# Lodestone Collaboration School Programme

## SOCIO-ECONOMIC INVESTMENT IMPACT ASSESSMENT

Return on Investment, Social Value & Economic Multiplier Analysis

May 2026

| R270m | R5m | 20yr | Pilot |
|---|---|---|---|
| CAPEX per school | Annual OPEX per school | Model horizon | Current stage (1–3 schools) |

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# 1. Executive Summary

This case study presents the investment thesis, indicative return on investment (ROI), social return on investment (SROI), and economic multiplier analysis for the Lodestone Collaboration School Programme. The programme uses as a school collaboration partner (SCP) model embedded within the South African public school system, drawing on the verified Western Cape Schools Partnership programme and its closest comparable model. The SCP has been refined and now includes an expanded mandate to integrate context-relevant, in-demand NQF 2–4 vocational qualifications alongside the academic stream.

**The core investment proposition**

A R270m capital investment per school, plus R5m annual operational expenditure, funds a 20-year programme that generates a discounted social value multiple of between 5–15× the invested capital — rising to 20–35× at replication scale — through a compounding chain of earnings uplift, fiscal returns to the state, NEET reduction, skills gap closure, and intergenerational human capital formation.

The model is structured around five compounding value chains:

- Direct financial ROI: discounted earnings uplift and fiscal return over 20 years
- Social ROI (SROI): household poverty reduction, NEET exits, community uplift, gender equity benefit, and intergenerational learning
- Economic multiplier: Keynesian consumption spillover (1.6×), human capital accumulation, and tax base expansion
- Infrastructure asset value: R270m per school of productive educational infrastructure with a 25-year productive life
- Replication option value: the pilot schools become the scalable template for replication from year 6 onwards

# 2. Context & Problem Statement

## 2.1 South Africa's education-employment paradox

South Africa faces one of the most acute skills-unemployment paradoxes in the world. The country simultaneously records some of the highest youth unemployment rates globally and the most severe employer-reported critical skills shortages across engineering, ICT, artisan trades, healthcare, and green energy sectors.

| 58.5% | 37.6% | 84% | 22% |
|---|---|---|---|
| Youth unemployment 15–24 Yr olds | NEET rate 15–24 Yr olds Q1:2026 | Large firms with critical skills shortages | Companies unable to fill artisan roles (2025) |

The artisan shortage doubled year-on-year between 2024 and 2025, with electricians, millwrights, automation specialists, and instrumentation technicians among the most sought-after roles. ICT specialists now constitute 22% of all reported shortages, up from 10% two years ago. The paradox — millions unemployed while employers cannot fill roles — is fundamentally a qualification mismatch problem that the current academic-only schooling system is structurally unable to resolve.

### 2.2 The qualification gap at NQF 2–4

National Qualifications Framework levels 2 through 4 represent the critical transition zone between foundational education and labour market entry. Yet South Africa's schooling system has historically treated this zone as purely academic, producing learners with a National Senior Certificate (NSC) but without the practical, sector-specific competencies that employers need at entry level.

The consequence is measurable: Statistics South Africa's Q1:2025 data shows that learners with vocational or technical qualifications (classified as 'other tertiary') experience a 37.3% unemployment rate, compared to 47.6% for matric-only holders — a 10.3 percentage point differential that, applied across cohorts of thousands, represents enormous economic value.

### 2.3 The Collaboration Schools model as proven intervention

The Western Cape Collaboration Schools model — the most directly comparable verified framework to the Lodestone programme — has shown that school operating partners embedded within public no-fee schools can produce dramatic, rapid turnarounds. Silikamva High School improved its matric pass rate from 40.4% in 2019 to 100% in 2025. Kraaifontein High School moved from 56% to 89% between 2023 and 2025, rising from among the lowest-performing schools in the province to ranking 50th of 145.

**Key finding from comparable model**

The SOP model does not require the state to build new schools or hire new teachers. It deploys specialist non-profit management capability into existing public infrastructure — making it one of the most capital-efficient school improvement models available at scale.

## 3. Programme Design & Investment Structure

### 3.1 Investment parameters

The model follows estimated inputs, with the variable assumptions stress-tested across the ROI model:

| Parameter | Value | Basis |
|---|---|---|
| Capital investment per school | R270,000,000 | Infrastructure, fit-out, technology, equipment |
| Annual operational budget per school | R5,000,000 | SOP fee, programme staff, materials, assessment |
| CAPEX depreciation period | 25 years | Straight-line, 10% residual value |
| Total year-1 investment per school | R275,000,000 | CAPEX + first-year OPEX |

| | | |
|---|---|---|
| Pilot scope | 1–3 schools | Current implementation stage |
| Model horizon | 20 years | Captures intergenerational effects |
| Discount rate | 7% (real) | Standard SA public investment benchmark |
| Replication factor (from Yr 6) | 3× (adjustable) | Provincial rollout assumption |

## 3.2 NQF 2–4 vocational integration: the embedded model

The defining structural feature of this programme is the embedding of NQF 2–4 vocational qualifications directly into the school timetable — as a parallel pathway alongside the academic NSC stream, not as an after-school add-on. This has three critical financial implications:

- No marginal infrastructure cost: School building, classrooms, and administrative systems are already funded through the R270m CAPEX. A standalone TVET programme for equivalent outcomes costs R80,000–R120,000 per learner in infrastructure and delivery costs alone.
- SETA levy-grant offset: NQF 2–4 qualifications delivered as accredited learnerships allow employer co-funders to recover up to 50% of direct training costs through their SETA mandatory grant — materially reducing the net programme cost to the primary funder.
- Employer co-design alignment: Qualifications designed in partnership with employers in context relevant high-demand sectors produce graduates who are immediately employable, directly addressing the skills shortage documented in the 2025 Xpatweb Critical Skills Survey.

## 3.3 In-demand vocational cluster priorities

The following vocational clusters are highlighted based on the 2024 National List of Occupations in High Demand, the 2025 Critical Skills Survey, and current national labour market signals. The sectors indicated for prioritisation in iLembe is based on district wide high growth potential, comparative advantage, and potential for self-employment.

| Cluster | NQF Level | Key roles | Shortage signal |
|---|---|---|---|
| Automotive | NQF 2 - 4 | vehicle servicing, fault-finding, and part replacements | Township and self-employment relevant |
| Green & renewable energy | NQF 3 - 4 | Solar PV technicians, energy efficiency advisors | Fastest growing |
| Digital & ICT | NQF 3 - 4 | IT support, digital literacy, coding fundamentals | +120% demand (2yr) |
| Construction & civils | NQF 2 - 4 | Electricians, plumbers, bricklaying, tiling, road works, | NDP pipeline driven, Township and self-employment relevant |
| Healthcare support | NQF 3 - 4 | Community health workers, care assistants, lab support | Rising acutely |
| Hospitality | NQF 2 - 4 | Hotel, food, catering, and wellness | Regional comparative advantage and high growth |

| | | | |
|---|---|---|---|
| Logistics & agri-process | NQF 2–3 | Supply chain ops, cold chain, agri-processing | Township-relevant |
| iLembe Priorities | Community relevant, comparative advantage, growth potential, and SMME potential | | |

# 4. Return on Investment Analysis

## 4.1 Baseline financial ROI (academic stream only)

Before modelling the vocational uplift, the baseline ROI is determined by the evidence of single-stream academic collaboration school programme working in the Western Cape and, baseline South African earnings data.

South Africa's wage premium for upper secondary attainment (matric) versus no matric is 46% — larger than the OECD average. Over a 35–40 year working life, this premium translates to a discounted lifetime earnings uplift of R900,000–R1.3m per additional matric graduate. The net fiscal return to the state on each added matric passer — through income tax, VAT, and avoided social grant expenditure — has been conservatively estimated at R250,000–R500,000 in NPV terms.

| Metric | Pilot (1–3 schools) | Replication (5–15) | Scale (30+ schools) |
|---|---|---|---|
| Social ROI multiplier (base — academic stream only) | 5–8× | 9–14× | 20–35× |
| Financial ROI (10yr NPV) | 280–420% | 500–800% | 1,400–2,200% |
| Payback period (OPEX only) | 4–6 years | 3–5 years | 2–4 years |
| Cost per vocational beneficiary | R15,000–30,000 | R8,000–18,000 | R4,000–8,000 |

## 4.2 Enhanced ROI with NQF 2–4 vocational integration

Embedding NQF 2–4 vocational qualifications generate added ROI across four distinct mechanisms that do not exist in the academic-only model:

- Employment probability uplift: vocational graduates face a 37.3% unemployment rate versus 47.6% for matric-only is a 10.3pp employment probability improvement. Applied to cohorts of 400–600 vocational completers per school per year, this difference compounds dramatically over the 20-year model horizon.
- Wage premium on vocational certification: in-demand NQF 2 - 4 trade and technical qualifications carry entry-level salary premiums of R38,000–60,000 per year above unskilled labour rates. The direct input to the earnings uplift stream in the ROI model.
- SETA levy recovery: employer partners can recover mandatory grant funding against accredited learnership delivery, creating a structural cost offset of R8,000–9,000 per learner per year that reduces the net investment needed from primary funders.
- Skills shortage premium: in sectors where employers are actively not filling roles the wage uplift materially exceeds the average, with some trade certifications commanding 40–60% premiums above the general vocational average modelled here.

| 5–8× | 9–14× | 20–35× | R80k+ |
|---|---|---|---|
| Pilot SROI with vocational stream | Replication SROI with vocational | Scale SROI — full model horizon | TVET alternative cost per learner |

### 4.3 CAPEX ROI: the R270m per school investment

At R270m capital investment per school, the upfront investment, is substantial and the payback calculus shifts fundamentally from a short-horizon ROI model to a long-dated asset multiplier and societal value creation thesis. Three framings are relevant:

- Infrastructure asset value: R270m of school infrastructure, properly built and maintained, carries a 25-year productive life with a 10% residual value. This is an asset on a balance sheet whether held by the state, a development finance institution, or a social infrastructure fund and can be financed via infrastructure grants, CSI or blended finance instruments and is separate from the programme OPEX , restructuring the ROI case around the R5m annual OPEX only.
- Full investment payback: modelled on 2 schools at default assumptions (900 learners per school, 50% vocational completion, 38% employment uplift, R42,000 annual wage uplift), the 20-year discounted social NPV materially exceeds total programme investment (CAPEX + OPEX). The full payback period on the R275m year-1 investment is reached within the 20-year horizon under base-case assumptions.
- Replication and scaling value: the pilot infrastructure and programme model has an asymmetric value. Once built and confirmed, the incremental cost of replicating the SOP model into additional schools is the R5m annual OPEX and notional R270m CAPEX is a sunk investment that creates a template, not a  per-school recurring cost at scale.

**Financing structure recommendation**

The optimal capital structure separates the R270m infrastructure investment (financed via development finance or social infrastructure bonds on a 20–25-year instrument) from the R5m annual SOP operational grant (funded by philanthropic, corporate social investment, government norms and standards, school fees, or a combination of all). This structure makes the ROI case on each component independently compelling, rather than requiring a single funder to carry the full R275m year-1 commitment.

## 5. Social Return on Investment (SROI)

### 5.1 Social value chain

The social multiplier works through six linked value chains, each generating measurable social value beyond the direct financial return:

| Social value chain | Mechanism | Indicative 20yr value (2 schools) |
|---|---|---|
| Human capital formation | Earnings uplift × employed graduates over working life | Largest stream — see ROI model |

| | | |
|---|---|---|
| NEET reduction | 3.5m+ youth currently NEET; each exit valued at R18,000–25,000/yr | Significant NPV at scale |
| Household poverty uplift | Average 3.8 dependants per employed graduate uplifted | Households × YEARS × dependants |
| Health & wellbeing | Employment linked to reduced depression, substance abuse, crime | ~25% of NEET value stream |
| Intergenerational effect | Educated parents invest more in children's education | R10,000/yr per added passer |
| Gender equity | ~35% of total social value accrues disproportionately to women | Modelled at 35% of SROI total |

### 5.2 NEET reduction as the headline social impact

South Africa's Q1:2026 data confirms that 37.6% of youth aged 15–24, over 3.5 million young people, are not in employment, education, or training. This cohort represents an extraordinary concentration of lost human potential and a direct fiscal liability through increased demand for social grant expenditure, healthcare, and criminal justice services.

The Lodestone programme directly attacks NEET formation through two mechanisms. Giving learners choice, accommodates neuro-divergence able to keep learners engaged in context relevant three-stream education through to matric or NQF 4 completion (reducing dropout-driven NEET), and providing vocational qualifications that translate into faster employment entry. Each learner diverted from the NEET cohort into formal employment is a value-creating event for the state, the community, and the individual that far exceeds the programme cost per beneficiary.

### 5.3 Community and intergenerational multiplier

Research consistently shows that educated parents invest more in their children's education — a second-order multiplier that compounds across generations. In the South African context, where intergenerational poverty is deeply entrenched and geographic concentration of disadvantage is acute, this effect is particularly powerful. The model conservatively estimates an intergenerational social value of R10,000 per year per added matric passer, applied to 60% of completers who go on to have children during the model horizon.

Spatially, a school serving 800–1,200 learners in a township or peri-urban setting is not merely an educational institution, it is the anchor of a community's social infrastructure. The R270m capital investment in a high-quality outcome directed school facility generates community uplift with effects of reduced crime, increased property values, improved community cohesion, something that extends significantly beyond the direct beneficiary population. Conservative modelling suggests a community radius of 3 kilometres per school.

## 6. Economic Multiplier Analysis

### 6.1 The Keynesian multiplier on wage injection

The Keynesian fiscal multiplier applied to education investment in South Africa works through three channels:

i. the direct wage injection into the economy as graduates move from unemployment to employment;

ii. the consumption spillover as those wages is spent in local economies (the Keynesian multiplier); and,

iii. the fiscal receipts as higher earners pay more in PAYE, VAT, and generate indirect tax through consumption.

In South Africa, where the marginal propensity to consume among low-to-middle income households is high and local economic multipliers in township economies are well-documented, a Keynesian multiplier of 1.6× on direct wage injection is a conservative estimate. When applied to the modelled annual wage uplift stream of employed graduates this generates a GDP contribution that materially exceeds the direct investment.

| Economic multiplier | Rate | Application | 20yr contribution |
|---|---|---|---|
| Keynesian consumption multiplier | 1.6× | Direct wage injection → GDP | Largest economic stream |
| Human capital multiplier | 5–15× | Total programme investment → lifetime value | Matches SROI multiplier |
| Fiscal multiplier (tax receipts) | 0.27× wages | PAYE + VAT + indirect tax | 27% of wage stream annually |
| Grant savings multiplier | R7,200/yr | Per employed graduate vs. SRD grant cost | Avoided social spend |
| Total economic multiplier | 8–20× | Combined Keynesian × human capital | From pilot to scale |
| Replication uplift (Yr 6–20) | 3×+ base | Provincial rollout multiplies all streams | Dominant long-run driver |

Note: In macroeconomic development, an investment is generally considered "worth the multiplier effect" if it yields a fiscal multiplier **greater than 1.5**. At this threshold, the economic output (GDP) generated exceeds the initial cost of the project, creating high-quality, long-term returns for the economy.(CSI Team, 2019)

## 6.2 Skills shortage economic cost avoided

The 2025 Xpatweb Critical Skills Survey documents that 84% of large corporations and multinational companies experience challenges sourcing skilled talent. The economic cost of unfilled skilled roles — in lost productivity, delayed projects, and the premium paid for expatriate labour or imported skills is significant. Each NQF 2 - 4 vocational graduate produced by the programme who fills a documented shortage role generates a skills shortage relief value, conservatively estimated at R12,000–14,000 per employed graduate per year, beyond their direct wage contribution.

At scale, across 30+ schools producing 12,000–18,000 vocational graduates per year in shortage-aligned sectors begins to move aggregate labour market dynamics — reducing the structural scarcity premium that currently inflates business operating costs and constrains investment in South Africa.

### 6.3 The replication multiplier: from pilot to systemic change

The most powerful economic multiplier in this model is not within the pilot itself — it is the opportunity value created by building a replicable, institutionalised programme model. The Western Cape Collaboration Schools model shows what systemisation could achieve when embedded in provincial legislation (Education Amendment Act 2018) with standardised SOP accountability frameworks, curriculum templates, and government co-funding mechanisms.

When the Lodestone pilot is replicated from year 6 onward at a 3× multiplier i.e., when the SOP model is deployed into 3 more schools with:

i. an estimated present value incremental cost of R5m annual OPEX per school.

ii. Present value estimated R270m CAPEX – i.e., proof-of-concept investment.

The economic return on the replication phase dwarfs the pilot on a per-rand-invested basis because the template, the curriculum, the accreditation, the employer partnerships, and the institutional knowledge are all pre-existing assets.

**The sovereign investment case**

At full provincial scale (30+ schools, 15,000+ learners annually), the combined Keynesian, human capital, and fiscal multipliers generate a GDP contribution estimate more than the total CAPEX and OPEX investment within 15–18 years. This is the argument for National Treasury or a Development Finance Institution — not as philanthropy, but as infrastructure investment with a quantifiable macroeconomic return.

## 7. Key Risks & Assumptions

The ROI figures in this case study are indicative, not audited. They are constructed from South African labour market data, international evidence on TVET, collaboration school models, and standard NPV method. The following assumptions carry the most material impact on the outputs and should be the priority for empirical grounding in the pilot evaluation framework:

| Assumption | Model input | Risk if wrong | Mitigation |
|---|---|---|---|
| Employment uplift from vocational cert | 38% above baseline | High — dominant ROI driver | Employer partnership agreements; track 12-month employment outcomes for each cohort |
| Attribution of pass rate improvement | 35–40pp | Medium — baseline uncertainty | Pre/post design; control school comparison; 3-year trend analysis |
| Annual wage uplift per employed graduate | R42,000 | Medium — sector-dependent | Sector-specific wage surveys; track actual earnings at 12 and 24 months post-graduation |
| Replication fidelity | Outcomes maintained at 3× | Medium — quality risk | SOP accountability framework; independent M&E; QCTO accreditation maintenance |

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|---|---|---|---|
| Discount rate | 7% real | Low — within standard range | Sensitivity analysis across 5–12% tested in interactive model |
| CAPEX per school | R270m fixed | Low — fixed input | Detailed quantity surveyor sign-off before commitment |

# 8. Conclusions & Investment Recommendations

## 8.1 Summary findings

This analysis shows that the Lodestone Collaboration School Programme, with embedded NQF 2–4 vocational qualifications, represents a compelling investment opportunity across all three value dimensions assessed:

- Financial ROI: a 20-year discounted social value NPV that materially exceeds total programme investment under base-case assumptions, with a social ROI multiplier of 5–8× at pilot stage rising to 20–35× at provincial scale.
- Social ROI: measurable reduction in NEET rates, household poverty, and intergenerational disadvantage; with gender equity and community uplift effects extending well beyond direct programme beneficiaries.
- Economic multiplier: a combined Keynesian, human capital, and fiscal multiplier of 8–20× on invested capital, generating GDP contribution and tax revenue that creates the basis for a sovereign co-investment case.

## 8.2 Recommendations

Three recommendations follow from this analysis:

1. Separate the capital and operational investment cases. Pursue infrastructure financing (DPW, DFI, blended finance) for the R270m CAPEX, and philanthropic, DoE Norms and Standards SOP subsidy for the R5m annual OPEX. This removes the CAPEX from the ROI denominator for the programme evaluation and makes both cases independently strong.
2. Build the M&E framework before the first learner enrols. The ROI case strengthens enormously as indicative figures become evidenced ones. Apply integrated MERL approaches for every cohort for 12-month and 24-month employment tracking. The data from the pilot is the asset that unlocks replication funding.
3. Activate employer partnerships as co-funders through the SETA levy-grant mechanism. Identify 5–10 anchor employers in shortage-aligned sectors who will co-design qualifications, provide work-integrated learning placements, and access mandatory grant recovery. This structurally reduces net programme cost and guarantees employment pipeline alignment.

**The bottom line**

South Africa cannot afford to produce another generation of young people with academic qualifications that the labour market does not value, while simultaneously not filling 350 high-demand occupations. The Lodestone model — combining collaboration school quality, embedded vocational pathways, and employer-aligned delivery — is one of the few structural interventions capable of addressing both sides of this paradox simultaneously. The investment case is compelling. The social case is urgent.

## 9. Sources


*Stats SA QLFS Q1:2026;*

*Xpatweb Critical Skills Survey 2025;*

*OECD Education at a Glance 2025;*

*Western Cape Education Department Collaboration Schools data;*

*ILOSTAT 2025;*

*South African Qualifications Authority*


## Annexure A: Collaboration School Abbreviation Directory

| | |
|---|---|
| AQF | Australian Qualification Framework |
| BCEA | Basic Conditions of Employment |
| BoQ | Bill of Quantities |
| CAPEX | Capital Expenditure |
| CAPS | Curriculum and Assessment Policy Statement |
| CATHSSETA | Culture, Arts, Tourism, Hospitality, and Sport Sector Education and Training Authority |
| CETA | Construction Education and Training Authority |
| CoP | Community of Practice |
| CPD | Continuing Professional Development |
| CSI | Corporate Social Investment |
| DBE | Department of Basic Education |
| DFI | Development Finance Institutions |
| DGMT | DG Murray Trust |
| DHET | Department of Higher Education and Training |
| DOCRA | Dolphin Coast Residents and Ratepayers Association |
| EIA | Environmental Impact Assessment |
| ETQA | Education and Training Quality Assurance |
| GDP | Gross Domestic Product |
| GHS | Groutville High School |
| ICC | iLembe Collaboration Council |

| | |
|---|---|
| ICCI | iLembe Chamber of Commerce Industry & Tourism |
| IDoE | iLembe Department of Education |
| IDP | Integrated Development Planning |
| KZN | KwaZulu Natal |
| LES | Lodestone Edsupport NPC |
| M&E | Monitoring & Evaluation |
| MEL | Monitoring, Evaluation & Learning |
| MERL | Monitoring, Evaluation, Research, and Learning |
| MERSETA | Manufacturing, Engineering, and Related Sector Education and Training Authority |
| MoU | Memorandum of Understanding |
| NASCEE | National Association of Social Change Entities in Education |
| NEET | Not in Employment, Education or Training |
| NEPA | National Education Policy Ac |
| NPC | Not for Profit Company |
| NQF | National Qualification Framework |
| OECD | Organisation for Economic Co-operation and Development |
| OHS | Occupation Heath and Safety |
| OHSA | Occupational Health & Safety Act |
| OPEX | Operational Expenditure |
| PAYE | Pay as you Earn |
| PBO | Public Benefit Organisation |
| PFMA | Public Finance Management Act |
| PPP | Public Private Partnership |
| PV | Photovoltaic solar energy |
| QCTO | Quality Council for Trades and Occupations |
| QLTP | Quality Learning and Teaching Campaign |
| QS | Quantity Surveyor |
| RoI | Return on Investment |
| SACE | South African Council for Educators |
| SADTU | South African Democratic Teachers Union |
| SANS | South Africa National Building Standards |
| SASA | South African Schools Act |
| SCP | School Completion Programme |
| SDG | Sustainable Development Goals |
| SETA | Sector Education and Training Authority |
| SGB | School Governing Body |
| SGB-SPT | School Governing Body – Special Project Team |
| SIP | School Improvement Programme |
| SLA | Service Level Agreement |
| SME | Small and Medium Enterprise |
| SMT | Senior Management Team |
| SOP | School Operating Partner |
| SROI | Social Return on Investment |
| SPLUMA | Spatial planning and land use management |

| | |
|---|---|
| UK | United Kingdom |
| UPS | Umhlali Preparatory School |
| USA | United States of America |
| VAT | Value Added Tax |
| VET | Vocational Education and Training |