

A Study of the Raffles Programme at the Raffles Girls' School, Singapore

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THIS PROJECT INVESTIGATED the Raffles Programme (RP), a whole-school curriculum reform in Raffles Girls' School. Data was collected through various methods in order to examine the planning, implementation and enactment processes of the RP. Key factors that contributed to, or impeded, organizational and pedagogical innovation in the school were identified. The achievements of the reform process at the level of classroom practice were also documented. The research found that the RP had been implemented with fidelity, and that substantial change in classroom practice has resulted. There was also considerable evidence that these changes have become embedded in the school's culture, including classroom culture, and tend to be highly supported by the school and curriculum leaders, teachers and students.

INTRODUCTION

This project investigated the Raffles Programme (RP), a whole-school curriculum reform in Raffles Girls' School (RGS). The catalyst for the reform was the Ministry of Education's decision to allow schools to offer an Integrated Programme catering to the academically most able students. This provides students with the opportunity to proceed from secondary school to junior college without having to take the 'O'-level examinations.

A substantial body of international evidence suggests that sustainable pedagogical innovation depends on systemic changes at the classroom level, supported by cultural and organizational changes at the school level.

KEY IMPLICATIONS

- *Policy:* A focus on leadership, learning and resources contributed to the success of the Integrated Programme at the school level. These aspects are interrelated and consistent with organizational learning through exploration.
- *Practice:* The success of the RP can be attributed to teachers who demonstrated a respect for students as people and learners, and who were able to systematically nurture and assess the development of students' self-directed learning, critical thinking, social awareness and engagement.
- *Research:* Sustainable pedagogical innovation depends on systemic changes at the classroom level, supported by cultural and organizational changes at the school level.

Three themes run through the relevant Singapore-related literature. First, in Singapore, new policy tends to be the principal catalyst for reform attempts. Second, the school-level response to that policy tends to focus on surface-level compliance. Third, development of that response tends to have a relatively brief time frame—speed is essential, due in part to rapid policy changes.

The overall curriculum design for the RP is based on the principles of exemplary gifted education, specifically the principles of van Tassel-Baska's (1986) integrated curriculum model. This model asserts that the needs of gifted learners are best met by: advanced content; high-level process and product work; intra- and inter-disciplinary concept development and understanding; and social and emotional learning.

In the RP curriculum framework, there are four curriculum organizers: macro-concepts (based on the *Understanding by Design* framework of Wiggins & McTighe, 2005); philosophy; character and leadership education; and research studies. These provide links between the various disciplines, so that a unified world is presented to the students.

Macro-concepts are the “big ideas” of the disciplines—abstract concepts like *change*, *systems* and *energy*—that are developed and expressed differently in the various disciplines.

Philosophy and character and leadership education promote the development of “caring and critical thinking”. Each discipline cares about a particular aspect of the world and has its own approach to critical thinking, and students are introduced to these fundamental aspects of each discipline.

Research studies is both a pedagogical approach as well as an area of study (e.g., Research Studies as a subject). This means that the students' sense of curiosity, creativity, self-directed learning and disciplined inquiry skills can be systematically nurtured.

The project examined RGS's whole-school curriculum reform effort. The objectives of the project were:

1. to critically examine the impact of planning, implementing and enacting the RP;
2. to identify key factors contributing to, or impeding, organizational and pedagogical innovation; and
3. to document the achievements of the reform process at the level of classroom practice.

RESEARCH DESIGN

The research was conducted in RGS over the school year 2009. A qualitative case study approach was adopted. Data was collected from four sources: document archives, interviews, classroom observations, and researcher field notes. The overall approach to data collection involved a graduated multi-step process of immersion in the context.

The first step was to review the school's archive of documents in relation to the initial stages of the RP development.

The second step involved semi-structured interviews with 8 school leaders, such as the principal and deputy principals. The third step involved focus group interviews with 10 curriculum leaders, such as heads of department and subject heads.

The fourth step involved classroom observations and video recording of 143 lessons taught by 16 teachers across 7 subject areas and through all 4 secondary levels. These were subsequently coded and analysed using quantitative methods.

The fifth step involved focus group interviews with 43 past and present students.

Content analysis was an ongoing and integral component of the research. It was used as a means to systematically search for commonalities, themes and patterns in the data, to reduce it or to focus its meaning in relation to the particular intentions of this project.

KEY FINDINGS

The research found that the RP had been implemented with fidelity, and that substantial change in classroom practice has resulted. It also found considerable evidence that these changes have become embedded in the school's culture, including classroom culture, and tend to be strongly supported by the school and curriculum-level leaders, teachers and students. The findings on whole-school curriculum reform may be classified into three categories.

Planning, Implementing and Enacting the RP

The success of whole-school curriculum reform could be attributed to the following key aspects:

1. A range of presage issues meant there was school-wide trust in the school's leadership and

confidence in the possibility of a school-wide curriculum reform.

2. Leadership at the school and curriculum levels acknowledged that fundamental learning requires risk-taking and time to achieve reform. It also recognized and optimized the structural and enabling conditions, such as creating local networks required for exploration and subsequent organizational learning.
3. A school-wide mandate catalysed action, including collaboration between schools and a clear understanding of the time frame for response.
4. An internal infrastructure promoted constructive communication within and between departments, and between school leaders, teachers and students.
5. A highly strategic and systematic approach to the reform process maintained a consistency of direction while promoting constant tailoring to the demands and opportunities at each stage.

Organizational and Pedagogical Innovation

Improvements to organizational and pedagogical strategies included:

1. An organizational philosophy consistent with the notion of a learning organization, including both exploration and exploitation.
2. A strategic alignment of intentions with resources, especially internal resources that could be used to build teachers' professional capacities and confidence.
3. Engaging students as partners in the process of change, particularly at the classroom level.

Building Teacher Professionalism

A strong focus on teacher professional capacity and identity has resulted in the cultivation of students to be self-confident, self-directed, socially aware, engaged and able to think critically. This arose from the following:

1. Teachers' professional capacities were fostered, including a respect for students as people and learners.
2. Teachers could systematically nurture and assess the development of professional capacities and the attitudes, beliefs and values that underlie them.
3. Teachers were committed to continue in developing professional capacities in ways that responded to the needs and levels of the students.

IMPLICATIONS

When reporting what we had found from the classroom observations and interviews to the school

in November 2009, we identified aspects of impact or potential impact through a SWOT analysis. These were organized under the headings of *curriculum*, *pedagogy* and *assessment*.

Collectively they reflect the development of both a new and adaptive local learning infrastructure, and the enactment of a vibrant student- and learning-centred culture in most observed classrooms. We use the term *co-pedagogy* to express this new dynamic.

For Curriculum

The Integrated Programme opens up curriculum space for teachers to experiment and create learning opportunities for students. There is a shift from curriculum coverage to student learning, with a strong priority on student learning and engagement.

Students are seen as learners and are taught dispositions and values towards learning. This is seen predominantly in the inclusion of subjects such as Research Studies and Philosophy. These dispositions and values are potentially applicable to all subject areas, including the sciences and mathematics.

We saw that the teaching of dispositions and values through Research Studies and Philosophy also allowed for cross-departmental conversations to occur. This can help in the development of integrated performance tasks.

Task designs were loosely framed to allow students to differentiate the tasks in terms of their intellectual ability and pace. In the lessons observed, there were examples of students self-selecting tasks based on their own perceived competency level; in essence, a form of task differentiation.

There was strong control of the delivered curriculum by teachers who saw themselves as purposeful and had a clear sense of direction. There were interesting and highly engaging approaches to classroom teaching, with the flexibility for adaptation to students' needs.

For Pedagogy

Good pedagogy is seen to position students as active learners, with the pedagogical load being shared between teacher and students. The school had expert teachers who were able to adapt lessons according to students' needs and levels. The students allowed for the teachers to employ creative pedagogical methods.

There was a strong sense of personalized pedagogy. Pedagogy was seen as embodied, emoted and contextualized. There was a form of personalization of understanding by the students, as they began to connect emotionally and intellectually with the tasks and subject matter.

The pedagogy used to teach Philosophy exposed students to ways of understanding knowledge and to peer interactions which helped constructive learning by encouraging them to be active participants in knowledge construction and critique. Furthermore, co-pedagogy was observed in classes, where there was a sharing of epistemic authority.

The Humanities teachers were able to weave numerous connections between subject matter, students' prior knowledge and common-sense experiences. This helped to build a strong conceptual knowledge base from which to engage with the subject matter critically and creatively.

A more consistent use of pedagogical practices across other subjects could be considered. Practices such as the Community of Inquiry or Paul's (1992) Wheel of Reasoning could be constructively engaged to help student learning. Creating an interdisciplinary curriculum and assessment tasks as well as interdisciplinary forms of pedagogy could also help.

For Assessment

There were interesting and engaging performance tasks for students. We noted that the presence of carefully designed assessment tasks and rubrics allowed students to be aware of the level of achievement required of them.

We observed formative assessment being used in classrooms for students to get feedback on their own practice; for example, the use of iterative scaffolding for success.

However, we noted that there is room for greater integration of performance tasks across subjects. This would minimize the proliferation of tasks students are required to do.

Teachers should also look into the notion of "feedforward", and assessment *for* learning rather than assessment *of* learning. They are encouraged to consider the idea of a "learning journey" for students.

CONCLUSION

There is a substantial body of international evidence which suggests that sustainable pedagogical innovation depends on systemic changes at the classroom level, supported by cultural and organizational changes at the school level. This research suggests that the literature on whole-school innovation and reform underplays the importance of continuity by emphasizing change.

Our findings point to the need for continuity in some areas and change in others. Specifically, continuity is needed and encouraged in factors that support individual and organizational learning, and learning that results in changes in professional practices, including classroom practices. Attempting to change the latter as a means to achieve whole-school reform, without first establishing confidence and competence in organizational learning, would seem unrealistically ambitious.

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