



EDUCATION DEVELOPMENT AND RESEARCH DIVISION

Research Agenda: Discussion document

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THE VALUE OF EDUCATIONAL RESEARCH

Educational research is variously defined the world over. For JET, education research is the *systematic enquiry into educational issues which is informed by a sound theoretical framework. It's a continuous application of a particularly coherent and systematic and reflective way of questioning, a mode of interrogation.* In the words of Gordon Johnson, President of Woodson College, Cambridge *"The real quest is not for knowledge, but for understanding....."*

Research that is well grounded in theory but practical in its orientation.

Whoever is the paymaster for research, the fact is that educational research is essential to the whole enterprise of education. One of the main reasons for this is that too little is known about cause and effect in education. This is especially true in developing countries, South Africa included largely because of the complexity and dynamic nature of educator factors.

It may be too much to hope that findings from JET's research might feed directly into policy decision making but this is exactly what JET want to achieve. In fact this is one of JET's key driving goals. By enlightening the educational milieu, our research can be very effective in creating a climate in which knowledge driven change can flourish. *Research can enable us to begin to understand what makes a difference in education and to act on this understanding.* Evidence shows that the best teachers are those engaged in research and development work in their subject areas. The same rings true for education researchers, donors, implementers and policy makers.

Our research needs to build the bridge between the short- and long-term imperatives within the education sector.

STRATEGIC OBJECTIVES OF JET

“Every child in South Africa receives quality education”

JET'S VISION, 2010

JET is a mission-driven organization. *“We offer our clients, who want to assist disadvantaged young South Africans, educational research and knowledge-based interventions that are innovative, cost-effective, and sustainable.”* (JET'S mission, 2010). For 17 years, JET pursued a mission of uplifting the education of the disadvantaged people of South Africa through the grants management, project management, fund holding and research ad evaluations. In the future JET will continue to make contribution to education in the following fields:

- School improvement
- Education planning
- Communities and youth development
- Education research
- Evaluations and assessments

The purpose of JET's research function, which is implemented by the Education Evaluation and Research Division (EERD), is to identify current educational challenges in order to explore innovative ways of addressing the problems. JET's research agenda is driven by both the need to determine and analyse the current challenges and to respond to the research agendas of the government and other players in the education sector. The research mission is thus:

To conduct research and evaluation projects that support national education development initiatives and seek solutions to current educational challenges.

Driven by this mission, JET offers research and evaluation services to partners and clients engaged in education development activities.

JET's research focus enables it to:

- Assist with providing insights into the best paths for education development in South Africa ;
- Provide enlightened and far-seeing intellectual leadership in education research both internal to JET as well as to others in the wider society interested in education development;
- Establish highly productive, strategic relationships with universities and partners in industry, government and civil society;
- Secure funding to support education development and research programmes;
- Attract and retain high caliber staff; and
- Enhance JET's reputation and competitiveness in the education development and research sector.

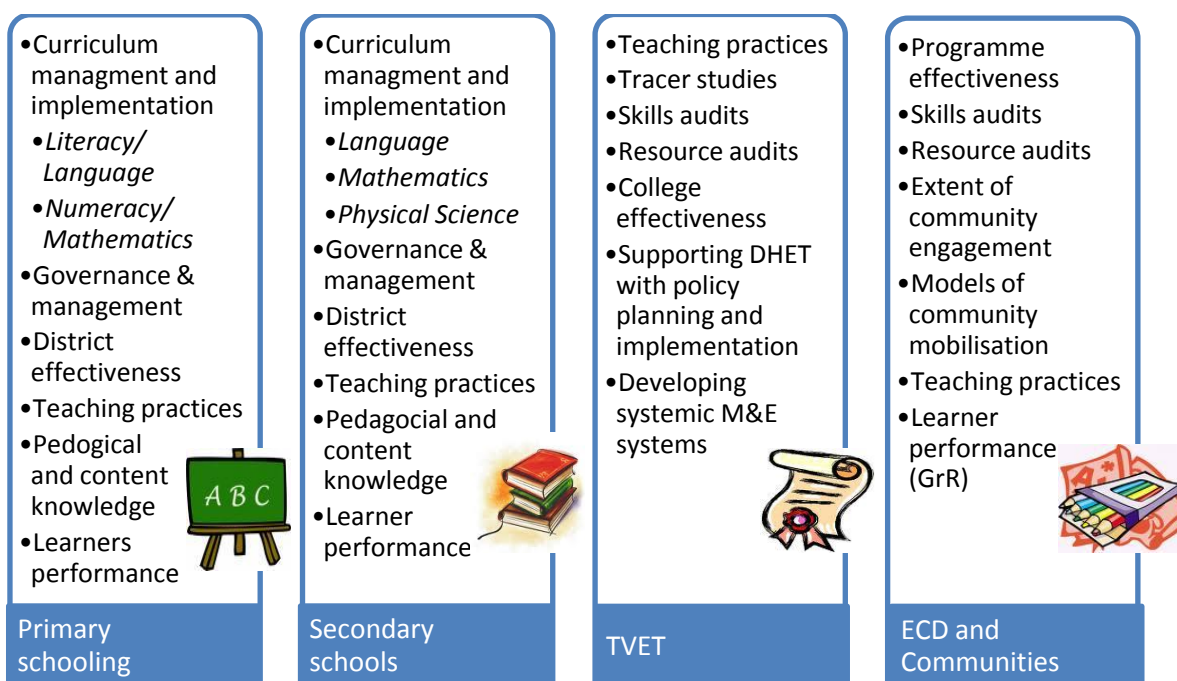
We want to broaden the understanding of education research in South Africa - to educate society about what the system is doing well and not so well.

JET'S RESEARCH FOCUS AREAS

We focus primarily on three sectors:

- Primary school teaching and learning, with a specific focus on literacy or language and numeracy or mathematics in the Foundation and Intermediate Phases (Grades R to 7).
- High school teaching and learning, with a specific focus on English, Mathematics and Physical Science in the General Education and Training (GET) and Further Education and Training (FET) phases (Grades 8 to 12).
- Technical and Vocational Education and Training sectors (TVET) with a specific focus on enhancing FET college effectiveness and student employability.

Although to a lesser extent, we also do research in the Early Childhood Development (ECD) and community mobilization arenas and are seeking to develop this further in the future.



JET'S RESEARCH PRINCIPLES

JET's approach to research is based on the following principles:

- We make use of scientific, rigorous and proven research methodologies.
- We avoid over-reliance on self-report data, particularly as evidence of behavioural change. When self-report data is collected it is corroborated with evidence – either behavioural evidence or evidence contained in documents or records. Since self-report data is, however, useful in assessing attitudes or trying to understand interviewees' perspectives on particular events, we may include it in our methodology to ascertain stakeholders' understandings of their own behaviours, e.g. educators' perceptions of the way in which they present lessons or a manager's explanation detailing a particular phenomenon in a school.
- We use multiple data sources in order to triangulate data and ensure a balanced view of a particular phenomenon.
- We use structured observation and documentary analysis instruments in order to reduce inter-rater bias and ensure that data collected in multiple sites is consistent and can be compared.
- We use research designs that draw on both qualitative and quantitative approaches to data collection, analysis and reporting. Qualitative data can be reported graphically using tables and narrative descriptions, which also describe inter-relationships between practices at different levels of the schooling system and post schooling system (the education departments, the institutional management structures and classroom). This data can also be quantified and used in correlation and regression analyses in order to determine the relative effects of factors on learner performance. Progress against pre-determined indicators can also be measured.
- We conduct research that is useable and adds value to our client's work – in other words the research or evaluation activities should provide information which facilitates reflection, contributes to the development of improved implementation strategies and delivery mechanisms and which informs planning and decision-making.
- We present research findings in such a way that they provide a balanced and fair assessment of a programme's implementation and impact.
- We discuss the determination of the scope and purpose of the evaluation and the design methodology openly in order to support the evaluation's objectives. These discussions also serve to identify the primary audiences of the evaluation report.
- We set impact and performance indicators collaboratively, involving both the evaluator and the client.

In addition to these general principles, JET undertakes to:

- Conduct the work in a professional manner;
- Complete the work timeously;
- Respect the confidentiality of the findings; and
- Respect the relationships which have been established.

JET'S RESEARCH OBJECTIVES

The current state of poor learning and teaching outcomes in South Africa is known all too well. The departments of education grapple with this on a daily basis. With a similar imperative, JET's aims to [conduct research and evaluation projects that support national education development initiatives and seek long-term solutions to current educational challenges](#). It is through this over-arching goal and guided by our research principles that JET's core research objective is to:

*Ensure that our **research is aligned to national strategic objectives and priorities in the school and post-school environments** - to continue to understand and promote knowledge on the complexity of what promotes quality teaching and learning and how best we can work to come up with solutions.*

To achieve this, JET will:

- [Continue to build strategic relationships](#) with four major partners, namely, universities, government departments, the NGO sector and private entities such as funding and development agencies. Diverse sources of funding provide flexibility in the establishment of such relationships and the nature of research conducted.
- [Develop strengthened links between our research and programme designs](#) in order to inform our work in both school and post-school development.
- [Engage in more qualitative research](#). We plan to develop our skills in qualitative research to compliment quantitative methods in understanding the mechanisms underlying educational processes.
- [Continue to develop learner performance tests and teacher subject content tests](#). We intend to develop a psychometric and assessment unit that will manage the development, piloting and maintenance of JET's suite of tests for learners and teachers at both the primary and high school levels. The purpose of the tests is to measure performance levels (as in the case of impact evaluations) or to determine developmental needs (as in formative assessments). This unit will also be responsible for managing the process of data collection using these instruments (i.e., scoring, capturing and analysing the data using both traditional and Rasch analysis) and reporting thereon (Figure 1).

JET TESTS

Figure 1: JET tests

What have we got?

PRIMARY SCHOOL LEARNER TESTS

- Grade 1 literacy and numeracy tests set at the Home Language (HL) level. Available in 9 of the 11 languages. These are versioned – not translated tests.
- Grade 2 literacy and numeracy tests set at the Home Language (HL) level. Available in 5 of the 11 languages. These are versioned – not translated tests.
- Grade 3 literacy and numeracy tests set at the Home Language (HL) level. Available in all 11 languages. These are translated tests.
- Grade 4 English and Afrikaans HL and English First Additional Language (FAL) level tests.
- Grade 4 mathematics tests in English and Afrikaans.
- Grade 5 English and Afrikaans HL and English First Additional Language (FAL) level tests.
- Grade 5 mathematics tests in English and Afrikaans.
- Grade 6 English FAL level test.
- Grade 6 mathematics test in English.
- Grade 6 science test in English.

HIGH SCHOOL LEARNER TESTS

- Grade 9 mathematics, science and English FAL tests
- Grade 10 mathematics and science tests
- Grade 11 mathematics and science tests

TEACHER ASSESSMENTS

- We have also developed teacher subject content tests set at Grade 2 to Grade 9 levels in 2 subjects: English HL and mathematics

What do we still need to do?

- Revise existing tests to extend our item bank and ensure its suitability to curriculum adaptations
- Develop new tests:
 - Grade 7 English and Afrikaans HL, English FAL and mathematics;
 - FET teacher content tests;
 - Grade R tests.

WHAT KIND OF RESEARCH DOES JET WANT TO PARTICIPATE IN?

Research that:

Policy dialogues

- Analyses the alignment of education policies with teaching practice, i.e. the effectiveness of policies in practice, for example examining curriculum interpretation at the provincial, district and institutional levels;

School and college effectiveness

- Interrogates the inter-relationship between institutional performance and learner performance and why this is not often homogenous;
- Examines school and college governance and management - going beyond compliance;
- Establishes the critical point (age, grades) before which it gets too late for any intervention to have an impact;
- Analyses the cost effectiveness of programmes
- Investigates the influence of resources and utilization on success factors

Educator development and competence

- Evaluates pre-service educator training and other educator training courses: examining what makes a difference in educator training and which educator training models work;
- Investigates how educator professionalism as a trait is exhibited and how it relates to changes in teaching and learning practices;
- Investigates qualifications vs. teaching aptitude: what makes the difference?

Role of parents and communities in education

- Examines parent's and community attitudes towards schooling and FET colleges

Learner experiences and development of future leaders

- Studies how schools and colleges promote leadership amongst learners

To support its research, JET will engage in ongoing process to seek funding through research proposals that directly link to our overall strategy and objectives.