**Knowledge hub
-
Collection of best practices**

Summary of the best practice

1. Title of the best practice (e.g. name of policy, programme, project, etc.) *

School-based vegetable garden

2. Country or countries where the practice is implemented *

South Africa

3. Please select the **most relevant** Action Track(s) the best practice applies to *

☑ Action Track 1. Inclusive, equitable, safe, and healthy schools

☑ Action Track 2. Learning and skills for life, work, and sustainable development

☐ Action Track 3. Teachers, teaching and the teaching profession

☐ Action Track 4. Digital learning and transformation

☐ Action Track 5. Financing of education

4. Implementation lead/partner organization(s) *

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5. Key words (5-15 words): Please add key descriptive words around aims, modalities, target groups etc. *

  Resilience-enabling intervention
  School-community in distress due to structural disparity
  Supporting food security for children and their families
  School-community agency
  Promoting positive education, wellbeing and health outcomes for children
  Peri-urban primary schools
  School-community partnerships
  Multi-sectoral government participation
  Teacher agency
  Peer-to-peer intervention transfer

6. What makes it a best practice? *

  Fidelity of intervention was evident in the following: (i) multi-sectoral provincial government participation (education, agriculture); (ii) teachers in multiple primary schools sustained vegetable gardens over time; (iii) schools crafted communities of practice where teachers transferred evidence-based, contextually relevant school-vegetable garden models to neighbouring schools; (iv) fidelity of intervention maintained; (v) schools mobilised as hubs for quality education, wellbeing and health of children (and their families) due to adversities caused by structural disparity.

Description of the best practice

7. Introduction (350-400 words)
   This section should ideally provide the context of, and justification for, the practice and address the following issues:
   i) Which population was affected?
   ii) What was the problem that needed to be addressed?
   iii) Which approach was taken and what objectives were achieved? *

Given the extreme inequality of structural disparity, the majority of South African primary schools are situated in challenged contexts. Challenges are multisectoral with school leaders, teachers, children and their families needing to navigate health, education, socio-economic and environmental demands. In addition, these multiple challenges are chronic and often intergenerational. The complexity of the challenges predict negative education, health and wellbeing outcomes for children and their families. From a resilience perspective a systematic intervention is required to change a trajectory to negative outcomes and rather promote positive outcomes for school children - despite the ongoing structural challenges.

In the past the research team has partnered with teachers in other schools in four provinces in South Africa to build knowledge on such resilience-enabling school interventions. These include the Supportive Teachers Assets and Resilience (STAR) study and the Supporting Home Environments in Beating Adversity (SHEBA) study. In all the school-based intervention studies teachers and school-community members co-generate and implement resilience-enabling school-based interventions to buffer against the distress of challenges, whilst promoting positive outcomes for education, wellbeing and health. The funding climate in South Africa favours multiple case study designs and the team builds theory from case study data (Ebersöhn, L. (2019). Flocking together: An indigenous psychology theory of resilience in Southern Africa. Cham, Switzerland: Springer Nature. doi.org/10.1007/978-3-030-16435-5). The research team privileges Participatory Reflection and Action (PRA) methodology to maximise expertise from partner groups, and the asset-based approach (Ebersöhn & Eloff, 2006) as a means to foreground agentic mobilisation of available resources (rather than a defeatist position of limited resources badly distributed).

The study proposed as a best practice model is the Food Intake and Resilience Support: Gardens as Taught by Educators (FIRST-GATE) research project. The FIRST-GATE project explored how the implementation and outcome of a teacher-to-teacher intervention on school-based vegetable gardens can support resilience (as indicated by unpredicted positive outcomes for education, wellbeing and health) in vulnerable primary school-communities in South Africa. The sample included 37 purposively selected teachers from nine primary schools in the Eastern Cape Province.

Teachers crafted a space to share practical guidelines and experiences with peer teachers (in schools in comparable settings) on how to establish and sustain successful school-based vegetable gardens. Teachers valued a space of professional development led by peers. The intervention was resilience-enabling for school-communities. Teachers navigated challenges to sustain the school-based vegetable gardens. Findings of the research acknowledge that, through engagement, the teachers were able to share knowledge, skills and resources with others, gaining from the experiences of peers who work in similar contexts. As such, the current study contributes to the discourse on resilience in discussing the outcomes and benefits of the FIRST-GATE teacher-to-teacher intervention on school-based vegetable gardens in support of vulnerable school-communities.

8. Implementation (350-450 words)
   Please describe the implementation modalities or processes, where possible in relation to:
   i) What are the main activities carried out?
   ii) When and where the activities were carried out (including the start date and whether it is ongoing)?
   iii) Who were the key implementation actors and collaborators? (civil society organizations, private sector, foundations, coalitions, networks etc.)?
   iv) What were the resources needed (budget and sources) for the implementation?
   *

   https://www.up.ac.za/centre-of-the-study-of-resilience/article/2973182/school-based-vegetable-gardens-a-guide-to-sustainable-practices
   Please follow the link for a description of the school-based vegetable garden. Teachers took ownership to facilitate positive change in their vulnerable school-community settings. Teachers facilitated the involvement of various school-community role players to support of the health and well-being of students in the various school-communities. This model for a school-based vegetable garden is a resilience-enabling intervention as it promotes food production, strengthen the involvement of a role players in schools, and promote the health and well-being of students and their families in vulnerable school-communities.

   The intervention created opportunities for people on ground level to enhance health and well-being in their communities. More specifically, the school-based vegetable gardens served as food hubs that provided nutritional meals through vegetable produce. Some of the reciprocal effects of promoting resilience through enhanced health and well-being relate to better learner attendance at school, thereby reducing absenteeism with the implied possibility of better learner performance. Furthermore, from a resilience perspective, the intervention encouraged community members to take ownership of looking after their school environments and embarking on other health promotion projects, such as recycling as part of a waste management project. In terms of resilience theory, the way in which the participants, learners and other community members took responsibility and ownership of the maintenance of their school environments and the school-based vegetable gardens served as protective factor to the broader community.

9. Results – outputs and outcomes (250-350 words)
   To the extent possible, please reply to the questions below:
   i) How was the practice identified as transformative? (e.g., impact on policies, impact on management processes, impact on delivery arrangements or education monitoring, impact on teachers, learners and beneficiary communities etc.);
   ii) What were the concrete results achieved with regard to outputs and outcomes?
   iii) Has an assessment of the practice been carried out? If yes, what were the results? *

   The intervention supplemented a government feeding programme for children in the distressed schools with a variety of fresh and nutritious 'home-grown' products. Their quality of learning was improved: they were eager to be at school to make and receive more interesting meals, and being better nourished meant that they could concentrate better. The gardens also promoted community-level awareness of how to maintain a healthy lifestyle - teachers, students, parents and community members increasingly bought vegetables for household consumption.

   School-vegetable gardens had a positive academic impact. Teachers and students earmarked the gardens as living-learning classrooms where students acquired knowledge on ways to sustain human-environmental wellbeing. Students gained competence to plant and care for vegetables, maintain healthy eating habits, and income generating opportunities. Students also expressed career aspirations in agriculture.
   School-community involvement in vegetable gardens enhanced parental involvement in schools. Parents enjoyed being role models to their children within an educational setting. In return for skills acquisition and access to nutritious food, school-community members assisted schools by, keeping the schools and vegetable gardens safe from burglary, and looking after the vegetable gardens during school holidays. The climate of support and collaboration spilled over to addressing other challenges (attending to issues such as fencing, securing school buildings, building and furnishing school libraries).

   When peers transfer contextually relevant school-intervention models to peers, the fidelity and sustainability of the intervention is strengthened. This form of teacher professional development allows trained teachers to implement an intervention in their home-language, drawing on socio-culturally salient values, beliefs, examples. Teacher capacity included being able to establish and maintain formidable partnerships (with students, their families, teachers and leadership within their schools, teachers and leadership in other schools, government departments, politicians, non-governmental organisations and local institutions) and access networks of support that are solution-focused and may address the challenges faced by vulnerable communities. Teachers started partnering and networking with various external stakeholders, such as.

   Schools were able to generate income for the schools and school-community - addressing unemployment challenges experienced by parents.

10. Lessons learnt (300 words)
    To the extent possible, please reply to the following questions:
    i) What were the key triggers for transformation?
    ii) What worked really well – what facilitated this?
    iii) What did not work – why did it not work? *

    KEY TRIGGERS:
    Schools and school-communities challenged by few resources unevenly distributed and causing education and health distress.
    Hungry children and their families with low household income and limited opportunities for fresh, nutritious meals.
    Children struggling to learn, be healthy and not being able to enjoy life as they should.
    Limited opportunities for formal teacher professional development on how to manage school-based interventions by using what is available.
    WHAT WORKED WELL:
    Teachers with high self-efficacy beliefs that they can manage interventions in their schools that can support positive outcomes for children.
    Teachers who transfer intervention-competencies to peers.
    An asset-based approach: using what is available to address distress.
    Addressing collective distress and supporting collective wellbeing (rather than addressing only/exclusively needs of children).
    Collaboration: school-community partnerships, school-school partnerships, teacher-teacher partnerships, school-business partnership, school-government partnership.
    WHAT DID NOT WORK
    Teachers found it difficult to balance their roles of teaching and support with that of managing the vegetable garden initiatives in terms of time management as well as maintaining a balance between the various roles.
    Poor quality soil, floods, drought and climate change having a negative effect on the vegetable-garden projects.

11. Conclusions (250 words)
    Please describe why may this intervention be considered a "best practice".
    What recommendations can be made for those intending to adopt the documented "best practice" or how can it help people working on the same issue(s)? *

    The challenges of living in a space of severe inequality did not go away. However, positive outcomes for education, health and wellbeing was enabled by teachers teaching each other (across schools) how to establish and maintain school-based vegetable gardens. Besides food production, and nutrition to children and their families, whole school involvement to promote collective wellbeing was evident. In addition, schools were able to generate income and become self-sustaining organisational entities that could contextualise the production, consumption and even the marketing of vegetable produce for themselves, the schools and communities. Income generation in turn enabled the schools to become more self-sustaining and embark on other projects such as school fencing, the purchasing of school equipment, and the establishment of, for example, a school library.

12. Further reading

Please provide a list and URLs of key reference documents for additional information on the "best practice" for those who may be interested in knowing how the results benefited the beneficiary group/s. *

Ferreira, R., & Ebersöhn, L. (2012). Partnering for resilience. Pretoria, South Africa: Van Schaik Publishers.

Ebersöhn, L. (2019). Flocking together: An indigenous psychology theory of resilience in Southern Africa. Cham, Switzerland: Springer Nature. doi.org/10.1007/978-3-030-16435-5.

Pukepuke, T. (2019). Flocking together. An indigenous psychology theory of resilience in Southern Africa. [Review of the book]. International Journal of Educational Psychology, 8(3),317-319. doi:10.17583/ijep.2019.4794