National Curriculum Framework

Nine-Year Continuous Basic Education
Grades 7, 8 & 9

REPUBLIC OF MAURITIUS
A major concern

• About 25% of pupils do not succeed in the national examination at the end of primary education.

• They struggle to complete secondary education.
Background and context

Primary School Achievement Certificate

3 years of middle school

4 years of middle school
Education Reform: Support systems

- Complete middle school in 4 years rather than 3 years
- Rethink about teaching and learning
Teaching of Mathematics and Science in the extended 4-year stream

Experimentation with the PMI-PSI approach
Objectives of the incentive

- Enhance students’ engagement in Mathematics and Science
- Increase students’ achievement in Mathematics and Science
- Value education as a rewarding activity
Action Plan

Phase 1
• Preparation phase (June – December 2017)

Phase 2
• Pilot study (January – December 2018)

Phase 3
• Extension phase (2019, 2020, 2021)
Scaling plan

Year 1 (2018): Pilot
Year 2 (2019) Scaling
Year 3 (2020) Scaling
Year 4 (2021)
<table>
<thead>
<tr>
<th><strong>STRENGTHS</strong></th>
<th><strong>WEAKNESSES</strong></th>
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| • Institutional/government willingness to give additional support to the extended four-year stream in the current reform | • Efficiency of stakeholders in the system  
• Students’ engagement in their studies |

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<tr>
<th><strong>OPPORTUNITIES</strong></th>
<th><strong>THREATS</strong></th>
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| • Aligns with the philosophy of the reform in terms of innovative pedagogy  
• The reform has triggered a changing mindset in the education system. | • Teacher willingness and fidelity to adopt the new pedagogical model - effecting the change with the same people who have been accustomed to the existing system. |
Influential Stakeholders

-Parents
-Teachers/Unions
-Inspectors
-Rectors
-MIE
-PS
-students
Phase 1: Preparation phase (June 2017)

- Team building: Mathematics, Science, Design and Technology Education
- Development of consolidated Action Plan
- Presentation of Action Plan to Ministry
Phase 1: Preparation phase (July-September 2017)

- Selection of 10 schools
- 3-day workshop by NJCTL for MIE Lecturers and 60 teachers
- Constitution of a panel (5 Mathematics and 5 Science Teachers)
- Purchase of materials for project implementation
Phase 1: Preparation phase (October-December 2017)

- Appointment of 10 Support Teachers (ST) from YEP
- Training of ST by MIE lecturers
- Completion of Year 1 PSI/PMI materials by panel and ST
Phase 2: Pilot study
January – December 2018
Target group for intervention

10 schools
750 students
60 teachers
<table>
<thead>
<tr>
<th>2018 (Year 1) (Pilot)</th>
<th>Activity</th>
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</table>
| January - March       | Implementation in 10 schools  
Continuous monitoring by ST |
| April – June          | Resource development for Year 2 by Panel and ST  
Development of PBL programme for Year 2 (2019) starts  
Collaboration of colleagues from Vocational Institutes/University |
| July - September      | Resource development for Year 2 by Panel and ST  
Continuous monitoring by ST  
Development of PBL materials for Year 2 continues |
| October - December    | Development of PBL materials (for Year 2) and teacher manual in final phase  
Longitudinal study of Cohort 1 in Year 1  
Project evaluation 1 |
Phase 3: Scaling of project
January – December 2019
<table>
<thead>
<tr>
<th>2019 (Year 2)</th>
<th>Activity</th>
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<tbody>
<tr>
<td>January - March</td>
<td>Refinement and scaling up project to a larger number of schools</td>
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<td>Continuous monitoring by ST</td>
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<td>Implementation of Project Based Learning in school</td>
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<td>April – June</td>
<td>Resource development for Year 3 by Panel and and ST</td>
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<td></td>
<td>Continuous monitoring by ST</td>
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<td>Development of PBL materials for Year 3</td>
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<tr>
<td>July - September</td>
<td>Further resource development for Year 3</td>
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<td>Development of PBL materials (for Year 3) and teacher manual in final phase</td>
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<td>Longitudinal study of Cohort 1 in Year 2</td>
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<td>October - December</td>
<td>Project evaluation 2</td>
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Monitoring mechanisms

- 10 ST to monitor project implementation and assist classroom teachers
- MIE Team: 2 schools per lecturers
- Ex-prevocational inspectors
Evaluation of project

- MIE team
- Yearly evaluation: outcomes, attitudes towards learning, appropriateness of the NJCTL model.
<table>
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<tr>
<th>2017</th>
<th>Item/Activity</th>
<th>Amount (USD)</th>
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<tbody>
<tr>
<td><strong>July – September</strong></td>
<td>- 3-day workshop by NJCTL</td>
<td>$ 1600 x 3 days x 3 persons = $ 14 400</td>
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<td>- 75 x 10 Polling devices</td>
<td>$ 25 per unit x 75 units x 10 schools = $18 750</td>
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<td>- 10 Interactive White Board</td>
<td>$ 2000 per unit x 10 = $ 20 000</td>
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<td>- Stipend to 10 Panel members</td>
<td>$ 100 x 10 members x 3 months = $3 000</td>
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<tr>
<td><strong>October – December</strong></td>
<td>- Stipend for 10 Support Teachers</td>
<td>$ 800 x 10 teachers x 3 months = $ 24 000</td>
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<tr>
<td></td>
<td>- Stipend for 10 Panel members</td>
<td>$ 100 x 10 members x 3 months = $3 000</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td>$ 83 150</td>
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Incentives for participating teachers

- Laptop
- Certificate of participation
- Possibility to participate in MS4SSA node
Assumptions

- Change in instructional model and classroom interaction will bring improvement in teaching and learning.

- Teachers will accept the model.

- Stakeholders will support the project financially, logistically and administratively.
Conclusion

This project is aligned to the philosophy of the educational reform and offers much potential to translate the reform agenda into actions.