advanced Data Analysis:** Apply more complex data analysis techniques, such as machine learning, to gain a deeper understanding.  Creating an ongoing feedback loop with students and teachers allows teachers to adapt and improve their teaching styles. This is known as continuous comment integration. |

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