



E³ CONCEPT NOTE



basic education
 Department:
 Basic Education
 REPUBLIC OF SOUTH AFRICA







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BACKGROUND

E³ is the result of a number of key country imperatives including the National Development Plan (NDP) which identifies education as being central to enhancing entrepreneurial capacity of the nation. The NDP states that courses should be designed, introduced and taught to promote and instil a culture of entrepreneurship in society (2012:469).

On 02 April 2014, the Deputy President and key cabinet Ministers of the Human Resource Development Council South Africa (HRDC SA) approved the recommendations tabled by the “Enabling Entrepreneurship” Technical Task Team (EETTT) and identified the Department of Basic Education (DBE) as the implementing agency for the “Entrepreneurship in Basic Education Grade R - 12”.

These decisions came about because of the increasing concern for the state of unemployment in the country. According to the Youth Enterprise Development Strategy 2013-2023 of the Department of Trade and Industry, South Africa has the third highest youth unemployment rate in the world (age 15 to 24) with 73% of youth being unemployed and 86% not having formal further or tertiary post-secondary education. A further two-thirds have never worked. South African youth are therefore not participating in the economy; they are not given the opportunity to acquire skills and work experience they need to assist in driving the economy forward; they are finding it more and more difficult to secure jobs due to inadequate job opportunities; and they are lacking in skills, work experience, job search abilities and financial resources to find employment.

In the light of this situation the EETTT proposed the embedding of Entrepreneurship Education into the National Formal Education of all learners from Grades R-12. Entrepreneurship Education involves action-led, practical learning that develops creativity, logical skills and problem-solving skills. Hence, in adding practical entrepreneurship and the development of higher order thinking skills to the curriculum, the employability of **any** learner going through the school system will be significantly enhanced and provide better opportunities for our learners.

On 20 April 2015, the draft Sector Plan on E³ (EiS at that stage) was developed and presented for discussion at the Heads of Education Departments Committee (HEDCOM) Retreat. Following input from the provincial Heads of Education, the necessary amendments were made and the draft Sector Plan was presented to the Council of Education Ministers (CEM) on 4 June 2015. CEM noted the draft Sector Plan and indicated that progress on its implementation should be reported on regularly. As a result, the DBE held several meetings with the Community and Individual Development Association (CIDA) and the Maharishi Invincibility Institute (to be jointly referred to as CIDA) to discuss the implementation of the Sector Plan and the Memorandum of Agreement (MOA) during 2016.

The MOA to implement the Sector plan was signed by DBE and CIDA in March 2017 and a steering committee comprising DBE officials from Branch C and CIDA was constituted.

The DBE Sector Plan to 2030 aims to lay a sound foundation within the schooling system for future entrepreneurs with a strong focus on skills for a changing world. The Sector Plan on Entrepreneurship in Schools (EiS) was launched at the DBE Sector Lekgotla on 22 January 2018. It was noted that the Entrepreneurship in Schools (EiS) Programme will be located in the Curriculum Implementation and Quality Improvement GET Directorate.

The official Sector Plan guiding the work of EiS (E³) focuses on the following four Key Result Areas:

1 Collaboration with the Foundational Learning Task Team.

To improve foundational knowledge and skills in Mathematics, Science and Languages.

2 Introduction of Mandatory Entrepreneurship Education.

To implement an entrepreneurial curriculum for learners in all grades.

- Short term (1 – 2 years): Increase exposure to entrepreneurship (extra-co-curricular)
- Long term (3 – 5 years): Infuse 21st century thinking concepts throughout curriculum

3 New teacher’s education for new and existing teachers.

- To ensure that Entrepreneurship becomes part of initial teacher education so that the new graduate teachers are able to:
 - Integrate entrepreneurial and financial literacy concepts in their respective subjects;
 - Acquire a better understanding of entrepreneurship concepts; and
 - Improve their soft skills;
- To encourage teachers to be agents of change / become entrepreneurial teachers;
- To develop teachers as facilitators of learning in order to guide the learning process instead of communicating knowledge;
- To equip teachers (new and existing) with the “HOW” of Participatory Action Learning and Research and Experiential teaching methods (games, interactive activities, reflective learning);
- To expose teachers to the real business environment (practical experience);
- To up-skill teachers with regard to managing Entrepreneurs’ Days; and
- To use **IT hubs** (countrywide) for training and resources for **existing teachers**.

4 Actively encourage businesses to engage with local educational institutions

- To partner businesses with schools to make entrepreneurship real for both teachers and learners;
- To participate in work-shadowing activities designed to assist teachers to gain a better understanding of industry practices; and
- To provide funding to support entrepreneurial projects.

GOVERNANCE

The structure responsible for the implementation of E³ comprises:

- Steering Committee led by Mr Mveli and Dr MJ Maboya (quarterly meetings)
- Advisory Council led by Dr AP Blecher and Ms WM Carvello (monthly meetings)
- Working Streams (as required)

Each level reports to the structure above and progress reports are presented to structures of the DBE.

PARTNERS

The E³ Advisory Committee comprises representatives from:



basic education

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C.I.D.A. provides technical support to 2030



Care for Ed (with the support of the LEGO Foundation) provides play-based learning support to teachers from Grades R to 3, thus providing a pipeline to, and an effective integration with E³'s project-based teaching and learning initiative.



The NECT shares its learnings in terms of its conceptual framework, the M&E lessons learned and the ability to expand and institutionalise a national educational change process.

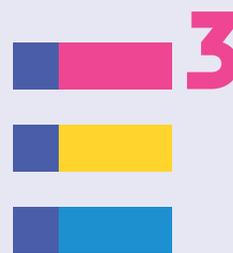


The NLF provides support through the District Driven Districts database to conduct the Schools Audit and to monitor and evaluate the implementation of the 2018 - 2021 pilot.

WHAT IS E³?

E³ is an initiative of the DBE that uses student-centred learning, including projects and games, in the existing CAPS curriculum to better prepare learners for the modern economy. The goal of E³ is to inspire 100% of learners to complete school and 100% of these learners to study further, get a job, or start their own enterprises.

In order to communicate the three-fold vision more clearly it was decided to rename the programme E³ (pronounced E-cubed). This depicts the three desired outcomes of Employability, Entrepreneurship and Education.



LEARN TO SUCCEED

ENTREPRENEURSHIP
EMPLOYABILITY
EDUCATION

IN SCHOOLS

VISION

The vision of E³ is to create a new South Africa of engaged citizens who are prepared through the school system to build the economic engine of this country. In this way SA will become an entrepreneurial nation that will simultaneously reduce poverty and unemployment, and place SA in a worthy position in the world family. The outcomes that the programme will achieve by 2030 are for 100% of learners to have developed skills, competencies, knowledge and self-reliant, solution-oriented mindsets. These will prepare them to complete school with the motivation to continue studying; and/or get a job or start their own enterprises.

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**DEVELOPING PEOPLE WHO
MAKE THINGS BETTER**

BEING AN ENTREPRENEURIAL

Traditionally the word “entrepreneurship” is thought of in a business context. It is defined in the broadest terms as the act of creating a business while building and scaling it to generate a profit. Entrepreneurial people are therefore generally understood to be the driving force behind the establishment of an enterprise. And although this is true, it is, however, not limited to this. At the base of entrepreneurship lies the mindset to seek and discover opportunities and find solutions to any problems and it is this mindset that effectively changes and adds value in organisations and initiatives. “Entrepreneurials” focus their solution-seeking energies on all sectors, including political, social and environmental.

This opportunity-seeking and problem-solving entrepreneurial mindset is the key driver and underpinning ideology of the E³ programme. E³ therefore, promotes the development of an entrepreneurial mindset in all subjects, through its constructivist pedagogy as it contributes to educating all learners to become Entrepreneurials.

The constructivist theory encourages observation and scientific study methods in learning. Learners construct their own understanding and knowledge of the world through experiences and reflection and through the process of asking questions, exploration and reflection. This learning approach and its various pedagogical methodologies ably support the nurturing of learners to become purpose-driven “Entrepreneurials” who will contribute to all sectors of society - whether placed in large companies, in the public sector, in academia or further study and, of course, those who want to launch and grow new enterprises.

In short, learners will be Entrepreneurials – they will be people of the search-and-discover generation. They will subscribe to the notion of: “if it’s going to be, it’s up to me”. Entrepreneurials have a discovery/search opportunity-seeking mindset that drives their purpose in the search for the intersection of their interests and abilities with the needs of their fellow human beings.

Entrepreneurials are those who take it upon themselves to solve problems for others. Unlike Millennials, they are not beholden to a particular age group – rather they are beholden to a particular mindset: a common logic that underpins their abilities and actions. They exist within established organisations and they create new ones. Preparing and nurturing these Entrepreneurials through engaging constructivist pedagogy to be purpose-driven in the discovery of solutions for the 21st Century (be it in employment, as an entrepreneur or in further education) is the goal of the E³ programme. So at E³, when we speak about entrepreneurship, we are defining it in the broadest terms and in all forms – entrepreneurial people in large companies, in the public sector, in academia and, of course, those who launch and grow new companies. Now more than ever, we need innovation, new solutions, creative approaches and new ways of operating to equip ourselves and our learners for a changing world.

An **ENTREPRENEURIAL MINDSET** is a solution-seeking mindset

mīn(d)-set, n

the underlying beliefs and assumptions that influence behaviour



An individual with an entrepreneurial mindset has the:

- Desire to be useful to others (purpose and agency)
- Belief in him-/herself (self-efficacy)
- 21st Century skills to carry out their purpose

WE REFER TO THESE PEOPLE AS “ENTREPRENEURIALS”

Like all skills, this mindset can be nurtured and developed through:

- Tasting success (through iterative attempts)
- Having a coach/mentor/teacher to encourage them
- Being exposed to relatable role-models
- Developing the ability to interpret “failure” in positive terms and try again



The E³ programme bases its process of pedagogical development on the Constructivist method. Students construct their own understanding and knowledge of the world through experiences and reflection. It is the process of asking questions, of exploration, and of reflection. This way of learning is how Entrepreneurials think and act, and it is therefore critical that all learners develop this mindset and the pathways of behaviour from as early as possible.



ALIVE WITH LEARNING

The process of learning will continue year-on-year starting at the beginning of the child's school journey through the play-based learning partnership with Care for Ed and will be embedded in every subject, every grade and every school for every child. Learners will be exposed to constructivist educational practices which will be delivered using action/reflection and project-based learning, which is learner-centric and which results in caring and empathetic learners. This process of school-based assessment will enhance the summative examination process through the development of deep understanding and cognition all through the school year.

HOPE

The E³ value proposition is to provide THE platform for all education initiatives in working with DBE schools who are striving to bring 21st century skills into the pedagogy. Included in this process is the need for all learners to develop curious, enquiring, empathetic minds. They will do this in every subject by being encouraged by the teacher to conceptualise a need, develop a solution and design a project that meets the needs of their environment and that fulfils a purpose within themselves. Teachers will create the opportunities for fun and fascination and provide the direction and guidelines for the three stages of conceptualisation, process and project outcome.

From a young age, learners will grow their empathy, become caring and develop a continuous problem-solving mindset that is driven by what they care about. It is this process that will establish hope and belief in a new SA of engaged youth.

THEORY OF CHANGE

By developing and preparing teachers to deliver the E³ pedagogy through effective training, support and roll out mechanisms, all youth will be motivated to be Entrepreneurials.

At the centre of this initiative is the creation of super-meaningful projects which are delivered through fun pedagogy utilising 21st Century learning skills. The outcomes are that all SA youth will think more broadly and comprehensively and will have developed a proactive, solution-based employment-focused mindset. They will be empathetic, socially responsible and concerned with engaging in SA's socio-economic problems on multiple levels through becoming engaged in their learning.



To ensure this, E³'s role is to ensure that SA's teachers are empowered and supported to implement the E³ pedagogy in every lesson so that all learners in SA schools become engaged in their learning and motivated to be Entrepreneurials. The second role of E³ is to support the DBE to institutionalize the E³ learning model throughout all layers of the department and for officials to be proactive in their support of teachers. The third role of E³ is to mobilize all stakeholder communities from civil society, business to higher education institutions to contribute resources and extended learning opportunities in order to create effective eco-systems within and around the schools. With this input the impact will be that 100% of learners in SA will complete school with the motivation to continue studying, get a job or start their own enterprise – thereby creating a new SA of engaged citizens.

LEVERS

Notwithstanding the leanness of the team to achieve this audacious goal, there are very powerful levers that the E³ team has access to which empower it to access resources and achieve exponential impact. Most importantly because of the backing at the highest levels of government and the support and infrastructure of the DBE, E³ is able to leverage the entire education system and all its resources. The weight of this enables the team to access key players in technology, media, education, civil society, business, international best practice partners and change management experts to name just a few. The goal to change a country's education system can only be achieved through the buy-in and support of all these players and E³ is enormously fortunate to have access to all of these players.



STRATEGY

Intensive strategy sessions with the E³ team has given direction and timing to the goals set out for the programme. The outcomes of the session included defining and confirming various elements including:

<p>Culture: A culture of empathy and social responsibility, in which school leavers are actively concerned with engaging South Africa's socio-economic problems on multiple levels</p>	<p>Method: To systematically, year after year, acculturate the youth within South African schools, to think more broadly and comprehensively and to build proactive, employment focused mindsets</p>	<p>Strategy: To systematically, year after year, create a new culture in SA schools where our youth become more self-reliant, solution-oriented and develop proactive, employment-focused mindsets which eliminate poverty and unemployment in South Africa</p>
<p>Core Purpose of E³: Every learner inspired to thrive through happy, empowered teachers and effective schools</p>	<p>Goal: 100% of school leavers will be either employable, studying further or equipped to start their own enterprise in the future</p>	<p>Core Values of E³: Pioneering and entrepreneurial, Everyone is welcome, Spirit of abundance and generosity, Exponential leverage, Never jaded, Fun and joy in meaning, Celebrate religiously</p>

THE STRATEGIC FOCUS AREAS TO ACHIEVE THIS ARE:

- 1. Pedagogy:** To develop the fundamental essence of what it means to be an entrepreneurial and embed this in teaching e-mindset and thinking skill methodologies that unlock engagement for an e-mindset within the curriculum - *So that there is a simple "golden thread" that runs through all materials and curricula - that unlocks engagement, curiosity, 21st century competencies and an a solution-seeking mindset in teachers and learners*
- 2. Teacher Training:** To prepare teachers to be facilitators of the solution-seeking mindset and thinking skill methodologies - *so that their own buy-in to the need for facilitation and the knowledge of innovative teaching methodologies (for solution-seeking mindset, thinking skills and competency development) is unlocked and implemented in their teaching*
- 3. Teacher Support:** To support teachers by creating communities of practice, effective teacher support groups, and reward and recognition opportunities - *So that support communities and accessible learning journeys are created to share best practice and reward and recognise excellence*
- 4. Roll out:** To design a roll out process that is efficient and effective in its ability to meet the quality and quantity indicators - *So that there is buy-in and genuine embedding of the solution-seeking mindset, thinking skills and competency development methodologies in all grades, all subjects and all schools*
- 5. Business engagement:** To enrol the support of businesses at national and local level to support the initiative in appropriate ways - *So that there are national and local ecosystems created that support students at school both in terms of economic/business role-modelling and in solution-seeking mindsets*
- 6. NGO:** To enrol the support of NGOs that are aligned to E³ pedagogical philosophy - *So that E³ can capitalize on their experience and creativity*
- 7. M&E:** To monitor the effects of the activities and evaluate the impact of the immediate outcomes - *So that there is data-driven evidence of progress towards impact and sufficient information for remediation (and celebration) along the journey*
- 8. Communication:** To advocate for, promote and communicate the initiative effectively and appropriately - *So that stakeholders are enthused and willing to share resources to make the initiative a success*
- 9. Networking:** To network with appropriate and expert players in the field of education, and entrepreneurship - *So that the initiative can benefit from best practice locally and internationally.*

THE STRATEGY IS INFORMED BY KEY PRINCIPLES THAT GUIDE THE WORK OF E³ NAMELY TO:

- 1. Build on strong foundations:** Learning should build on and enhance the fundamental skills and competencies outlined in the existing curriculum.
- 2. Bring learning to life:** Learning happens best when learners actively engage with challenging concepts and real-life problems in a fun, experiential, and practical way, with tangible outcomes for the benefit of their society.
- 3. Start young and keep going:** Repeated exposure to, and reflection on, active learning experiences from a young age forms mindsets and pathways in the brain that enable young people to become adaptive citizens throughout their lives.
- 4. Prepare learners for an unpredictable future:** In an increasingly uncertain future world of work, learners need entrepreneurial, 21st century competencies to adapt, evolve, and innovate.
- 5. Build bridges for true collaboration:** Genuine partnership and collaboration across sectors is the most effective way of ensuring sustainable success.
- 6. Keep it simple!** As the world becomes more complex, the need for smart synthesis and simple solutions has never been greater. True mastery comes in simplicity.

MONITORING AND EVALUATION

The New Leaders Foundation (NLF) has been supporting the Department of Basic Education in implementing the District Driven Districts (DDD) programme, which developed a monitoring tool, the DDD Dashboard, that consolidates and visualises the core curricular assessment data across the South African education system.

NLF has become the monitoring and evaluation (M&E) partner of the implementation consortium and the DDD Dashboard has been used as the data source for core curricular assessment data during the pilot project that was conducted in 2018. NLF is developing a comprehensive monitoring and evaluation tool that will be used to track implementation, and effects and impacts of the E³ programme roll out to enable regular programme monitoring and review. It will also design and commission ongoing evaluations.



E³ M&E PLAN

The M&E plan intends to test aspects of, and provide adequate evidence on:

• Specific Measures:

- The **Implementation** of the programme
- The **effectiveness of training** and skills transfer
- The **effectiveness of other change levers** such as communication, stakeholder engagement, competitions and E³ ecosystem
- The **quality of teaching and learning** taking place
- The changes in **knowledge, skills, competencies and attitudes and values**

• Macro/Broad Environment Measures:

- From a long-term perspective, the **impact** of entrepreneurship in schools and thinking skills for the changing world **on schooling and post-school outcomes.**

NLF supported the implementation team to develop a detailed Theory of Change and Logical Framework, which outlines indicators and data sources for each for the above-mentioned M&E focus areas. NLF will conduct reviews of both the pilot project and the roll-out using a mixed methods approach that will include summative data, questionnaires and participatory action.

NLF will also commission external evaluations of the roll out to evaluate the E³ programme design, management, effectiveness and sustainability.



E³ THEORY OF CHANGE

- **IF** All SA teachers are empowered and supported to implement E³ pedagogy in every lesson...
- **AND** all learners in SA schools become engaged in their learning and motivated to be “entrepreneurials”
- **THEN** 100% of learners in SA will complete school with the motivation to continue studying, get a job or start their own business – thereby creating a new SA of engaged citizens.

USE OF TECHNOLOGY

The E³ programme design will leverage digital technology in the roll out to:

- Advocate the programme and sustain stakeholder motivation to implement programme elements
- Develop educator capabilities at scale
- Reach learners directly, enabling them to drive their own learning
- Mobilise and coordinate other stakeholders to participate, enriching teaching and learning
- Track implementation at scale
- Collect implementation and outcome data
- Generate and disseminate M&E outputs.

NLF and other key partners will identify specific programme use cases of digital technology and source and deploy ideal digital solutions that will meet the prioritised programme use cases. As a starting point, the following stakeholder uses of digital technology have been identified:

TEACHERS

- Understand E³ programme
- Self-study E³ concepts
- Learn E³ concepts
- Engage and learn from peers
- Receive implementation instruction
- Request support
- Engage and receive support from a mentor

LEARNERS

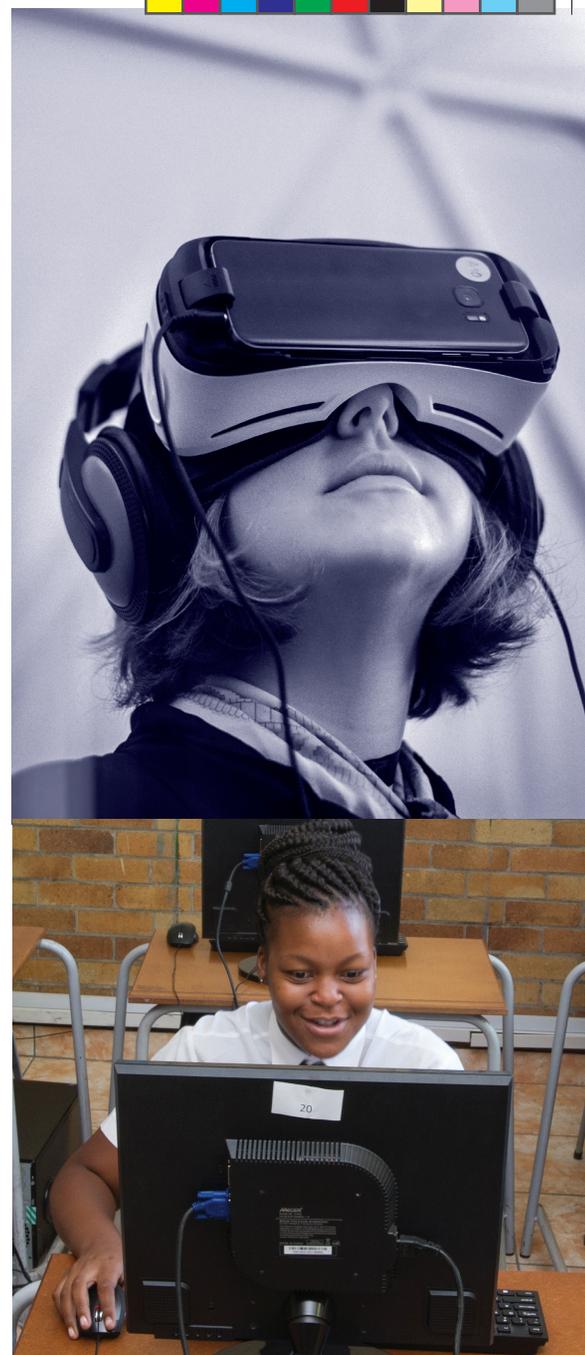
- Understand the E³ programme
- Receive implementation instructions
- Self-study E³ concepts

OTHER STAKEHOLDERS

- Understand the E³ programme
- Express interest to participate
- Receive implementation instructions

PROGRAMME TEAM

- Provide E³ information and resources
- Implement change management
- Drive and track implementation
- Solicit feedback on E³ activities
- Track programme results
- Generate and disseminate M&E outputs

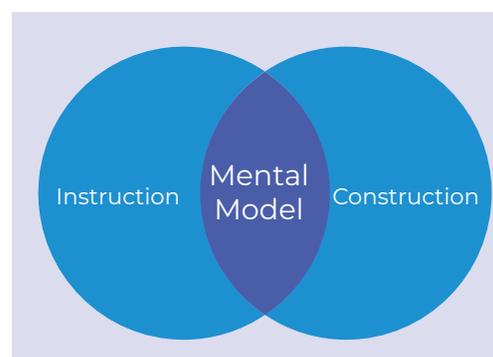


E³ LEARNING MODEL – CONSTRUCTIVIST LEARNING AND PROJECT-BASED LEARNING (PBL)

The fact that school is mandatory for all children presents a wonderful opportunity to mould and create an entrepreneurial, future-focused, purposeful youth culture. E³'s journey to create Entrepreneurials with 21st century competencies is based on the theory of Constructivist Learning.

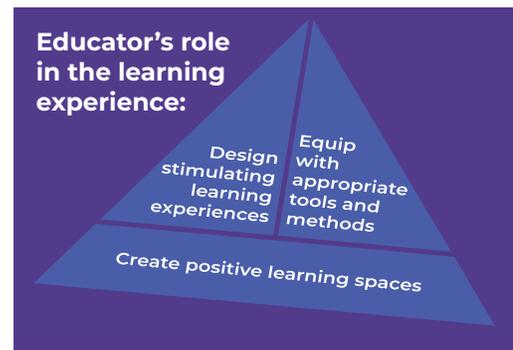
MENTAL MODELS AND PBL

Learners construct their own understanding by reflecting on their personal experiences and by relating new knowledge to what they already know. Each student creates his/her own "schema" or mental model to make sense of the world and accommodates new knowledge (learns) by adjusting these models over and over. Learning is therefore an ongoing (lifelong) search for meaning. To be effective, an educator's role is to help the learner in discovering his/her own meaning.



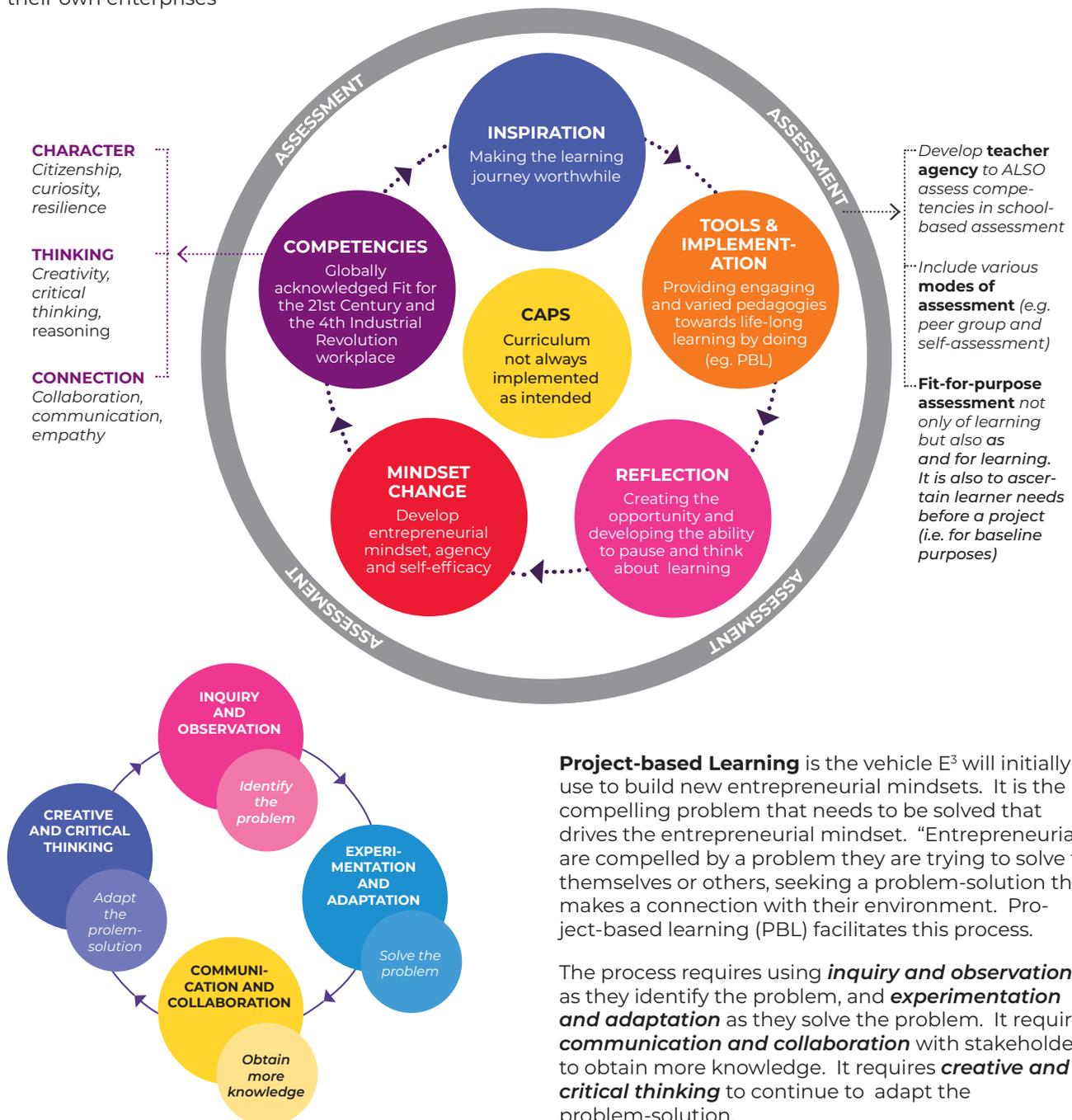
EDUCATOR'S ROLE

The responsibility is on educators to create creative learning spaces, design stimulating learning experiences and equip learners with appropriate tools and methods to create a positive classroom experience where learners have the opportunity to try out these different mental models. Learners connect abstract knowledge (through instruction) to concrete applications (constructions). They convert and apply abstract and general principles in meaningful and responsible acting in life. With input from educators and peer collaboration and ongoing information input, learners begin to self-regulate, reflect on and evaluate new mental models. This process is located in and applicable to their life context.



E³ LEARNING MODEL

Transforming Constructivist Learning into action can be done most effectively by applying design thinking in education – i.e. in educators, learners and in fact in the whole educational ecosystem. Design thinking is closely associated with the entrepreneurial mindset in that it is about believing that we can make a difference; that we have an intentional process in order to get to new, relevant solutions that create positive impact. Design thinking, like being an Entrepreneurial, is human-centred (requiring high levels of empathy), collaborative, optimistic and experimental. E³ is an initiative of the DBE that uses student-centred learning, including projects and games, in the existing CAPS curriculum to better prepare learners for the modern economy. The goal of E³ is to inspire 100% of learners to complete school and 100% of these learners to study further, get a job, or start their own enterprises



Project-based Learning is the vehicle E³ will initially use to build new entrepreneurial mindsets. It is the compelling problem that needs to be solved that drives the entrepreneurial mindset. “Entrepreneurials” are compelled by a problem they are trying to solve for themselves or others, seeking a problem-solution that makes a connection with their environment. Project-based learning (PBL) facilitates this process.

The process requires using **inquiry and observation** as they identify the problem, and **experimentation and adaptation** as they solve the problem. It requires **communication and collaboration** with stakeholders to obtain more knowledge. It requires **creative and critical thinking** to continue to adapt the problem-solution.



PILOT

In 2018 E³ conducted a pilot in three provinces to ascertain the appetite of opt-in schools for the new programme, and to test the beta version of the pedagogy.

The training session was conducted under the theme of: “Thinking Skills for a Changing World” which concentrated on Project Based Learning (PBL). The content is aligned to the Curriculum and Assessment Policy Statement (CAPS) of the Economic and Management Sciences (EMS) subject. The training was based on Action Learning and Experiential Learning methodologies.

Evaluations of the pilot showed that there was cause for cautious optimism. 70% of the 103 educators attended the full training programme. However, some educators found the training programme short and would have preferred a longer training. A significant number of educators highlighted a need for in-school support. There was an adequate spread of educators across grades. There were also educators who taught non-related subjects such as English and Physical Sciences. It does not appear that the performance in Term 3 projects as recorded by SA SAMS was adversely affected by the introduction of the E³ pedagogy.

The E³ team is going through its own discovery process. The feedback and learning from this pilot will provide reflective observation and abstract conceptualisation and enable us to determine the future rollout strategy.

In 2019 the second learning phase for E³ saw about 350 schools engaged in a further round of PBL in all nine provinces. The establishment of a national E³ Teacher Tribe shows early signs of deep engagement of learners and buy-in and enthusiasm of teachers. Agency was observed in teachers as some developed their own customised projects in subjects other than the pilot’s subject (e.g. Maths and English). Teachers and learners were positive about the progressive learning methodologies and the compelling projects unlocked solutions to the problems in they had identified in their communities which in turn helped learners to unlock their competencies, agency and self-efficacy.



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