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Title: Designing Learning: The Central Role of Timetabling in Schools

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Research Overview

A timetable connects the whole school in many ways and on many levels by coordinating all students, teachers, and resources so that learning can take place (Liddicoat et al., 2018). This study aims to explore how timetabling changes impact school leadership, teachers and students in the school environment.

Purpose of Study

Leadership teams have a difficult task of deciding if and when changes to the timetable are required and need to foresee how these changes might impact on the school environment. Research on timetabling and curriculum change, conducted across various international schools, highlighted how curriculum alterations influence timetable structures or are explored within existing timetable frameworks. (Gabhainn et al., 2010; Hipkins, 2020; Liddicoat et al., 2018; Nicholas & Ng, 2010; Wiggins et al., 2017).

The literature reveals key gaps, including limited representation of stakeholder perspectives in timetable changes and a lack of understanding of their impact from decision-making through to implementation. Timetable changes are often treated as a by-product of curriculum reform rather than a focus of study. This research therefore explores timetable changes and examines their impact on leadership, teachers and students.

Research Methods

Participant perspectives and voices were key to understanding timetable changes and hence a qualitative interpretivist research paradigm was adopted (Hughes, 2010). The study utilised a comparative case study approach to examine the findings from two school sites (each case) in Victoria, Australia.

School A is in the western suburbs of Melbourne and is the second campus to a large independent school. It has just over 1000 students and is co-educational. There are 54 staff members from years seven to 10. School A changed their timetable by moving from very specified elective and core subjects to broader student choice and the removal of a pastoral care program.

School B is in the Geelong region of Victoria and is a government co-educational school. There are around 900 students attending from years seven to 12. School B changed their timetable by going from six period days to five period days and the removal of morning tutor group.

Data collection methods included document analysis, surveys, semi-structured interviews (seven Interviews for each site ranging from leadership to teaching staff), and student focus groups (two focus groups each site consisting of four to six students) to incorporate multiple perspectives from the data (Punch & Oancea, 2014). Documents were sourced from school websites and provided by schools. Surveys were distributed to staff to capture teaching and leadership perspectives, while interviews were conducted with those directly impacted by the timetable change. Students contributed through surveys and focus groups, sharing their experiences. Survey Responses are listed below.

Staff Survey's – School A: 14/54 responded, School B: 29/72 responded.

Student Survey's – School A: 110 responses, School B: 68 responses.

Data was analysed using Grounded Theory and inductive coding practices as outlined by Creswell and Guetterman (2019). Open coding was applied to all interviews and documents followed by axial coding to group initial codes into sub-themes which were

then refined into seven major themes that will be discussed further in the results section (Creswell & Guetterman, 2019).

Results and Discussion

Preliminary data analysis resulted in seven key themes that connected both schools in their timetabling change: Timetable and Time Management, Values and Priorities, Community and External Factors, Change Management and Culture, Staffing and Staff Experiences, Student Experiences and Outcomes and Teaching and Learning. Although each theme is present at both schools the initial comparative data analysis suggests that the approach to change was significantly different at both schools.

School A completed their timetable change in a relatively short period of time. Consensus from staff members was that there was limited inclusion of staff opinions surrounding the timetable change. The change occurred over a term break with very limited discussion with staff or members of the school community. The driving force behind the change was parent complaints about the rigidity of the previous timetable and its inability to allow for more student choice.

School B completed a lengthy process for their timetable change by taking just over 12 months to complete in total with staff being involved in multiple decision points along the way. Parents contributed via surveys and other contact points, whilst students completed some focus group sessions. The leadership at School B sought to understand the reasoning behind the change and what impact it would have on students/staff and teaching and learning.

Further analysis of the data is required to provide additional discussion points and understanding of the impacts of timetable changes. The data also brought out the changing nature of timetables and how the potential for Artificial Intelligence could be used to create, develop and optimise timetabling in the future. Timetables form the backbone to most educational institutions and therefore this research has the potential to unpack their significance in the future.

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