

## Chapter 9

# Promoting Collaboration in Teaching and Learning: A Data-Centric Approach

**Olalekan Rafiu Ayodele-Oja**

 <https://orcid.org/0009-0006-6652-7210>

*Desheng School (International), China*

### **ABSTRACT**

*The expanding concentric circles of the international baccalaureate (IB) diploma programme model highlight the importance of imparting defining attributes to learners, and the infusion of same through the circles. The faint lines within and across the circles invite an exploration of the intrinsic links among them to optimise learning. On this reading of the diploma model, it is crucial to rethink the current analytics for interpreting the IB diploma results. To have a more definitive evaluation of the students' outcomes relative to the intrinsically collaborative reading of the diploma model, also referred to as “connectedness and concurrency of learning” or CCL, relevant data need to be associated with the reading. This chapter explores five years of relevant data from an international high school in China. From the source data, it teases out data points that are evident of the CCL, and by applying an original analytics model to reading the data, it reveals further insights about the notion of the CCL across the diploma curriculum.*

### **INTRODUCTION**

The focus of this chapter is primarily on the application of data analytics to the International Baccalaureate (IB) diploma results. Schools usually focus on what can be called the traditional data analytics—such as the use of averages, standard deviation, correlations, median, etcetera—to analyse and present their students' performances, especially after terminal examinations like the IB diploma. This analytics is helpful to some extent, but it has significant limitations. In broad strokes, it employs key statistical data to inform existing stakeholders, and to help prospective ones in making informed decisions, about the status of learning in the respective school. When it provides fine details, the data can still be relatively

DOI: 10.4018/978-1-6684-8795-2.ch009

## ***Promoting Collaboration in Teaching and Learning***

isolated and individualised to the extent that they minimise or miss altogether important links to other data points. However, adapting data analytics to provide detailed and meaningful feedback on the critical task of teaching and learning depends on the objectives of the analysis and identification of relevant data points.

The source school of this chapter reviews their IB diploma results yearly. Based on the above-mentioned metrics, the analysis has been showing objectively promising details about teaching and learning in the school. This chapter believes that a different approach could yield more meaningful and insightful results about the status of “connectedness and concurrency of learning” (CCL) in the school with potential impact on both its curriculum and instructional systems. Simply, CCL is the idea that no learning is isolated. The diploma curriculum is built on the notion that students can apply learning in one discipline to solve problems or motivate inquiries in another discipline and attain learning objectives from multiple disciplines at the same time. To facilitate CCL, the International Baccalaureate Organization (IBO) requires schools to demonstrate evidence of practising collaboration, including collaborative planning and reflection (CPR)—where teachers across multiple disciplines (i) plan teaching and learning activities collectively (ii) implement the plan accordingly, and (iii) reflect on the processes in like manner (IBO, 2022, Practice 0401-02; 0403-03, 04). As a whole school approach, the IBO also prescribes specific practices to school (0401-01, 03; 0404-02) and students (0402-01, 02, 03).<sup>1</sup>

The chapter concurs with the IBO on the centrality of the CCL to the implementation of the diploma programme. As such, the relevant analytics must identify relevant data points, and extract granular details from those, to reveal multiple actionable links across the entire teaching and learning landscape.

With its defence of the notion of CCL in the diploma programme literature, the IB offers some of the most robust foundations for collaboration in teaching and learning. But, again, the issue here is not the merit or otherwise of collaboration or CCL. To that extent, there is little gain in moralising to schools or proffering extensive theoretical arguments in defence of the instructional practice. A better approach is to empower schools to self-appraise their current implementation of the CCL practices based on critical analysis of relevant data.

This is where the chapter hopes to make an impact on knowledge. It believes that meaningful feedback on diploma students’ results must capture the status of the CCL or collaboration in a school. Toward that end, it identifies relevant data points in the diploma results to associate with the notion of connectedness and concurrency of learning along with original data analytics to measure the status of such learning in a school.

## **BACKGROUND**

Given the objective of the chapter, as stated above, it is worth noting that the core of this chapter is original research to build on the notion of connectedness and concurrency of learning posited by the IBO. The educational body is clear about the centrality of the CCL in the IB diploma framework or model and correct about the importance of CCL to teaching and learning in the diploma programme. It has also provided relevant *programme standards and practices* (IBO, 2022) to guide schools along. But it seems insufficient to merely require IB World schools to report their compliance with the relevant practices. What is apparently missing is the appropriate quantitative metrics for schools to (self) diagnose the effectiveness of their implementation of the said practices. The chapter is blazing a new trail of discussion in this area, rather than merely contributing to an existing debate. In that situation,

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/promoting-collaboration-in-teaching-and-learning/334319](http://www.igi-global.com/chapter/promoting-collaboration-in-teaching-and-learning/334319)

## Related Content

---

### Excellence Through Innovation and Inclusivity: New Zealand

(2023). *Academic Framework for 21st-Century Schooling: Promoting Global Peace and Harmony* (pp. 257-279).

[www.irma-international.org/chapter/excellence-through-innovation-and-inclusivity/332527](http://www.irma-international.org/chapter/excellence-through-innovation-and-inclusivity/332527)

### Faith Goes to College: The Religious Factor in the Founding and Development of HBCUs

Harry Singleton (2022). *Contributions of Historically Black Colleges and Universities in the 21st Century* (pp. 1-20).

[www.irma-international.org/chapter/faith-goes-to-college/309359](http://www.irma-international.org/chapter/faith-goes-to-college/309359)

### Recognition of International School Qualifications for Higher Education Access: A Case Study of International Schools in Italy and Categorization of Qualifications

Chiara Finocchietti (2024). *Handbook of Research on Critical Issues and Global Trends in International Education* (pp. 499-521).

[www.irma-international.org/chapter/recognition-of-international-school-qualifications-for-higher-education-access/334330](http://www.irma-international.org/chapter/recognition-of-international-school-qualifications-for-higher-education-access/334330)

### Efficiency Assessment of University-Industry Collaboration

Ebru Yüksel Halilolu (2021). *University-Industry Collaboration Strategies in the Digital Era* (pp. 155-175).

[www.irma-international.org/chapter/efficiency-assessment-of-university-industry-collaboration/271530](http://www.irma-international.org/chapter/efficiency-assessment-of-university-industry-collaboration/271530)

### School Management Teams' Strategies to Enhance Curriculum Delivery in the Era of the COVID-19 Pandemic

Ailwei Solomon Mawela (2021). *Investigating the Roles of School Management Teams in Curriculum Delivery* (pp. 145-157).

[www.irma-international.org/chapter/school-management-teams-strategies-to-enhance-curriculum-delivery-in-the-era-of-the-covid-19-pandemic/285756](http://www.irma-international.org/chapter/school-management-teams-strategies-to-enhance-curriculum-delivery-in-the-era-of-the-covid-19-pandemic/285756)