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SKILLS DEVELOPMENT ACT, 1998 (ACT No.97 of 1998)
DRAFT NATIONAL ARTISAN DEVELOPMENT STRATEGY AND IMPLEMENTATION
PLAN 2017

I, Ms Grace Mandisa Naledi Pandor, Minister of Higher Education and Training, in terms of section 26A (2) of the Skills Development Act, 1998 hereby publish the Draft National Artisan Development Strategy and Implementation Plan, 2017 for public comment.

The full document is available on the Department of Higher Education and Training website: www.dhet.gov.za and National Artisan Development website: <http://nadsc.dhet.gov.za>. All interested institutions, persons and organisations are invited to comment on the Draft Artisan Development Strategy and Implementation Plan, 2017.

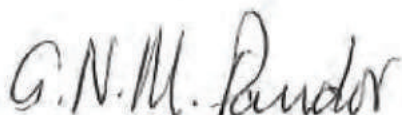
Submissions and inputs should be submitted to the Acting Director: Artisan Development, Mr. Fumane Mboweni via email to Mboweni.F@dhet.gov.za not later than thirty one (31) days after publication of this notice.

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Minister of higher education and training

Date: 8-3-2018



**higher education
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Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

DRAFT NATIONAL ARTISAN DEVELOPMENT STRATEGY AND IMPLEMENTATION PLAN 2017

PRODUCING 21st CENTURY ARTISANS

National Artisan Development Strategy

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1. Executive Summary

The National Development Plan (NDP) affirms that one of the nine challenges confronting South Africa is that "too few people work" [1]. The production of mid-level skills such as artisans is seen as one of the avenues that will ensure that more South Africans access work opportunities. It is the mission of the Department of Higher Education and Training (DHET) to develop capable, well-educated and skilled citizens who are able to compete in a sustainable, diversified and knowledge-intensive international economy, which meets the development goals of our country.

It therefore follows that what South Africa needs is to ensure that more people are relevantly skilled to find employment. One of the avenues for making this a reality is through the re-skilling and up-skilling of its citizens through the acquisition of skills needed by the economy. The South African government has through various strategies identified artisan training as being the key driver to the growth of the economy and ensuring that more South Africans find employment in the mid-level skills labour market. It is a recognised fact that the level of education and training, and the duration spent learning does have an impact on the employability or graduation of citizens.

The National Artisan Development Strategy aims to highlight the priority activities that will have a direct influence in the training of quality artisans. There is a need for the establishment and implementation of a uniform artisan system and processes to accelerate the production of artisans in the country thereby continuously balancing the supply and demand curve for future artisans.

Arising from some of the findings of the Artisan Development and Technical Task Team (AD-TTT) of the Human Resource Development Council (HRDC) established in 2012, a need arose to establish a credible artisan database management system as a point of departure which would enable future artisan planning and empirical projections. The artisan database management system remains a key delivery feature within the artisan development system. To date much progress has been achieved in respect of the establishment and operationalisation of this system. Employers, SETAs and INDLELA are now able to supply data into a central system in terms of the Generic National Artisan Workplace Data, Learner Grant Funding and Administration Policy. The Swiss South African Cooperation Initiative (SSACI)

utilised information on this platform to perform its DHET commissioned work in assessing and evaluating artisan learner employability trends for the periods 2011/12 to 2014/15. The satisfactory performance of this system in terms of providing valid, reliable and usable information has been confirmed by the office of the Auditor General for the past three financial years ending 2015/16. There are however still some system performance and process challenges to overcome though the crucial advantage that now exists is that the various forest trees are now visible with respect to determining what needs to be done. The present national artisan training picture in terms of numbers is as follows:



Key Priority 1: Formally establish a national artisan advisory body which on advisory basis to DHET will map the national artisan agenda.

The functioning of the national artisan development system is driven through a continuous consultative process with various stakeholders who possess community of expert knowledge and advice which is considered by the DHET in advancing national artisan development. The DHET, to this effect has identified a need to formally establish an artisan advisory body which will advise the DHET on matters related to artisan development. This body will be established through policy, given specific objectives with members nominated from Sector Education and Training Authorities (SETA), State Departments, State Owned Companies (SOC), all sectors of Organised Business and Organised Labour.

Furthermore this advisory body will be the catalyst to drive and deepen the involvement of employers within the artisan development system. The same goes for all organised labour wherein their skills training and development interests in terms of artisan training will be well

served within this structure. It is therefore important that DHET relations with industry and labour are always given more attention to ensure this artisan development relationship is continuously improved upon.

Key Priority 2: Establish and maintain an Artisan Research and Development mechanism at INDLELA

The development of a research driven approach to artisan development is a critical factor that also needs prioritisation. This approach will add further value to the data collected by giving it meaning in order to give informed empirical evidence to the artisan development decision making process. This research needs to look at matters relating to the number of artisans in existence, the cost benefit model of the artisan training system, measurements of artisan quality and the future of the artisan development system on a continuous basis. This type of research will ensure that the artisans trained constantly meet the requirements of industry and that industry benefits not only in the end result of the artisan produced, but also during the apprenticeship process.

Key Priority 3: Establish and support a user friendly artisan training quality assurance system and processes in line with the National Artisan Moderation Body (NAMB) and the Quality Council for Trades and Occupations (QCTO)

The artisan quality assurance system and mechanisms alignment need to be made clear and precise in determining what quality assurance standards are necessary for artisan development without being superfluous and also what variables to measure. At the end of the day it should not matter if an apprentice was trained by a private or public Skills Development Provider (SDP), the quality standard of the artisan coming out of the system should be the same no matter the training route. More emphasis needs to be given to the workplace quality assurance system as that is where the most learning happens within the artisan training system. This must be done with the attitude of ensuring more employers are assisted to meet the requirements of workplace based learning and training through simplifying approval processes whilst retaining high standards of training.

Key Priority 4: Sustain a ring fenced artisan learner (apprentice) grant and disbursement system and processes.

Funding regimes dedicated to apprentice training should be streamlined by way of consolidating all artisan related funding streams *ab initio*, these streams being located at skills development provider point of allocation and the workplace based learning and training allocations. The Generic National Artisan Workplace Data, Learner Grant Funding and Administration Policy ensures that the artisan learner allocation grant is ring-fenced and disbursed properly throughout the duration of training.

Key Priority 5: Establish and support a national artisan training system based on the simultaneous delivery of the three learning components (theory, practical and workplace learning) based on a block release system between a TVET college or a Training Centre and Industry.

The QCTO has been in the process of developing new occupational qualifications. The development of these qualifications has presented an opportunity to the artisan development system on how best to structure the curriculum learning content or syllabi in order to ensure we deliver artisans able to contend with the artisan universal standards. It is a matter of fact that artisans acquire most of their learning in the workplace. The dual system approach to pedagogy and didactics, which is the integration of the knowledge and practical learning components with the workplace experiential learning is critical to the success of the envisaged artisan development system. This integration should give an apprentice an opportunity to simultaneously cement what they have learned at a TVET college or training centre with the experiential learning at the workplace as soon as possible in order to achieve the maximum learning impact.

The distinguishing characteristic of the strategy is the integration of the knowledge, practical and workplace learning components. Dubbed the ***“Apprentice of the 21st Century”*** and given the acronym A21, takes its cue from the traditional apprenticeship systems which always ensured the simultaneous delivery of the three learning components in an integrated manner on a block release system between a TVET college or a training centre and the shop-floor (industry). The NOCC has expanded on the curriculum framework developed by the QCTO to make the A21 as practical as possible. The A21 will be based on a work project methodology.

What this entails is that the trade/vocational theory for the full apprenticeship will be broken down into credit modules with specific outcomes linked to the required core competencies and the qualification's outcomes for the trade. The credit modules be divided into the knowledge, practical and workplace components which make up these learning projects.

The McKinsey & Company "Big Five" report of South Africa's Bold Priorities for Inclusive Growth states that "The international experience shows that vocational training must be closely linked to practical work experience through apprenticeship if it is to have true impact on employment and economic growth. While South Africa's government and industry have made concerted efforts in recent years to increase the number and quality of apprenticeships, they will need to redouble their efforts as part of a broader drive to strengthen the education-to-employment journey" [3].

Evidently the success of the A21 system hinges on the availability of extraordinarily more training spaces at the workplaces which will be supported by the contracting of apprentices at the point of entry onto the A21 artisan training programme through the various pathways, including technical and vocational learning at basic education level, allowing them all access onto an apprenticeship programme. These entry pathways will therefore create a pool of learners who meet the criteria to enter the A21 from which employers can choose from. The contracting of the apprentices will therefore take place after an employer has chosen an apprentice. This is done so, as the learning integration methodology of the trades and occupations qualifications requires.

The full essence of the strategy seeks to create a seamless link between the early education and training pathways to entering the artisan training programme, workplace learning (learner contracting) and the A21 system. In order to achieve success of the A21 system, the other aspects of the 7 steps have also been analysed later in this document, in order to ensure that the system fully supports the main aspects of the strategic direction of quality artisan training.

The stark reality is that much of quality apprenticeship training takes place at the shop-floor, production and assembly line, etcetera. The allocation of the artisan learner grant is meaningless if there is no uptake as such from industry. It is imperative therefore to canvass largely state owned entities to provide these training spaces in big numbers not precluding the role of the private sector in artisan training.

Key Priority 6: Promote a strong base of artisan training in state owned entities through negotiated artisan training quotas.

SOCs have traditionally played a key role in the training of artisans in the country. This active involvement meant that SOC trained above their needs in order for the country to have skills that were needed at that time. The South African National Defense Force also contributed to the training needs of the country by training artisans. The contribution of SOC to artisan training has diminished over the years. The DHET and DPE have established a skills development committee that looks into reviving the SOC contribution to artisan training. This will be the primary vehicle used to facilitate the training of artisans by SOC for the country.

2. Background

Mostly, like other developing countries in the Southern and Eastern hemispheres South Africa faces a challenge of an increasing unemployment rate which is stubbornly circling around 26%. The dire consequences thereof are deteriorating socio-economic conditions impacting the population. This is evidenced by the inability to have met some of the millennium development goals being the creation of decent employment, poverty alleviation and improving education and training, which are now expressed as the long term sustainable development goals and as continuing developmental projects country by country [3]. Improving education and training quality is one of the priority goals of government. Channelling more resources toward the development and acquisition of skills development infrastructure in order to be able to produce more citizens with the right kind of skills and on demand skills cannot be overemphasized. It is for these reasons that the South African government has led the charge to produce the correct mid-level skills urgently needed by the country.

The DHET has the mandate of addressing the skills challenges faced by the country through the implementation of the Skills Development Act of 1998. The Skills Development Branch of the DHET through the National Artisan Development (INDLELA) Chief Directorate is directly responsible for driving the national artisan revolution throughout the entire economic sector network in partnership with all artisan development stakeholders. The National Artisan Development (INDLELA) Chief Directorate through external and internal consultations generally develops credible artisan development policies and strategies assisted by the constant scanning and analysis of the artisan environment and recommends appropriate policy

and/or strategy review and intervention to remedy any blockages and deviations that may exist in the implementation of such policies. Furthermore it is tasked with rejuvenating the artisan training system to ensure the optimal effectiveness and efficiency of all components that make up this system.

The White Paper for Post-School Education and Training states that "In areas of work such as the artisan trades, apprenticeships have traditionally been the pathway to qualifications; however, the apprenticeship system has been allowed to deteriorate since the mid 1980's, resulting in a shortage of mid-level skills in the engineering and construction fields. Re-establishing a good artisan training system is an urgent priority; the current target is for the country to produce 30 000 artisans a year by 2030" [5].

This statement expresses a policy directive as to what the Skills Development Branch needs to achieve in the long term. The critical directives specifically relating to artisan development and extracted from the White Paper for Post School Education and Training provisions are:

- The re-establishment of a strong apprenticeship training system.
- The simplification of the pathways leading to artisan trades.
- The improvement of the quality of the apprenticeship training system.
- The production of 30 000 qualified artisans per annum by 2030.

**(at the time of the publication of this document the average rate per annum is 16000)*

Furthermore the White Paper for Post School Education and Training recognises the importance of linkages amongst the different role players in the post-school education and training system. Closer ties therefore are needed between the DHET, SDPs, Organised Employers, Organised Labour and other critical role players in the artisan training value chain. Each of these stakeholder groups plays a distinct and an important role in the post-school education and training system.

As much as we look at improving the primary factors such as artisan throughput rate, trade test pass rates, quality of provision and ultimately the gold standard of artisans produced by the system, we need to ensure that the artisan training system is accessible to everyone. The DHET recognises the need to address the value principles of the NDP as it "... envisions a South Africa where everyone feels free yet bounded to others; where everyone embraces their full potential, a country where opportunity is determined not by birth, but by ability, education

and hard work" [1]. It needs to work much more closely with all employers to ensure the opening of workplaces and the development of capacity to take on more apprentices. This developmental work with employers will ensure that more and more learners have access to workplaces especially where it is a requirement of their qualifications as is the case with artisans.

Workplace learning opportunities need to be available for those not in employment, education or training, the so called NEET group. The effect of this strategy should be able to develop processes which may give this cohort access to second-chance opportunities. The NDP recognises that "The education system will play a greater role in building an inclusive society, providing equal opportunities and helping all South Africans to realise their full potential, in particular those previously disadvantaged by apartheid policies, namely black people, women and people with disabilities." [1].

The exposition above has captured the essence and the framework of the **National Artisan Development Strategy** and is the direct reflection of Chapter 2 of the Skills Development Act of 1998 which may be summarised as giving effect to the skills development agenda of the country.

3. Legislative Environment

3.1. Skills Development Act

The Skills Development Act (SDA) of 1998 and is the primary legislation driving the work of the DHET regarding skills development. These pieces of legislation set the legislative parameters, functions and objectives that the Skills Development Branch need to operate within and achieve in order to fulfil its mandate. Chapter 6A of the Skills Development Amendment Act of 2008 broadly sets out the statutory functions of the Chief Directorate: National Artisan Development with the main focus being that of coordinating artisan development within the country.

The Skills Development Act as amended sets out a broader mandate for the DHET in Section 2, as amended, where it states the purposes of the Act as being to develop the skills of the South African workforce through improving the quality of life of workers, their prospects of work and labour mobility; to improve productivity in the workplace and the competitiveness

of employers; to promote self-employment; and to improve the delivery of social services; to increase the levels of investment in education and training in the labour market and to improve the return on that investment; to encourage employers to use the workplace as an active education and training environment; to provide employees with the opportunities to acquire new skills; to provide opportunities for new entrants to the labour market to gain work experience; and to employ persons who find it difficult to be employed; to encourage workers to participate in learnership and other training programmes; to improve the employment prospects of persons previously disadvantaged by unfair discrimination and to redress those disadvantages through education and training ; to ensure the quality of education and training in and for the workplace; to assist work-seekers to find work; to assist retrenched workers to re-enter the labour market; to assist employers to find qualified employees; and to provide and regulate employment services.

The artisan development system is impacted by the above purposes as it seeks to ensure that all stakeholders understand their role in an integrated post-school system and assist the DHET in ensuring that it achieves the purpose of the SDA in relation to artisan development.

3.2. White Paper for Post School Education and Training

The Minister of Higher Education and Training in his preface of the White Paper for Post School Education and Training states that, "The aim of this White Paper is to outline a framework that defines the Department's focus and priorities, and that enables it to shape its strategies and plans for the future" [5]. He further states that "This White Paper is an important document in the development of our higher education and training system. It is a definitive statement of the government's vision for the post-school system, outlining our main priorities and our strategies for achieving them. It is a vision for an integrated system of post-school education and training, with all institutions playing their role as parts of a coherent but differentiated whole. These institutions include the colleges and universities whose main purpose is the direct provision of education and training and, in the case of universities, the conduct of research. They also include institutions that support the education and training process, such as the Sector Education and Training Authorities, the National Skills Fund and the advisory, regulatory and quality assurance bodies such as the South African Qualifications Authority (SAQA) and the Quality Councils."

This draft strategy document is therefore grounded on the principles outlined by the White Paper for Post School Education and Training with special emphasis on the artisan development system. The draft strategy expands on these principles by articulating them in relation to the envisaged artisan development system.

4. Artisan Development System Role Players

4.1. National Artisan Development Chief Directorate

The National Artisan Development (INDLELA) Chief Directorate is the primary functionary of the DHET responsible for artisan development in the country. The work of the Chief Directorate is derived from the Skills Development Act 97 of 1998 read with the subsequent amendments, which falls under the control of the Minister of Higher Education and Training in South Africa. Chapter 6A Section 1 (b) states that the Director-General must provide the National Artisan Moderation Body with the personnel and financial resources that are necessary to coordinate artisan development in the Republic.

The National Artisan Development (INDLELA) Chief Directorate is made up of four directorates, the Artisan Development, National Artisan Moderation Body, Career Development (which recently includes the World Skills South Africa project) and Artisan Registration, Assessment and ARPL. The work of the National Artisan Development (INDLELA) Chief Directorate is still in developmental phase with adjustments still being made in order to maximise the effect of a final structure. It therefore follows that the coordination of artisan development functions cannot be the restricted role of the National Artisan Moderation Body. Coordination in the broader sense of artisan development falls within the full ambit of the Chief Directorate National Artisan Development (INDLELA) as expressed above.

At operational level the work carried out by the National Artisan Development (INDLELA) Chief Directorate necessitates the segregation of functions and duties in order to ensure that each Directorate focuses on specific roles and none of the Directorates play both a player and referee function. The National Artisan Development (INDLELA) Chief Directorate will therefore plan, develop, implement, coordinate, monitor and evaluate a single national artisan development system. The core responsibility of the National Artisan Development (INDLELA) Chief Directorate is the coordination of artisan development nationally to achieve a single,

common national standard across all economic sectors for artisan development as contemplated in the Skills Development Act. This core role and responsibility includes the sub-roles and responsibilities to develop, implement and manage systems and processes as developed, implemented and managed by the Directorates making up the National Artisan Development (INDLELA) Chief Directorate.

Coordination means that the Chief Directorate: National Artisan Development (INDLELA) must organise the different elements or activities that make up the artisan development system in order to enable them to work together efficiently and effectively. This is done through the development of systems, models, criteria and guidelines, standards, policies and regulations that will guide all role players on how to plan, manage and implement their activities in a harmonised way to achieve efficiency and effectiveness in the artisan development system. The Chief Directorate therefore must quality assure each step of the artisan value chain and through a system of quality control in line with the QCTO quality assurance standards ensure that correctives measures are implemented wherever necessary. Furthermore coordination presupposes that when it comes to artisan development matters, the Chief Directorate must be the authority on all strategic matters.

4.1.1. Artisan Development

The Artisan Development Directorate was established in order to ensure that artisan skills development policies, strategies and implementation correlate with identified national and regional economic growth priorities. The Artisan Development Directorate focuses on the development, coordination and implementation of national artisan development strategies in collaboration with all artisan development stakeholders. The collection and management of artisan data also falls within the ambit of the directorate. This data ranges from apprentice registrations onto formal learning programmes, completions through passing trade tests and mentor registrations, etc. The National Artisan Development Support Centre is the mechanism through which National Artisan Development drives the data management and analysis process.

Occupational Qualification Delivery includes workplace support and development. The sub directorate is responsible for the development and delivery implementation of the practical (skills) and occupational knowledge component as well as delivery and coordination of the

workplace (applied theory and skills) component of an artisan qualification. This work includes the development of the Occupational Qualifications for trades listed in Gazette 35625.

4.1.2. National Artisan Moderation Body

During 2008 the Skills Development Act, Act 97 of 1998, was amended to strengthen national policy that governs artisan development in South Africa. One of the critical outcomes of the amendment was the establishment of a NAMB on 30th November 2010 in the DHET. The NAMB is established in terms of Section 26A (1)(a) of the Skills Development Act, Act 97 of 1998 as an operational unit within the Department of Higher Education and Training with statutory functions. The NAMB is an integral part of the DHET and not a public entity or a state owned company.

The Director-General of the DHET has implemented the process to operationalise the NAMB by allocating the NAMB to the National Artisan Development (INDLELA) Chief Directorate which is a Chief Directorate located at Olifantsfontein, Gauteng and falls within the Skills Branch of the DHET.

The National Artisan Moderation Body is required by Section 26A (2) of the SDA to perform the following statutory functions:

- (a) Monitor the performance of accredited artisan trade test centres;
- (b) Moderate artisan trade tests;
- (c) Develop, maintain and apply a national data-bank of instruments for assessment and moderation of artisan trade tests;
- (d) Develop and maintain a national data-base of registered artisan trade assessors and moderators;
- (e) Record artisan achievements;
- (f) Determine appeals against assessment decisions;
- (g) Recommend the certification of artisans to the QCTO; and
- (h) Perform any other prescribed function.

4.1.3. Trade Test Application and Assessment

Trade Test Application and Assessment Directorate is responsible for trade testing trades that are accredited by the QCTO for it to test as per the list of trades stipulated in Gazette 35625. The Directorate also includes the ARPL function which is responsible for the development, implementation and management of the national ARPL regime.

4.1.4. Career Development (WorldSkills South Africa and the Decade of the Artisan)

The Career Development Directorate develops, coordinates and implements artisan related career guidance to school learners and/or post school persons through advocacy programmes such as the Decade of the Artisan and World Skills South Africa amongst other interventions. The directorate is also responsible for the development of artisan career materials to enable the communication of a uniform message on career development. It is further responsible for the coordination of participation of TVET colleges in partnership with industry and SETAs in the World Skills South Africa activities meant to enhance the vocational education and training skills development element through the World Skills International mechanism.

4.2. DHET TVET Branch

The Minister of Higher Education and Training has the authority to approve and publish legislation, regulations and policy. The TVET Branch within the DHET is responsible for the operational development of legislation, regulations and policy governing the public TVET sector. It is responsible for the registration of public and private TVET Colleges. The branch coordinates programme delivery and support for TVET Colleges encompassing areas such as curriculum development, student development and support services, exam management and monitoring and lecturer development.

4.3. SAIVCET

The White Paper for Post-School Education and Training states "SAIVCET will be established in order to provide necessary support and appropriate support to the college sector" [5]. The primary responsibilities of SAIVCET are listed as:

- "Developing innovative curricula for TVET and community colleges;
- Upgrading the technical knowledge and pedagogical skills of existing staff in TVET and community colleges, and promoting the professionalisation of lecturers, instructors and trainers;
- Providing a forum for experts to develop materials for TVET and community college programmes;
- Advising the Minister on vocational and continuing education;
- Initiating research on the TVET colleges, the community colleges and the college system as a whole;
- Promoting dialogue, coordination and linkages between TVET and community colleges, and between these institutions and universities, SETAs, employers and workers, in order to enhance coherence and articulation;
- Monitoring and evaluation of the TVET and community colleges" [5]

The National Artisan Development (INDLELA) Chief Directorate by the nature of its strategic function is meant to closely collaborate with SAIVCET especially regarding artisan training curriculum content development and trade testing.

4.4. Skills Development Providers

Section 29 (3) of the Constitution states that everyone has the right to establish and maintain, at their own expense, independent educational institutions that do not discriminate on the basis of race; are registered with the state; and maintain standards that are not inferior to standards at comparable public educational institutions. A SDP is a training provider accredited by the QCTO to offer components of occupational qualifications or part qualifications and conduct internal formative and summative assessments. The term SDP encompasses both private and public colleges as they both offer courses that are vocational or occupational by nature meaning that the student receives education and training with a view towards a specific range of jobs or employment possibilities. The public providers are represented by public TVET Colleges whereas the private providers are represented by standalone private providers and in-company private providers. The difference between the standalone private providers and in-company private providers is that the latter offer integrated artisan training as the core focus of the company is on a product or service and not on making money from training. Standalone private providers are similar to public TVET Colleges in that they independently offer accredited

programmes to learners mainly focusing on the knowledge and practical components of the apprenticeship. It is a peremptory requirement that all SDP offer artisan training programmes within the scope prescribed by the QCTO and SAIVCET.

4.5. Trade Test Centres

A trade test is a final summative external integrated summative assessment that an apprentice must attempt to pass in order for them to be recognised as competent in their trade. This final external integrated summative assessment is performed by independent trade test centres which are accredited by the QCTO. A trade test centre is a centre formed to perform independent external assessments in an accredited trade. There are an excess of 400 trade test centres in the Republic supporting the decentralisation approach followed by NAMB and the QCTO in trade testing.

All Trade Testing in South Africa is regulated by the national Trade Test Regulations issued under Section 26D(5) of the Skills Development Act that are applicable to all Trade Test centres whether they are operated by private, government or state owned companies. These national, decentralised trade test centres must be accredited by the QCTO before they will be allowed to conduct national trade tests. The national trade test includes practical tasks that a learner must complete within a specified periods of time as determined by the NAMB. It is a peremptory requirement that all trade test centres use assessment standards, instruments and environment as prescribed by the QCTO through NAMB.

4.6. Sector Education and Training Authorities

SETAs were established to facilitate skills training and education required by those in the post school sector including those requiring workplace experiential training and those already employed looking to improve their educational and skills competencies. SETAs operate within predetermined sectors as determined by the Minister of Higher Education and Training to determine the skills training required by the sectors in order to keep their employees up to date with current trends and also train future employees required by the sectors. According to the White Paper for Post School Education and Training, "SETAs will focus on obtaining accurate data about workplace skills needs, as well as supporting providers to deliver programmes necessary for their sectors. The latter will include facilitating cooperation between education

and training institutions and workplaces" [5]. SETAs will therefore continue to be intermediaries between the workplace and the skills development providers within the artisan development system. It is a peremptory requirement that all artisan training SETAs, in terms of predetermined artisan development processes, must allocate sufficient resources in relation to facilitating artisan training and must meet artisan targets as set by the DHET.

4.7. Quality Council for Trades and Occupations

The QCTO is a Quality Council established in 2010 in terms of the Skills Development Act. Its role is to oversee the design, implementation, assessment and certification of occupational qualifications on the Occupational Qualifications Sub-Framework (OQSF).

The QCTO is one of three Quality Councils (QCs) responsible for a part of the National Qualifications Framework (NQF). Collectively, the Quality Councils and the South African Qualifications Authority (whose role is to advance the objectives of the NQF and oversee its development and implementation), all work for the good of both learners and employers. Another important role for the QCTO is to offer guidance to service providers who must be accredited by the QCTO to offer occupational qualifications.

The QCTO was set up to ensure that occupational qualifications, involving workplace training, were registered, quality-assured and offered by reputable service providers. In the past, occupational education had lacked leadership and the QCTO is responsible for trying to stabilise that situation. It is responsible for the setting of national standards for the development of each curriculum, and to quality assure the providers (training and workplace). The QCTO will manage and coordinate the qualifications in the occupational qualifications framework in terms of their development, provision, assessment and impact. Its scope will be the development and quality assurance of fit-for-purpose occupational qualifications and unit standards as required by the labour market for work and employment purposes. The mandate of the QCTO is derived from Section 27 of the National Qualifications Framework and includes advising to the Minister of Higher Education and Training on policy matters, design, development and maintenance of occupational standards, quality assurance of the qualifications, and promotion of the National Qualifications Framework.

The NAMB as a statutory body closely collaborates with the QCTO, a relationship which may be expanded to ensure quality assurance at delivery level especially at the workplace.

4.8. Department of Basic Education

The Department of Basic Education is a critical component of the artisan development system. Through the technical high schools, schools of skill and the academic route they continue to create a pool of learners who feed into the artisan development system. Even through these learners' competence may be of varying degrees, the different Basic Education pathways ensure that learners have various options for entering the artisan development system. There are still some challenges that still need to be addressed in relation to learners coming from the basic education system, but both the Department of Basic Education and Department of Higher Education and Training are working closely to address these matters.

There has to be a smooth articulation between the technical, vocational and occupational offerings in the Department of Basic Education's CAPS and artisan training without further unnecessary requirements.

4.9. Private and Public Sector Employers

The White Paper for Post School Education and Training states that, "Given the expected needs of the economy, a particularly important form of work-integrated learning is artisan training through apprenticeships or learnerships, which are presently used mainly to produce artisans in the engineering and construction industries. Artisan training has gone through a period of relative neglect but is being revived, with growing support from employers in both the private and public sectors, including the state-owned enterprises" [5]. Within the artisan development space "Workplace learning must be seen as an integral part of qualification and programme design" [5].

The statements above, taken from the White paper on Post-School Education and Training describe the importance of workplace learning for the artisan development system and resonates well with the key priority 6 above. It follows therefore that there is a need for the system to strengthen relations with both private and public sector employers in order to ensure enough workplaces are available for those wishing to become artisans. There is still much work that needs to be done, especially in the Public TVET College space, to foster sustainable relations with both public and private sector employers.

5. The New 7 Steps to becoming an Artisan



Figure 1: New 7 Steps to becoming an artisan

The linearisation of the artisan training process into the seven steps is for convenience purpose whilst in essence it remains a strongly holistic process. The new 7 Steps to becoming an artisan articulates the driving mechanism of the vision of the DHET for artisan training specifically as the department moves towards achieving the goals of the NDP. The section below is dedicated to describing how through this mechanism the DHET plans to affect change within the artisan training system to achieve higher artisan throughputs and output. Fundamental changes within the system includes the separation of foundational learning

components from the trade theory into a standalone Foundation Learning Programme (FLP) which will precede the entry into an apprenticeship. Further to this the integration of the knowledge, practical and workplace components will necessitate that learner contracting happens before a learner enters the apprenticeship component of training. This is the backbone of the "Dual Apprentice System" which is adopted as the A21.

5.1. Career Development

5.1.1. Career Guidance Services

"Identity can be construed as predominantly an internal aspect linked to an individual's perception and description of him- or herself" [6]. Social identity on the other hand "can be defined as a person's knowledge that he or she belongs to a social category or group" [6]. The negativity surrounding artisanal careers can be largely attributed to the perceptions of individuals belonging to the artisanal group. People generally group economic activities as belonging to certain social groups. Societal perceptions of artisans are those of work requiring little underpinning knowledge, with added associations to artisanal workers not requiring high levels of academic knowledge.

The ILO report titled Towards a Model Apprenticeship Framework: A comparative analysis of national apprenticeship systems infers that a strong culture in the occupational group/industries makes apprenticeships in those groups/industries more attractive [7]. A question that we then need to ask is if there are strong cultural occupational groups in the trades today. The fact that artisanal trades are not seen as attractive career options in itself gives much evidence to the potential lack of strong social identity within the trades today.

If we follow the thinking of the ILO report then the multiple occupational groups and industries need to rejuvenate the strong cultures within their groups that once existed. Communication of these strong cultures would have to be done by these employer groupings in order to increase the attractiveness of their occupations to youngsters especially. The professionalisation of the artisan occupations will add much drive to the needed artisan cultural revolution.

The White Paper for Post-School Education and Training states that "An important area of concern to both the schools and post-school system is ensuring that all young people in the

latter years of schooling (and those in early years of post-school education) receive appropriate and adequate career guidance advice" [5]. The first requirement in the recruitment and selection process is effective career guidance services as highlighted by the White Paper. The country faces a challenging high unemployment rate which according to the quarterly labour force for quarter four of 2016 is 26.5 percent for the age group 15- 64 years [4]. The analysis of the survey further reveals that of the age group 15-24 years, those that are in the NEET category make up 30.1 percent of this group [4]. "Education is generally good insurance against unemployment and for an individual to stay in employment. It provides both productive capacities to individuals and their signals to potential employers. Hence, qualifications attained by workers are their main asset in competition for jobs available in the labour market. Educational attainment also increases access to decent jobs, while those with lower educational attainment are at risk of economic marginalisation, since they are both less likely to participate in the labour force and more likely to be without a job, even if they actively seek one" [4]. The majority of people within these two categories have low skills levels (matric and less) which highlights the need for career guidance services in order to ensure that they are directed into education and training where there is an economic need. This will add value to their prospects of getting meaningful employment.

The work of career guidance is not just the responsibility of school educators but requires the involvement of a wide variety of stakeholders including DHET, SETAs, CDWs, NGOs, employers and other beneficiaries in the learner development value chain. When the NEET category is included it therefore becomes obvious that more efforts are needed that will cover the wide span of possible career guidance recipients from school learners to NEET candidates. Effective career guidance should arouse the interest of learners and parents in various occupations. Part of the process of ensuring the attractiveness of vocational careers is the need for career guidance services that will have an impact on learner career choices.

In order to address the above identified challenge, the DHET has come with various interventions as part of a career guidance drive to complement the work that is currently done by the DBE. The Decade of the Artisan, WSSA and NCAP are three examples of such programmes that seek to build effective career guidance systems into the post-school education sector. An exciting and innovative development is the Try a Skill Component which has developed out of the WSSA programme. Try a Skill allows learners to "feel and touch" what a particular occupation entails.



The main difference between traditional career guidance and Try a Skill is the participation of the learner in the performance of tasks related to that skill instead of watching a video or reading up about that occupation. The Try a Skill gives learners actual experience of what an electrician will do as part of their job. The real life experience will give the learner the real life opportunity to see if they identify or are interested in a particular occupation.

The traditional idea that career guidance is something that should happen at high school level is also something that needs to be confronted. If we look at the modern child and the level of information they process from an early age it is therefore advisable that the world of careers be opened up to them from an early age. School learners from grade 6 level are invited to attend Decade of the Artisan and WSSA Competitions. The reason for this is to expose the learners as early as grade 6 to the different trades with special emphasis on the Try a Skill component. This will give the learner enough time to process the career information given and identify an occupation they relate to. Parents are also an important element in the effective career guidance system. The ideal career guidance system should also make it easier for parents to access career information through formations like school governing bodies.

The Decade of the Artisan continues to remain the primary career guidance advocacy programme for artisanal trades as it gives the DHET an opportunity to engage with a wide variety of stakeholders. Part of this programme is a concerted effort to train life orientation educators, TVET College career advisors and CDWs on the nature and character of artisan careers as part of the career management efforts. This is in line with ensuring that from grade 7 onwards we are able to effect good career guidance services related to the artisanal trades. The success of this training shows the useful DHET – DBE inter-departmental collaboration. There is however a need to expand these collaborations to include the SETAs, media, school governing bodies, NGOs and community based organisations.

A concern raised in the revised Decade of the Artisan concept was that there were no post training/event intervention strategies. These strategies would need to be developed with individual schools to ensure that the life orientation educators implement what they were trained on. The prioritisation of lower quantile schools within the DBE sector should ensure that these schools are given priority as they may have a serious limitation in resources. These strategies would also include drawing up of career guidance calendars which would include taking learners to TVET Open Weeks for apprentice recruitment purposes based on their interest in becoming artisans from grade 9 onwards. The same would be done for TVET College Career Advisors. An intra-departmental effort is required for this task which would include a monitoring and evaluation aspect.

There is a move by the DHET to mutually but exclusively differentiate the public TVET Colleges through programme specialisation. What this means is that the economic dynamics in a particular region should dictate the public TVET College offerings in that area. This would make public TVET Colleges more focused and relevant within their economic geographical areas. This direction, coupled with employer support could greatly contribute to the occupational culture required to improve the attractiveness of artisanal trades.

5.1.2. The Selection and Recruitment Tool

The Deputy Minister of the DHET has through the Decade of the Artisan launched the TVET College Open Week. The TVET College Open Week is an opportunity to increase awareness of TVET College offerings and also change the negative perception towards TVET Colleges. It thus brings an opportunity for employers to recruit learners into apprenticeship programmes.

The recruitment and selection of potential apprentices must be aligned to other programmes that the DHET is embarking on. The new 7 steps as defined in point 5.2.1 proposes a fundamental reversal in the selection and recruitment process. There is a need to swap the current step 2 (General/Vocational/Fundamental Knowledge Learning) and Step 3 (Learner Agreement Registration and Contracting). The reason is explained in detail in point 5.2.1. With this shift, employers would have to contract learners before they can go for theoretical learning at a SDP.

Clearly defined pathways are critical to a successful career development system. With clearly defined pathways, learners would know when they can enter apprenticeships and what their career trajectory is. The OECD Review of Vocational Education and Training: A Skills Beyond School Review of South Africa states the following:

There are several vocational routes at upper secondary level

1. NC(V) programmes
2. N or NATED programmes
3. Technical Schools, providing vocational-type programmes from grade 8 leading to a national senior certificate with a vocational element
4. Learnerships and apprenticeships
5. Occupational Qualifications involving assessments of different unit standards of competences.

Recommendation: Simplify the System. Building on the proposals set out in White Paper:

- Upper secondary vocational programmes should be merged into two main tracks – a school based track and a work based track
- To meet the needs of adult learners, develop a second chance vocational programme and ensure flexible provision

There are 125 listed artisan trades in South Africa as per Gazette 35625. A desktop analysis of the number of pathways related to trades indicates that there are over 810 pathways for artisan training, with the electrical trade consisting of 23 pathways. The advent of the QCTO Occupational Qualifications presents an opportunity to simplify the system and implement a single pathway per trade. This will ensure that it is easier to not only deliver artisan related qualifications but to also offer streamlined effective career development services.

The White Paper for Post School Education and Training states that "The entire gamut of vocational programmes and qualifications will therefore be reviewed and rationalised into a coherent and simple framework that fits easily into the NQF and makes learning pathways clear to school-leavers and employers.....Given all these developments we find ourselves today with five vocational qualification types – Nated (or N) programmes; NCV programmes; occupational programmes; Higher Certificates; and the NSC with Technical Subjects. The review should ideally involve both DHET and the Department of Basic Education, as both offer vocational programmes" [5]. Aligning these changes in the 7 step process defined above and

the clearly defined pathways would make it easier for employers to recruit learners yet, at the face of it and in the long run, the NC (V) programme may not be ideal for apprentice indenturing.

The work that INDLELA in partnership with industry stakeholders needs to do is to develop prescribed minimum standards for a recruitment and selection tool. The nitty-gritty of the tool is subject to this collaboration. The developed selection and recruitment tool will be used in the selection and recruitment of learners onto apprenticeships. Employers wishing to expand the tool within reasonable and non-discriminatory additional requirements will be able to do so as part of their internal recruitment and selection processes.

5.1.3. Multiple Access routes onto A21 Apprenticeship

5.1.3.1. Grade 9, Academic Matric and Technical Matric

The artisan development training system has historically recognised the availability of multiple routes which give access to an apprenticeship. The traditional routes of Grade 9, Grade 12 (Academic) with Physical Science and Mathematics and Grade 12 (Technical), with the respective technical orientated subjects, will still be important in accessing training. These routes will be the pre-requisites for a learner to enter the FLP. The main reason for this is that the foundational elements have been separated from the A21 component of which a learner must complete before entering the apprenticeship. In order not to render the Grade 12 (Academic and Technical) related subject credits superfluous, especially in consideration of Grade 9 also being an access point, and comparatively a lacuna which exists and being one of the reasons for the dis-functionality of NC (V), the FLP will recognise credits for the purposes of learner acceleration. For example, a learner with between 45% and 50% pass in mathematics and science at Grade 12 level will be credited in those subjects. Furthermore learners who bear a Grade 12 (Technical) may receive further credits related to the disposition of their technical subject passed at more than 50% mark. They will then have to complete the rest of the foundational competencies of the FLP to access the A21.

5.1.3.2. Foundation Learning Programme

The lack of learner mathematical and communication competencies has for some time plagued the national education system at basic education level, which in essence has amongst other things negated the rapid growth of latter uptake of engineering related programmes at FET and

HET bands. Though the end purpose is not to blindly pander to employer requirements on the altar of societal broader needs, it is an accepted fact that the foundational competencies are naturally cross cutting in maneuvering the journey of life, albeit at different levels of requirement, these competencies more often than not are not at par with what the employer standard requirements, hence the need to develop an FLP which will target closing these gaps.

The assertion above found ground when DHET engaged with employers in the various artisan forums which led to the development of the sectorised and pilot GTPP in partnership with the employers. More and more employers are now insisting on apprenticeship candidates having a minimum of 50% in mathematics and science, whereas in view of the rationale above a range of between 45% and 50% is realistic and reasonable for Grade 12s. The GTPP was a pilot foundation programme which was developed to explore possibilities in address the foundational competency challenges. The GTPP will mutate into a permanent FLP programme.

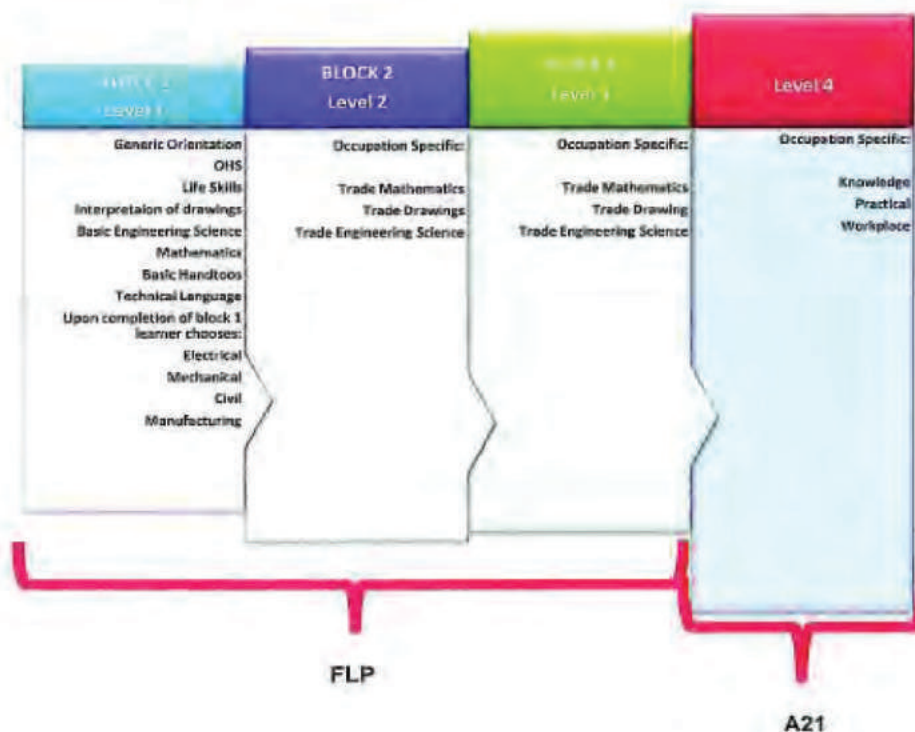


Figure 2: Foundational Learning Programme

The Foundation programme will comprise of mathematics, science, life orientation, language and drawing subjects. These foundation programmes have been separated from the trade theory/vocational subjects as those will happen in the actual apprenticeship (A21) phase. The

full programme will be a pre-requisite for learners between grade 9 and 12 who do not have between 45% and 50% pass in maths and science respectively. Grade 12 learners and those exiting at grade 9, the pass in mathematics and science should be above 50% respectively. Without sounding repetitive it is important to stress that due to the rampant low levels of foundational competencies that most of the learners leaving the basic education system display, it is necessary to ensure that these foundational competencies are strengthened before a learner enters the A21 programme.

Therefore the initial career development partnership between the DHET, employer and the SDP in terms of the development and usage of instruments for apprentice recruitment and selection used in conjunction with the FLP requirements will assist greatly in ensuring that learners with the right aptitude and interest in becoming artisans enter apprenticeships. Resultantly, this will have a knock-on effect on the throughput and output (pass rate) for A21 indentured apprentices.

5.2. Apprenticeship of the 21st Century (A21)

The EPR conducted by National Treasury noted that: "The existing system for artisan development consists of multiple routes, a large number of which are complex and do not allow for the optimal integration of theoretical, practical and workplace knowledge and experience" [8]. It is therefore important that the integration of the knowledge, practical and workplace learning components be prioritised in order to achieve the quality objectives required within the artisan development system.

Step 3 of the new 7 steps to becoming an artisan is the most radical change within the new artisan training landscape. The proposed dual system of apprenticeship, termed the Apprenticeship of the 21st Century (A21) has been developed to effectively replace all other artisan learning pathways to improve the system and realise cost savings. Its nature requires an integrated approach to learning that requires the time spaces between knowledge, practical and workplace learning to be as short as possible.

This integrated approach to learning will further close the culture gaps between training centre or college and workplace in terms of technology, practice and ethos by way of inculcating a positive effect on apprentice learner discipline, timekeeping and other soft skills. This process

will also lead to the early development of learner responsibility and thereby enhance early returns on employer investment on apprentice training.

5.2.1. Learner Contracting

The majority of artisan training and learning happens in the workplace. It is in the workplace that apprentices get to apply the theory and practice they have acquired at the SDP. The delivery of the A21 apprenticeship will incorporate the dual system principles applied within the South African context incorporating lessons from the DSAP and DSPP. For artisan apprentices this would take place at a SDP (knowledge and practical) and a workplace (experience). The basis of the A21 programmes delivery will always be the listed occupational trades. With the A21 apprenticeship programmes, the existence of an apprenticeship contract is imperative *ab initio*.

It is worth noting that the artisan training system in South Africa has for some time experienced challenges with the availability of workplaces for the apprenticeship workplace training component. Consequently to balance the admission scales at SDPs for engineering programmes the DHET must have a long term view of the implementation of the A21 in South Africa. A hybrid system as a transitional mechanism to balance out the new artisan training model with the old may be necessary. In essence this means that different scheduling may have to be considered for those prospective apprentices who do not necessarily have workplace contracts, but meet the minimum requirements to enter into an apprenticeship. These apprentices may complete the full scope of the knowledge and practical components before entering a workplace. However the delay time should be as minimal as possible. This will make sure that those who are not contracted in the medium term are able to continue with the indentured apprenticeship programme.

A very useful cost/benefit analysis curve which scientifically proves the positive return on investment for companies who train apprentices is well captured by Lerman as shown below [9]:

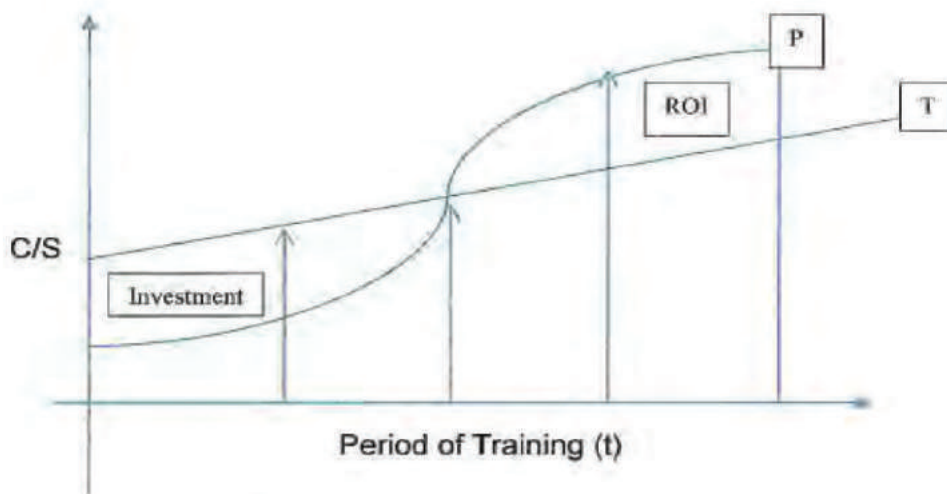


Figure 3: Cost Benefit Curve
Source: Lerman 2014

Where: C/S = Cost and Benefit

P = Production curve

T = Training curve

t = time

ROI = Return on Investment

Lerman shows that over a period of time, the training of an apprentice starts at a negative production curve (P), as the period of training (t) increases he/she becomes productive and at some point a breakeven point is achieved from where the apprentice starts contributing positively in the production cycle, an area shown as return on investment for employers training apprentices [9].

It is imperative therefore to ensure closer ties between the DHET, employers and organised labour for the A21 system to work. This further emphasises the critical role of NADAB.

5.2.1.1. Apprentice status in the workplace

The final blockage to be identified by the AD-TTT was "The removal of blockages related to labour legislation that regulates employer and artisan learner employment relationships, conditions of service and any other element or variable that may inhibit an increase in the number of approved artisan learner workplaces taking into account collective bargaining agreements (where applicable)". This blockage came about due to a number of employers stating that they were experiencing challenges in relation to the fact that apprentices are regarded as employees once they engage in the workplace learning component of their training. According to these employers, they have to go through the same rigorous disciplinary process for apprentices as they would their ordinary employees given the general indiscipline of apprentices. These employers are of the opinion that the exclusion of learners from the employee category will greatly contribute to the opening up of workplaces for artisan training.

Apprentices in the workplace are considered to be employees. Section 18 (2) of the Skills Development Act states that : "if the learner was not in the employment of the employer party to the learnership agreement concerned when the agreement was concluded, the employer and learner must enter into a contract of employment". This part of legislation falls under the ambit of the DHET and is in line with the Labour Relations Act 1998, the primary legislation concerning employment relations in the country. S200A of the Labour Relations Act states the following in relation to employer employee relations:

S200A - Labour Relations Act**Presumption as to who is employee:**

(1) Until the contrary is proved, a person, who works for or renders services to any other person, is presumed, regardless of the form of the contract, to be an employee, if any one or more of the following factors are present:

(a) The manner in which the person works is subject to the control or direction of another person;

(b) The person's hours of work are subject to the control or direction of another person;

(c) In the case of a person who works for an organisation, the person forms part of that organisation;

(d) The person has worked for that other person for an average of at least 40 hours per month over the last three months;

(e) The person is economically dependent on the other person for whom he or she works or renders services;

(f) The person is provided with tools of trade or work equipment by the other person; or

(g) The person only works for or renders services to one person.

Source: S200 of the Labour Relations Act

Apprentices would therefore continue to enter into a contract of employment and learning with employers. It is a recognised universal principle that apprentices are viewed as employees, as shown by Lerman 2014 in figure Figure 3: Cost Benefit Curve, and that in the medium to long term they actually contribute to the profit of the company. The provisions of the LRA in this regard are supported fully.

It is also noteworthy that the relationship built between the apprentice and employer during the workplace training part may result in employment and future business relationships. "A study from Finland found that workplace training taught students entrepreneurship, promoted maturity and supported the development of practical soft skills like initiative, problem-solving skills and the use of information sources" [9]. This school of thought is of the view that the learning is strengthened by the status of an apprentice being regarded as an employee.

The employee status gives rights and responsibilities for both the employee and the employer. This is done so in order for both parties to be held responsible for their portion of delivery and eliminate any potential abuse of one party by another. It therefore follows that those who support the retention of apprentices as employees do not want the law to be amended in any way.

5.2.1.2. Data Analysis from the Learner Contracting System

The first blockage identified by the AD-TTT is the lack of “detailed, accurate, current data for artisan trade prioritisation, workplaces and placement, scientific target setting and monitoring and evaluation”. The AD-TTT established that there was an acute lack of accurate data in the artisan development system. Amongst other things, data related to the number of apprentices being trained, number of apprentices passing trade tests nationally, number of qualified artisans in the country, where they are, what they do, their race, their gender and whether they are involved in the field in which they qualified was severely lacking.

This lack of data hinders the planning process, research and development capability of the National Artisan Development Chief Directorate and monitoring and evaluation of the artisan development system in terms of labour market supply and demand of skills and the resultant socio-economic impact felt. Correct on scale government planning and interventions need therefore an accurate data platform as a point of departure. This platform will provide a strong basis for an artisan information management system offering numerous possibilities and scenario creation.

The AD-TTT as an HRDC ad hoc committee tasked the National Artisan Development Chief Directorate with the task of developing and maintaining of a single national database of artisans in order to eliminate the artisan data blockage. This indeed is ongoing work.

The NADSC based at INDLELA is a central co-ordination point in the collection of data and maintenance of the artisan database. SETAs furnish the NADSC with monthly artisan data for registrations and completions within their sectors to be captured on the artisan database. The NADSC was established as a one-stop shop Artisan Data management Centre. The main focus of the NADSC is to manage the national artisan data and report on all national artisan data statistics. The work done at the NADSC also includes:

- Recording and reporting on all artisan related data to remove the first HRDC artisan development blockage;
- Collecting , collating , validating and reporting Artisan data from all 16 artisan related SETAs and INDLELA, for scientific target setting, monitoring and reporting;

- Reporting on a monthly/quarterly and annual basis on all artisans registered and completing their apprenticeships;
- Co-ordinating placement of engineering learners in accredited workplaces through working with all public TVET Colleges and private SDPs to assist in placing engineering Learners;
- Matching of supply and demand of artisan learners to industry needs by analysing the industry demands, through SSPs so to match with learners on the database; and
- Management of artisan related databases. These databases include:
 - Database of all learners that register in any artisanal learning program in the country through SETAs and INDLELA;
 - Database of all learners that complete artisanal learning in the country;
 - Database of all accredited workplaces that participate in artisan development ;and
 - Database of all certified artisans.

In order for the artisan system to be fully effective, the data collected at NADSC will have to be expanded from the current registration and completion of those in apprenticeships. Data is required on all the components that make up the artisan system. The expansion of the collection of the different data sets will allow the development of more accurate interventions based on real, available data. This is also due to the fact that there are relationships between some of the data components. The Workplace Approval Criteria stipulates the workplace ratios required for mentors in relation to apprentices in the workplace. We can have access to the total number of employers available in the system, but if we do not know the number of mentors in the system we cannot accurately estimate the capacity to train apprentices in the country. These data sets are therefore a necessity if we are to develop a system that looks at the artisan system holistically.

5.2.2. Knowledge, Practical and Workplace Training

The A21 apprenticeship requires an integrated approach to apprenticeships. This process requires the time between knowledge, practical learning and workplace leaning for apprentices to be as short as possible. The rationale is that more learning is achieved in the workplace when the knowledge and practical components are still "fresh" in the apprentices mind. This therefore requires that the application of the theory and knowledge components is applied

simultaneously with learning at the workplace (refer to the A21 model explained above) This tripartite alliance of artisan training cannot be overemphasized.



Figure 4: Work Projects Structure

A practical scenario of the A21 model application is given above which may possibly be based on a work project methodology, which is another way of expressing an integrated module system (soft and hard skills). What this entails is that the trade/vocational theory for the full apprenticeship will be broken down into modules (Learning Areas) with specific outcomes linked to the required core competencies for the trade. The modules (Learning Areas) will then be divided into the knowledge, practical and workplace components which make up the learning projects that will be based on real life workplace projects to align the overall learning to actual workplace practice. The learning project will be tailored to enhance the knowledge and practical skills acquired at the SDP. More emphasis will be given to practical training at the SDP with the knowledge component supporting the practical training given. The total hours spent on a work project (inclusive of knowledge and practical training) will be based on credit accumulation required at each level of learning. As the apprentice advances to the next level, the work projects will become increasingly advanced to enhance learning, planning, implementation, execution, evaluation and problem solving skills required for the trade. More so the apprentice will spend more and more time on the workplace component as they advance through the different levels.

The integration of knowledge, practical and workplace learning will close the gaps between the SDP and workplace in terms of technology, practice and ethos which will have a positive effect on discipline, timekeeping and quality standards amongst others. This process will also lead to the early development of learner responsibility and productive value. Employers will have access to the best learners which will save them from expensive recruitment and training processes.

One of the projects undertaken in South Africa by MerSETA is the COMET pilot project which is a useful instrument to have in the holistic monitoring and evaluation of an apprentice's progression through his/her training. The primary elements of the instrument measure competence at four levels: (1) nominal competence; (2) functional competence; (3) processual competence; and (4) holistic shaping competence. The four levels are described as follows:

- **Nominal competence** reflects the superficial conceptual knowledge of the field and individuals at this level can therefore not yet be seen to be competent. They are considered a 'risk group' (merSETA, 2012).
- **Functional competence** refers to basic technical knowledge learned in isolation – it is the elementary subject knowledge and skills not yet integrated and assimilated (Rauner, et al, 2012b). The skill of integrating knowledge to solve process related problems is therefore still very limited (merSETA, 2012).
- The third level of competence is **processual competence** which relates to the ability to interpret work tasks in terms of the relationship with work processes and workplace situations. Aspects such as 'economic viability and customer and process focus' (Rauner, et al, 2012b: 164), as well as communication through the 'ability to express thoughts in a clear and organized way, through verbal accounts and technical drawings' to propose solutions, are important skills at this level of competence (merSETA, 2012: 7).
- The fourth and highest level of competence is **holistic shaping competence** – the full complexity of the task is understood and 'due regard [is given] to the diverse operational and social conditions in which they are performed' (Rauner, et al, 2012b: 164), resulting in solutions which are uniquely different (merSETA, 2012).

The A21 aims to produce artisans who are at the highest level of competence, are non- sector based, and can fit into any sector due to their levels of holistically shaped competences.

The loss of centralised coordination and control that may have contributed to the partial collapse of the apprentice system led to the proliferation of various pathways to becoming an artisan. Part of this collapse was the decentralisation of curriculum development with multiple knowledge pathways existing for a single trade. Although the new occupational qualifications developed by the QCTO includes a curriculum framework, it does not contain a detailed curriculum content, enough to allow for a minimum standardised delivery process across all SDPs. The DHET has as a result established mechanisms to develop learning content for all artisan related occupations known as the NOCC.

The A21 apprenticeship will therefore replace the multiple plethora of learnership programmes and other pathways currently available. Once the A21 is combined with the Foundational Learning Programme for engineering studies, there will also no longer be a need for NATED N1 – N3 or National Certificate Vocational NC(V) Engineering and some services programmes for artisan development. This is expected to result in huge examination cost savings for the DHET.

This simplification is also in line with the emerging thinking in the DHET to create public TVET Colleges as Centres of Specialisation. A new approach to programme design is necessary which will emphasise the abandonment of a curriculum desktop- to- industry model and embrace a industry-to curriculum design model.

The A21 occupational qualifications do not have trimester exams and annual exams as compared with the current NATED and NC(V) engineering programmes. The occupational qualifications will have formative assessments throughout the work projects that combine knowledge, practical and workplace modules. The summative assessment will only comprise the trade test at the completion of the three learning components. The formative assessments will be done by the training providers or colleges "in-house" with no external exams conducted. NAMB in collaboration with the QCTO features in this space in terms of quality assurance at the combined sites of curriculum delivery.

Although workplace development approval processes and resources currently reside within the SETA system, the QCTO in particular needs to develop and impose across all sectors a standardised workplace approval policy and system that is employer "friendly" and conducive to opening up more workplaces, especially small and medium companies. Although the NAMB has developed and issued a National Standardised Artisan Learner Workplace and or Site

Approval Policy, it is not a policy that is adhered to by SETAs and needs the authority of QCTO for compliance. The NADWACC is currently responsible for the approval process with regards to workplaces.

Critical to the role the QCTO should play is the coordination of workplace approval processes to ensure that all SETAs apply uniform criteria and checklists to workplace approval per trade. This will ensure that a workplace is approved once per trade (or occupation) and reduce the administration burden placed by multiple approval processes from SETAs. Some of workplace expansion key focus areas could include:

Development:

- Develop minimum requirements for workplace mentors;
- Develop a database of mentors;
- Workplace development advocacy programmes;
- Return on investment for the employers;
- Mechanism for developing existing employees;
- Easily accessible advice;
- Development of a database of workplaces; and a
- Workplace Development Ambassador Programme.

Support:

- Development of a standard logbook per trade;
- Mentor Development Programme inclusive of CPD;
- Technical equipment and tools advice for the workplace;
- Monitoring , evaluation and corrective action; and
- Link employers with DoL health and safety training.

Approval:

- Review The National Standardised Artisan Learner Workplace and or Site Approval Policy;
- Coordinate workplace approval and monitoring processes;
- Develop comprehensive checklists for all trades taking into account the size of an enterprise;
- Coordinate workplace checklists for existing and new qualifications and

- Ensure alignment of policy to QCTO Policy for development of workplaces.

Key to workplace development and therefore key to the success of the A21 is the role of mentors. South Africa is however experiencing a shortage of mentors and this is negatively affecting the availability of workplaces. To rectify this weakness a formal a regulated policy environment as contemplated in Section 26C of the Skills Development Act is being implemented for the development of a national artisan mentor database that will offer opportunities for retired artisans and those considering retirement to legally re-enter or remain in the artisan system to assist with apprentice mentoring work.

5.2.2.1. Artisan System Funding

The progressive implementation of the A21 will require structural changes to the funding regime employed within the artisan development system. The medium term solution will require the integration of several funds to ensure full term funding for an apprentice in the A21 system. The long term solution will require the development of a single integrated funding regime collapsing several forms of funding into a singular A21 funding mechanism.



Figure 5: Artisan Funding Streams

As already alluded to, the A21 training requires the integration and simultaneous delivery of the knowledge, practical and workplace components. Each of these components require there be specific funding in order for the apprentices to access training. The occupational qualifications do not yet fall under the Ministerially Approved Programmes. Ministerially Approved Programmes are those that qualify for funding from Treasury allocations and are

better referred to as norms and standards funded programmes. This means that learners entering this system are completely funded from the public funding element (in this case the TVET colleges in particular). The essence for this approach to allocation of funds is informed by the nature and mandate of the TVET Colleges, amongst other things to promote the lecturing/teaching element of artisan training and not necessarily train artisans, as this is the competence of industry. The lecturing/learning costs are covered under this form of approved programmes.

On the other hand the Private Skills Development Providers usually contracted by SETAs or Employers have tended to integrate lecturing/teaching (training centres) with training (workplace) using varied modularised methods of delivery in training apprentices. The A21 approach to funding artisan training is largely influenced by the latter in that in the medium to long term it seeks to extend an integrated approach to funding even to public TVET Colleges which will combine the programme approval allocation with the workplace artisan learner grant in order to facilitate a "single and holistic" artisan training funding vehicle. In the long run this "single and holistic" artisan training funding vehicle will eliminate double dipping and wastage of resources. It stands to reason therefore that there has also to be a Ministerial approval for the integrated funding of occupational trade qualification programmes at a public TVET College as a recognised stream. In the case of private SDPs, private funding from the learner is required to access this element of training. In most cases private SDPs already have the practical training equipment required for the A21 practical component

The workplace component of the A21 is funded through the Generic National Artisan Workplace Data, Learner Grant Funding and Administration System Policy. The policy is a result of the identification of a second blockage to artisan development identified by the AD-TTT which was the lack of "a single guaranteed funding model for all artisan trades applicable to all sectors including simple artisan learner administration and grant disbursement system". The funding of apprentices in the workplace was uncoordinated in that there was no single agreed amount to fund an apprentice throughout their workplace training. The funding is approved, distributed and administered by SETAs. The blockage identified was that the SETAs each had different criteria and funding models for artisan trades.

To this effect the Generic National Artisan Workplace Data, Learner Grant Funding and Administration System Policy was approved by the DHET Minister, Dr BE Nzimande, MP, on 4 June 2013. The policy aims to create a single funding model for the funding of artisan training

for employers with regards to all artisan trades as listed on Government Gazette No.35625. This will result in the removal of the funding blockage as identified above and create benefits with regards to the development of artisans in South Africa. The policy will go a long way to ensuring that the country can eradicate multi-blockages such as funding challenges, workplace availability challenges, data availability challenges and create a common understanding from Government, SETAs and Employers on what skills are actually required.

Conclusively, the combination of the various funding elements is required to ensure that the A21 funding process is as efficient as possible. This funding process needs to follow and support the integrative A21 methodology. In the short to medium term, the Ministerial Approved Programme and Generic National Artisan Workplace Data, Learner Grant Funding and Administration System Policy may need integration pending the full delivery of occupation trades at TVET colleges under the theme of Centres of Specialisation will need to be integrated in order for the apprentice to have full funding for the full training duration. The swapping of step 2 and 3 of the 7 steps to becoming an artisan will ensure that the three artisan training components (knowledge, practical and workplace learning and training) are funded simultaneously as the indeed simultaneously occur.

The Expenditure and Performance Review of the National Artisan Development Programme commissioned by National Treasury in 2014 assessed the costs of training artisans. The Expenditure and Performance Review concluded that on average the cost of training an artisan is R400 000. The cost of R400 000 is made up of the knowledge (SDPs), practical (SDPs and practical training centres) and workplace (employers) training elements of artisan training.

The full cost of training an artisan should come from the same pot of funds in the long term. The implication of this is that as a transitional measure, and due to the subsisting legislative mandates held by the SETAs and the NSF in terms of the Skills Development Act 1998, the disparate strands of funding (Ministerially Approved Programmes and Artisan Learner Grant Funding) may be incorporated until such time that **A Single Integrated Artisan Training Funding Mechanism** is shaped. On the other hand this incorporation may be overtaken by the advent of the delivery of occupational trades' qualifications through the Centres of Specialisation at TVET Colleges which seek to introduce another stream of funding conceptualised as "POPS". Furthermore Operation Phakisa as a vehicle of rolling out scarce skills for the blue economy in particular, the convergence of a funding mechanism is critical.

5.2.2.2. Entrepreneurship and the expansion of SMMEs

"South Africa's economic growth has disappointed in recent years. In 2014, real gross domestic product (or GDP) growth registered 1,5 per cent and the latest projections estimate that real GDP growth in 2015 will also be around 1,5 per cent. This falls short of the estimated population growth of 1,6 per cent. The slow growth outcomes have been registered despite expansionary monetary and fiscal policies, and mainly relate to a number of structural impediments in the South African economy, such as the electricity constraints; the small pool of skilled labour and certain infrastructure bottlenecks" [10]. "Estimates of the contribution of small, medium and micro enterprises (SMMEs) to the economy vary. In terms of contribution to GDP, an estimate of 52 to 57 per cent has been quoted by the Deputy Minister of Trade and Industry, Elizabeth Thabethe, who put the number of SMMEs in South Africa at 2,8 million and their contribution to employment at 60 per cent. Moreover, looking ahead, the National Development Plan projects that, by 2030, no less than 90 per cent of new jobs will be created in small and expanding firms" [10].

There is a growing voice of stakeholders requesting that entrepreneurship be integrated into the theoretical artisan training space in order to inculcate a culture of entrepreneurship, especially within the previously disadvantaged groups. This would add to the NDP plan of growing the SMME sector and expanding apprentice's views of only looking at formal employment opportunities post qualification. The Report on Tracking of Artisans by SSACI reports that of the artisans who qualified between 1 April 2011 and 31 March 2015, 73% found employment, 6% were self-employed with 21% being unemployed [11]. These statistics show that there is a growing acceptance of artisan qualifications in industry though these artisans may be employed in other industries not related to their trades. The challenge lies with the 21% who are unemployed who may be good candidates for establishing their own companies looking into supplying skills needed by the economy in line with the NDP and the purposes of the SDA.

The Government established the Department of Small Business Development in 2014 to look at issues of small business development in line with the NDP. There also exists various entrepreneurship programmes within agencies such as NYDA that train candidates on how to start their own businesses and the resulting administration thereof. The DHET will link with all

relevant departments, agencies and NGOs in order to ensure there is access for those artisans wanting to become entrepreneurs to access these opportunities.

6. Artisan Recognition of Prior Learning

The White Paper for Post School Education and Training states "It is close to twenty years since South Africa discarded the apartheid regime and replaced it with a democratically elected government. Much has been achieved since then, but much remains to be done to rid our country of the injustices of its colonial and apartheid past. Deep seated inequalities are rooted in our past; it is not by accident that the remaining disparities of wealth, educational access and attainment, health status and access to opportunities are still based on gender. A growing black middleclass has been empowered by the new conditions created by the arrival of democracy, and its members have managed to transform their lives in many ways. However the majority of South Africans have still to attain a decent standard of living. Most black people are still poor; they are still served by lower quality public services and institutions (including public educational institutions) than the well off. Patriarchy, also a legacy of our past, ensures that women and girls continue to experience a subordinate position in many areas of life, including in much of the education and training system" [5].

The Minister of Higher Education and Training signed the Criteria and Guidelines for the Implementation of Artisan Recognition of Prior Learning on 30 November 2016. The Criteria and Guidelines now establish a standard for the implementation of ARPL within the country. They provide an active pathway to a full artisan trade qualification in all sectors of the economy.

The RPL system is born out of a system where black people were not afforded the opportunities to appropriately acquire education and training opportunities, especially in the artisan training system. This deprivation in the artisan training system resulted in unqualified artisan aides (artisan assistants) being the result of this ignoble system of Apartheid. There was indeed a realisation and acknowledgement of the deprivation meted on this cohort yet the emerging post-apartheid artisan system failed to compensate this cohort by way of affecting recognition of prior learning mechanisms. In 2013 the ADT-TTT recognised and accepted this as a blockage and proceeded to pilot an ARPL model spearheaded by the DHET. The ARPL model aims to develop an ARPL system that will effectively address the skills gaps existing in artisan aides and those in the informal artisan trade sector of the economy. Many of these ARPL

candidates have accumulated years of trade experience, but never got the opportunity to formalise this learning experience gained.

Many industries today still discriminate against artisans who qualified under Section 28 of the Manpower Training Act (the qualification route taken by non-contracted apprentices). With the introduction of the SDA an opportunity arose for the DHET to eradicate the marginalisation of these artisans through the implementation of a single trade certificate under Section 26D of the SDA. The current certificate does not distinguish between a qualified artisan who went through a structured apprenticeship programme and one who qualified through ARPL. This lack of distinction does place the onus on the DHET to ensure that the quality of the apprentices being certified is the same no matter the route of their learning.

The objectives of the ARPL regime are to recognise through formal assessment processes and certification the experience possessed by artisan aides, to encourage life-long learning within a formal artisan environment through the acquisition of formal qualifications and to meaningfully contribute to the skills development agenda. The ARPL regime is grounded on the SAQA National Policy for the Implementation of the Recognition of Prior Learning and the QCTO RPL.

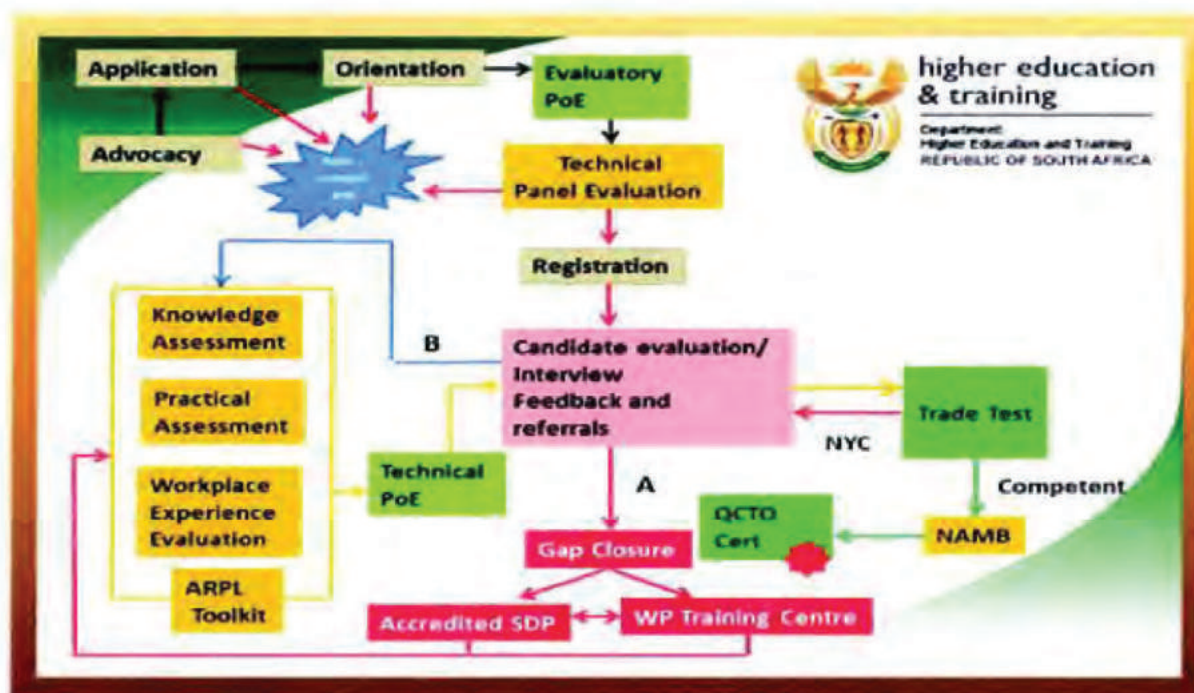


Figure 6: ARPL Model

The above ARPL model is based on lessons learnt from the ARPL pilot project. These lessons shaped the final ARPL model. Without sounding pedantic it must be noted that the purpose of a pilot study is to experiment on a small scale sample in order to learn how a large scale project or process might work in reality. The experiment gives insight into positives and negatives in order for improvements to be effected for the large scale implementation of the project or process.

Some of the challenges experienced during the pilot phase were the following:

- The experience of some of the candidates was inadequate.
- Limitations in competence in performing the entire scope of the trade.
- Lack of understanding from organised labour and employers about the ARPL process;
- Lack of communication between all relevant parties at times leading to refusal of access to candidates by employers for on the job evaluation;
- Where qualified artisans are employed in areas where sections of work are fabricated to form a bigger structure, artisan aids perceive that they can perform the same duties and therefore should be recognised as qualified artisans;
- Companies were also not willing to give their employees off-time to undertake the assessments due to the time required to perform such tasks; and
- Not being able to access gap closure facilities for candidates at workplaces.

Readers of this strategy are advised to consult the Criteria and Guidelines for the Implementation of the ARPL 2016 document which captures the full explanation of the flow of the ARPL model.

What needs mention separately is the technical evaluation panel which will be made up of subject matter experts per trade who will evaluate the candidates who submitted evaluation PoE to determine a candidate's suitability and categorisation. The technical evaluation panel comprises of qualified artisans (minimum of 2 with the one being the subject matter expert for the trade being evaluated) who are subject matter experts related to the trades being evaluated. The panel members would be approved and registered on a database as assessors with the NAMB. These panels could also comprise of Advisors. The technical evaluation panel will be coordinated locally from individual trade test centres. The National Technical Panel dealing with non-national qualifications obtained at the old SANDF, SAAF, Telkom, TVBC, will

be located at INDLELA. Once the technical evaluation panel is satisfied that the candidate meets the minimum requirements, they will be recommend for ARPL registration

At the other end of the ARPL process an approved part qualification pathway will come into existence through the qualifications development mechanisms of the QCTO. The part qualifications will allow such candidates to be recognised for those part skills they have in order to access employment opportunities and later articulate further qualification credits towards a full artisan qualification.

7. Trade Testing

All Trade Testing (External Integrated Summative Assessment) in South Africa is regulated in terms of the provisions of the National Trade Test Regulations issued under Section 26D(5) of the Skills Development Amendment. The National Trade Test Regulations are applicable to all Trade Test Centres whether they are operated by private, government or state owned companies. These national, decentralised trade test centres must be accredited by the QCTO upon recommendation by NAMB before they are allowed to conduct national trade tests. The national trade test includes practical tasks that a learner must complete within a specified period of time as determined by the NAMB.

In addition all trade testing processes will be monitored and moderated by the NAMB as required by Section 26A (2) of the Skills Development Amendment Act. The national trade testing system is also being built to include customised artisan development testing aligned to the ARPL system that will offer persons who have assimilated knowledge and skills related to an artisan trade through workplace activities to also enter a well-supported process that will result in access to a national trade test.

To ensure that trade testing is always relevant to the needs of the industry and to ensure that learners achieve artisanal status, all artisan trade testing or assessment practitioners including assessors, assessment tool designers and moderators will be registered by the NAMB and be subject to continuous and regular capacity building through re-skilling processes. It is a mandatory requirement for these practitioners to register with the NAMB before they conduct their trade test activities.

All accredited trade test centres will report to the NAMB as per pre-determined requirements to enable the NAMB to monitor their performance. In this sense the NAMB will act as an "ombudsman" for artisan development and any concern with regards to the quality of artisan development may be reported to the NAMB.

The Skills Development Act in Chapter 6A and Section 26D lists the statutory functions of the NAMB in relation to trade testing. The implementation of the trade test regulations and trade testing processes is the responsibility of the NAMB. The DHET is in a process of developing a web based trade testing system that will be implemented at all accredited trade test centres. The key focus of the system is to progressively minimise the manual paper based activities currently active within the trade testing process and effectively implement the Trade Test Regulations.

One of the functions of the web-based trade testing system is the collection of national data that will allow the DHET to instantaneously measure the national trade test pass rate. The current and reported trade test pass rate data consists only of INDLELA trade test data. Current indicators however point to a higher national trade test pass rate approximating 65% as reported in the SSACI report *An Analysis of Data on Artisan Development* from the National Artisan Development Support Centre, 2015 [12]. The implementation of the web-based trade test system will then allow for the expansion of the data collection process to become a national process. This will also result in a mechanism that will accurately measure the pass rate of trade tests nationally, per trade, per SDP and per trade test Trade Test Centre and other analysis variables.

A current challenge within the manual trade testing processes that may contribute towards the low quality and possibly pass rates is the depletion of the variations of tasks over the last couple of years to a single task per assessment module category in some trades. The single task availability allows a candidate to know precisely in what he will be tested and may limit the preparation done by candidates and provide a false sense of confidence within some candidates, leading to lower standard of performance than required. The development and implementation of a national web based trade testing system will assist the DHET in managing the risks associated with trade testing. This process will be aided through the web-based system as it will draw from an assessment instruments bank with a variety of tasks per assessment module for all trades that would in turn support computerised random generation of trade tests through selection of task combinations, thereby diminishing the probability of

"trade task spotting". The web based trade testing system will also eradicate the current fraud experienced in the system through a range of security measures such as thumb print recognition for administrators, candidates and assessors to limit fraud and corruption in assessment processes. Further to this the web based system will bring back the integrity of the national trade testing system with a direct positive impact being the quality of artisans produced through the artisan development system and supplied to the labour market

A skilled and capable workforce is produced in order to give industry the resources it needs to be efficient and competitive. It is industry that ultimately uses the artisan skills in their operations. It is industry that drives the development of technologies and new skills to enable it to continually improve. It is therefore logical that industry as well as the occupational and professional bodies be key to the development of trade test tasks as it is the case in the development of occupational qualifications and assessment frameworks. By having employers develop and submit preliminary trade test tasks for approval and inclusion in the tasks data bank will ensure the creation of a credible trade testing mechanism. This will also stretch SDPs to ensure that they are constantly abreast of the latest developments within a particular trade. The assessment specifications TWG would then assess if the trade test tasks submitted by employers cover the scope of the trade as far as the QCTO curriculum and assessment specifications. This process could greatly expedite the increase in the trade test/instrument data bank. This would have the effect of increasing the quality of trade testing and certified artisans more rapidly.

The final Trade Test Regulations were approved by the Minister, Dr. Nzimande on 8 May 2015 through Government Gazette No. 38758. The regulations which are being progressively implemented replace all prevailing industry and sector-based trade testing systems. The trade test regulations provide a harmonisation mechanism for trade testing by setting the criteria for certification, trade testing, minimum entry for trade testing and quality considerations. The Trade Test Regulations will set the legal basis for trade testing.

Increasing and improving the capacity and quality of trade testing is currently managed through the National Artisan Development Quality Assurance Committee (NADQAC) that is made up of representatives from the DHET, the SETAs and QCTO who are involved in the recommendation of accreditation of artisan trade test centres. This forum has focused on both the increase of capacity and the control of the quality of trade testing. Through a centralised and nationalised trade test centre accreditation process that has removed the SETA or Sector

based accreditation system, the forum has allowed accredited trade test centres to give access to trade test candidates from any sector and not just a single sector as determined by the previous SETA accreditation system. This has opened up considerable access to persons wishing to register for a trade test anywhere in the country.

However this broader access to trade testing has limitations due to lack of appropriately located accredited trade testing centres across the country and the current uneven cost of trade testing. Improved spatial planning for the development of trade testing centres is becoming a critical need as is the standardisation of trade testing fees. At present the state owned trade test centre at INDLELA is over stretched to test the large numbers of persons that apply for trade testing.

Trade Testing is not a profit driven operation. This results in most trade test centres offering expensive trade test preparations generally aimed at preparing apprentices to pass the paper based trade tests. Accredited trade testing appears to be needed although this will need to be managed very carefully as at present the records at NAMB indicate there are 481 Accredited Trade Test Centres in the country, although only 184 test non printing industry artisan trades. It is preferable that only the State conducts national trade tests in order to centrally maintain and control the process and trade testing costs but at present there are only 26 government centres made up of 6 Metros, 19 public TVET Colleges and INDLELA. The remaining balance of approximately 158 centres is either in the private sector or state owned companies. The position of the DHET is to gradually move to a position where the state (INDLELA, public TVETs, SOCs) and large company trade test centres are the only trade test centres in the country.

8. Certification

Prior to the early 1980s South Africa had a single national artisan certification system controlled from the Centre of Trade Testing or COTT (today known as INDLELA) that issued a "red seal certificate under the auspices of the National Department of Manpower (today Department of Labour.) With the advent of firstly the Industry Training Boards from 1981 as established by the Manpower Training Act and subsequently the SETAs from 2000 as established by the Skills Development Act, certification of qualified artisans became first an industry and then sector based process. The result of these decentralised certification processes was a huge mess of

certificates that at its worst allowed for at least ten different types of certificates for an electrician, as an example.

The outcome of the decentralised system with its multiplicity of certificates was the creation of serious blockages to employment as certain sectors, mining in particular, would only employ trades persons who possessed a certificate from that sector. If a person lost his employment or decided to move to another sector, then he or she had difficulties in that his certificate lacked portability from one sector to the other. This highlights the shortcomings of sector specific qualifications and certification instead of a national certification process. This chaotic situation was finally arrested on 1 October 2013 when after a long process with the SETAs and QCTO a national certificate for artisan trades was re-introduced by the QCTO.

The successful completion of a trade test results in the recommendation by NAMB of that candidate to be certificated by the QCTO as per Section 26D (4) of the SDA. Certification of candidates opens up equal opportunities for employment. It is therefore imperative that the certification process be a smooth one without delays in order to ensure that candidates access work opportunities soon after completing their trade tests. A concern with the current certification sub system of the artisan system is the long, lengthy, manually based process that is currently operational. A delay between four to six months or longer can occur between the day a person passes a trade tests and receiving a certificate. This backlog has huge implications for employment and job creation of artisans. The process is also open to errors and misuse due to the manual nature of the current system process. The solution to the concern is the development and implementation of the national web based trade testing system that will accelerate the process of certification.

9. Quality Assurance

The statutory responsibility for the quality assurance of the occupational qualifications in relation to trades lies with the QCTO. This includes the occupational trade curricula developed, those in the development pipeline and their implementation. It therefore follows that QCTO policy will therefore guide the implementation of the quality assurance activities in relation to trades listed in Gazette No. 35625. Since artisan training needs to happen in an integrated manner comprising the theory, practical and workplace components as envisioned through the A21 process, the QCTO will need to quality assure the actual knowledge, practical and

workplace delivery. The implementation of the trade testing component is monitored by the NAMB through its statutory functions through the quality assessment policies of the QCTO. The QCTO may further collaborate with the NAMB in terms of section 26A (h) of the Skills Development Amendment Act with respect to quality assurance processes at the points of curriculum delivery.

Quality Assurance is defined by ISO 9001:2015 as "part of quality management focused on providing confidence that quality requirements will be fulfilled" [13]. The confidence provided by quality assurance is twofold—internally to management and externally to customers, government agencies, regulators, certifiers, and third parties. Quality assurance therefore gives confidence to users of the artisan development system that measures are in place that the system will produce artisans of a particular standard. Quality Control on the other hand is defined as "part of quality management focused on fulfilling quality requirements" [13]. "Monitoring or inspection is the process of measuring, examining, and testing to gauge one or more characteristics of a product or service and the comparison of these with specified requirements to determine conformity. Products, processes, and various other results can be inspected to make sure that the object coming off a production line, or the service being provided, is correct and meets specifications" [13].

The quality assurance and monitoring functions have to be performed through the creation of knowledge, practical, workplace delivery regional development and support quality control components in addition to the quality requirements built through processes such as qualification development, accreditation policies, internal and external summative assessments. The monitoring of trade testing will happen through the moderation of trade testing by NAMB.

9.1. Accreditation

An integral part of the quality assurance regime is the accreditation and approval of SDPs, TTCs and workplaces which are part of the artisan training system. Accreditation helps ascertain if an institution meets the minimum quality standards and gives confidence to potential students and employers about the ability of the institution to provide a quality educational offering.

The artisan development system training delivery relies on SDPs for theoretical and practical training, workplaces for apprentice on the job training and TTCs for the external summative assessment. All these delivery institutions play different critical roles in the artisan development value chain. It therefore follows that the QCTO should lead in the development of accreditation policies with regards to all the above mentioned delivery mechanisms of the artisan development system with special emphasis on the SDP, Workplace delivery and assessment (internal and external) modes.

9.2. Regional/Provincial Quality Assurance and Control

There is also a need to create a monitoring function in relation to training provision, practical provision and workplace learning provision as a part of the quality assurance value chain. This monitoring function will ensure adherence to policy, accreditation criteria and ensure that apprentices are developed through the highest standards as directed by the DHET and QCTO. The QCTO and NAMB may collaborate in this area.

9.2.1. Training Provision Development and Monitoring

The National Artisan Development Chief Directorate in collaboration with the TVET branch and QCTO should constantly monitor the delivery of learning content and its effectiveness as taught at the SDPs. The delivery of learning content is critical to the success of the SDPs and the artisan development system. A monitoring team should be established focusing on trades as per Gazette No.35625 which should conduct site visits to SDPs in order to ensure the adherence to curriculum and pedagogical delivery quality. This monitoring team should ideally be made up of qualified artisans, lecturers, trade-specific DQP members and organised labour. Their work should include post-A21 implementation engagements with lecturers and learners to determine weaknesses in the training provision in order to recommend appropriate interventions. This approach will also assist with lecturer development especially in public TVET Colleges.

It is highly important that this approach is not seen and used as a stick to punish the SDPs and their lecturers which may not comply with the training provision requirements. The monitoring approach is a developmental support mechanism aimed at assisting SDPs in achieving optimal

teaching quality and success. The process is aimed at evaluating their adherence to the teaching curriculum and where gaps exist, recommend corrective actions.

9.2.2. Workplace Development and Monitoring

The QCTO workplace curriculum sets out what apprentices need to learn when they are in the workplace. This information is relevant in the development of trade specific log-books which details projects/tasks the apprentice should be performing during their workplace learning.

The current system does not have a workplace monitoring function. This function needs to be set up and operationalised to give a monitoring impetus to the workplace development function. The improvement of trade test pass rates and the related quality of the artisans coming through the apprentice system is highly dependent on adherence to the workplace curriculum (log book) and the quality of the apprentices' learning when they are in the workplace.

As with the SDP monitoring function, this function is an important function in the workplace development process. The DHET is not looking at catching out and punishing those that do not comply but wants to assist those employers with challenges to attain the highest levels of mentorship and workplace learning for apprentices. The operational function of workplace monitoring will be affected through the DHET provincial structures in collaboration with the QCTO and SETAs to ensure closeness to employers.

9.3. Trade Testing, Quality Assurance and Delivery Monitoring

The trade testing system needs to be quality monitored and moderated to ensure the quality of the trade testing itself. The accreditation of trade test centres requires that they sign an SLA agreement with the NAMB. One of the stipulations of the SLA agreement is a requirement for TTCs to allow their assessors to perform at least two moderations annually at another TTC within the geographical area of the TTC.

The moderation of trade tests (summative) is different from the moderation of mainstream tests and exams. This requires that the moderator be present at a trade test site to quality assure the actual trade test taking place through on site observation. The moderator needs to look at matters like potential bias and adherence to assessment specifications by the assessor and proper undertaking of trade test tasks by the candidate. The SLA with TTCs will give the NAMB

the capacity and resources it needs to perform this critical task and will expedite the implementation of a national standard through peer moderation.

NAMB is currently in the process of registering assessors and moderators in the 125 trades as per Gazette No.35625. Only moderators and assessors registered with the NAMB will be able to perform assessments at TTCs and perform moderations. The NADQAC is responsible for the processing and recommendation of accreditation to the QCTO for SDPs for all previously designated legacy trades and all TTCs. This process ensures that all requirements of the SDP, TTC and Assessor Registration policies are met before accreditation can be awarded by the QCTO. SDP accreditation for Occupational Trade Qualifications registered on the NQF will be dealt with by the QCTO.

The NAMB developed a monitoring process of TTCs for the moderations of TTCs conducted through the SLA with TTCs. The enhancement of this function will be effected through the establishment of provincial moderations forums, the building of capacity to support the public SDPs or alternatively setting up NAMB structures within the provinces. This quality monitoring function in relation to trade testing is imperative in that the trade test will be the only external integrated summative assessment for occupational competence. The quality monitoring function at this level has implications for other quality assurance functions performed at the various stages of the apprenticeship learning cycle.

Quality assurance and monitoring is a vital factor within the artisan training system. The NAMB in collaboration with the QCTO will establish a quality monitoring team for the development and support of SDPs, TTCs and workplaces. The team will work closely with SDPs and employers to ensure they achieve the highest standards of delivery as per the QCTO Curriculum requirements.

10. Skills Development Providers and TVET Colleges

The theory and practical delivery mechanism for the A21 apprenticeships is through private and public SDPs. It is therefore important to acknowledge the strengths and weaknesses that lie within these mechanisms in order to develop plans that will lead to the overall quality produced by the entire artisan development system.

10.1. Private TVET Colleges

Private TVET Colleges also play a vital role in the development of artisans in South Africa. While it is acknowledged that the public TVET College system is central to teaching and learning for the national artisan development system, it must be stressed that public TVET Colleges are only a part of the teaching / training component of the national artisan development system in South Africa. In addition there are at least six other groups of institutions that fall within the teaching and learning component of the national artisan development system and all contribute to the development of skilled artisans, many of these still the backbone of artisan development in the country. These groups, in terms of curriculum delivery are located within the NQF sub-framework for trades and occupation under the QCTO quality assurance umbrella includes:

- Government Owned Training Centres (national, provincial and local levels)
- State Owned Company Training Centres
- Private Sector Owned Company Training Centres
- Private Skills Development (Training) Providers

The private sector providers account for a big portion of the trained learners passing their trade tests. This means that the system as a whole cannot ignore the contribution of the private sector in the training of artisans. The DHET and the public TVET Colleges within the DHET needs to work with and collaborate with this larger artisan system for the benefit of the country and economy. There is clear and growing need for convergence across the larger national artisan development system. At present the situation could best be described as a growing but diverging system that needs stronger centralised convergence and coordinated control at INDLELA.

10.2. Public TVET Colleges

South Africa continues to struggle with the triple challenges of unemployment, inequality and poverty. The National Development Plan acknowledges the contribution of the TVET sector in supporting young citizens to obtain intermediate level qualifications in order to ensure economic participation.

Similarly the White paper for Post School Education and Training places the public TVET Colleges at the centre stage of the of the post school sector, acknowledging that both growth and quality in the sector must improve to meet demand. The White paper for Post School Education and Training states that "The programme to improve the teaching and learning infrastructure of colleges will be continued. Colleges must have the facilities and equipment necessary to provide the type of education that is expected of them. In particular, they must have well-resourced workshops for providing the practical training demanded by their curricula" [5].

However well-resourced workshops will be rendered useless unless the necessary quantity and quality of lecturers are also available to utilise such workshops efficiently and effectively. The White Paper for Post School Education and Training specifically stresses this requirement under the responsibilities of the SAIVCET: "Upgrading the technical knowledge and pedagogical skills of existing staff in TVET and community colleges, and promoting the professionalisation of lecturers, instructors and trainers. This task will be undertaken with the assistance of university academics, employers and other expert staff" [5].

This requirement is similarly contemplated in the FET College Amendment Act, Act No1 of 2013 is Section 43B(1) (j) that state that SAIVCET must "Develop capacity and upgrade college teaching staff skills in vocational and continuing education and training".

In addition the TVET colleges are facing difficulties to align their delivery with the needs of industry. Suitably qualified engineering field lecturers (Qualified Artisans) are difficult to find and often not prepared to work at salary scales offered within the DHET structures. Up to date equipment is expensive and modern workshop is almost an unattainable without support from industry. Formalised PPP engagements are a necessity especially with the purpose of building and developing a weak public TVET college system for artisan development.

Due to real and perceived weaknesses of the public TVET Colleges and the importance of PPP in developing artisans it has become imperative to develop structured mechanisms through which these partnerships can be actively pursued and sustained. This will provide the colleges with a structured process of engaging with private business to strengthen and build their capacity while at the same time acknowledging the private sector contribution to skills development.

Furthermore, The OECD Review of VCET: A Skills beyond School Review of South Africa released at the national TVET Conference held in November 2014 stresses on Pages 102 and 103 the critical need for regular and continuous interaction between the industry experts and college staff to improve technical teaching skills. This requires a converging and a seamless linear pipeline between the sections of the artisan development system within the public and private sector. There are other emerging converging mechanisms in place but these need to be strengthened and built on through formal processes.

Another potent mechanism is the SIPS concept of Occupational Team which should be allowed to gain traction within the artisan development system as it combines the QCTO, NAMB, TVET, SETA, SDP and Employer factors into a single deliberate community of experts in so far as the occupational trade curriculum design and delivery issues are concerned.

The Occupation Team concept is also the basis for evaluating a public TVET College that has applied for consideration as a "Centre of Specialisation" College that could be eligible for the new "POP" Grant being developed in conjunction with the NSF.

10.2.1. The composition of the Academic Boards of TVET College

It is important for the artisan development system that the College Councils review the composition of TVET College academic boards to ensure that the right industry people are composite members of the academic boards and councils themselves of course. This is important from a leadership point of view, but also to ensure that industry is part of the TVET College governance structure and contributes in driving the college's mandate forward, in this aspect artisan development.

10.2.2. Lecturer Development

The other positive spin-off from a PPP deal between the industry and the TVET colleges is lecturer development which remains a crucial factor in the delivery of the A21 system. This will ensure the quality of curriculum provision at public TVET Colleges. Technological innovation and revolution occurs at the industry which therefore makes sense for artisan curriculum reform and the subsequent lecturer development to initiate from the industrial frontline. A slow

curriculum corrosion and relevance may therefore be systematically avoided whereas in the past it has resulted in creating a huge gulf between industry and the TVET sector with respect to curriculum relevance in supplying the ever evolving needs of industry. The ARPL for TVET college engineering lecturers may also be another avenue contributing to lecturer development.

A possible intervention as a College Council's or a DHET initiative of the working conditions of lecturers needs a possible review in order to accommodate prolonged delivery hours at TVET colleges which in turn may accommodate the demand training needs from industry. Indeed a TVET College lecturer having obtained a lecturer qualification should progressively become an occupational trainer with higher employment status than an entry lecturer. Lecturers need to be supported as much as possible to ensure that they succeed in their core business of teaching. Some of the interventions needed to ensure they keep abreast of changing technologies and production techniques are:

- Exposure to the workplace through partnerships with employers in their footprint. As the TVET Colleges move closer to specialisations (aligned to industry in their geographical footprint) workplace.
- Regular regional and national workshops addressing didactical skills, new technologies and their application in the trades, best practice and other matters that will assist in the performance of their functions;
- TVET College partnerships with industry which may lead to donation of still relevant and usable equipment.
- Development of exchange programmes for lecturers with other overseas TVET Colleges involved in similar dual system programmes for apprentice training.

The White Paper states that "The most important indicator for the success of a college is the quality of the education offered and consequently the success of its students. For this, the colleges need a well-educated and professional staff" [5]. The professionalisation of A21 lecturers should go hand in hand with the professionalisation of the artisan occupation.

11. The Lead and Host Employer Concept in A21

11.1. Public TVET Colleges as lead employers

The core of the A21 system is the importance of the availability of workplaces which by and large are located in the private sector. There is therefore no A21 system without this imperative. It is mentioned again that interventions are required to bring the public TVET Colleges closer to employers in order to facilitate workplace training for learners and continuous up-skilling of lecturers. Indeed pro-active TVET Colleges have long set up dedicated workplace learning and employment placement offices in order to create placement opportunities for learners. The SETA – TVET Colleges partnership fostered by the DHET policy on SETA partnership with TVET colleges has eliminated the previous discrimination which TVET colleges experienced from SETAs in terms of accessing skills development programmes.

This type of TVET college's system responsiveness gears up public TVET Colleges to become lead employers, of course some of them are not new in this concept as they have collaborated with private lead employers during the period of SETA discrimination visited upon them. This direction will have the following benefits:

- The standardisation of apprenticeship stipends so that we level the playing fields and eradicate the employer hopping of apprentices from one employer to another
- Engraving the notion that the workplace component is part of learning and apprentices need to appreciate that this is still part of their learning process
- Forging closer relationships between public TVET Colleges and employers, especially industry within their geographic footprint
- Lessening the administration burden for employers in relation to registration of apprenticeships which will have the benefit of bringing in the SMMEs into the artisan training system

11.2. Private and Employer Associations as Lead Employers

Employer associations may also take up the role of lead employers with the aim of facilitating apprentice placement within their employer companies. Employer associations group themselves based on similar activities with the aim of organising themselves to regulate

member behaviours, collective bargaining as they impact them due to similar activities performed.

The value of having employer associations as lead employers is based on the following:

- They have direct access to employers within their sector
- They know the training needs of the sector
- They know the plans of the sector in relation to changes in production methodologies, technologies and the type of skills needed by these changes
- They provide a centralised coordination mechanism for placing apprentices

This alternative will also enable closer ties between SDPs in general and employers with the exception of INCOMPANY training centres. Capable and efficient private industries may also act as a lead employer.

12. Artisan Dedicated Research

One of the key areas that need development is the research element related to the artisan development system in the country and located at INDLELA. In the last few years there have been concerted efforts to improve the data collection mechanisms which have an impact on the research drive. Data is critical to the production of quality research which will aid the policy making processes within the artisan development system.

Other research efforts have been implemented by the DHET through theme 6 of the HSRC LMIP project. This project looked at various themes that have an impact on the artisan system and provide guidance and insights into possible planning and policy avenues available for the DHET to pursue. Various SETAs and NGOs also conduct research within the artisan development space. There is therefore a need to coordinate these various research pockets in order to ensure alignment and non-duplication for the benefit of the system through the research unit based at the DHET.

13. Implementation Plan

This National Artisan Strategy will be implemented through a phased approach over the period leading to 2030 with changes being constantly made to reflect the current economic and social realities facing the country that the strategy aims to address. Therefore the strategy will be a guide in relation to priority programmes that the National Artisan Development Chief Directorate will pursue over the term leading to 2030. The prioritisation approach as well as the phased implementation will allow the National Artisan Development Chief Directorate time to gradually build up processes to effectively achieve the strategy goals.

The implementation plan therefore flows from the National Artisan Development Strategy which sustains on the expression of six priority areas. The following plan focuses mainly on the identified six priority areas with the full master implementation plan to be developed by 31 March 2018.

13.1. Consolidation of Artisan Stakeholder Management

There is strong evidence of a very weak relationship between government and the private sector with regards to artisan training matters in the country. The advent of SETAs arguably worsened this relationship. It is a necessary requirement to establish and strengthened this relationship which extends to include organised labour.

- ***Priority 1: Formally establish a National Artisan Development Advisory Body (NADAB) as the primary advisory structure to DHET on issues of artisan development (This may encourage a formal and consistent undertaking by the employers to consistently create workplace training spaces).***
- This structure may also serve as a link to the Human Resource Development Council's efforts to promote artisan development.
- There are indeed other structures which will foster artisan development.

13.2. Expansion of artisan training in State Owned Companies and other national and local government departments

The redefinition of state owned entities as profit making companies somehow compromised the availability of artisan training spaces there. The numbers deteriorated to unacceptable levels from 2004 till now. This has also resulted in the under-usage of the training facilities at these entities. Other rich spaces of artisan training are located at local municipality level, in the police and army.

- ***Priority 2: Promote a strong base of artisan training in state owned entities and other government departments through negotiated artisan training quotas and usage of training facilities (This will ensure that the majority of artisan access training in the public training space).***

13.3. Implementation of the A21 artisan training model

The present fragmented modes of artisan training are primarily based on learnership, apprenticeship and artisan recognition of prior learning. There is a combination of both linear and dual system of artisan training which largely creates a class distinction and discrimination within the artisan sector. A pure dual apprentice system is absolutely necessary supported by employer contracting ab initio.

- ***Priority 3: Establish and support a national artisan training system based on the simultaneous delivery of the three learning components (theory, practical and workplace learning) based on a block release system between a TVET college or a Training Centre and Industry. (This will promote the DUAL APPRENTICESHIP system which integrates all knowledge and skills sets in terms of artisan training).***
- Very critical to this DUAL SYSTEM is the role of the employers to offer apprenticeship contracts to prospective apprentices before they become enlisted at a TVET college.
- To encourage employer contracting ab initio research has shown the cost/benefit equilibrium regarding employer training of artisans in the following manner:

13.4. Consolidation of the artisan learner funding system

The Generic Artisan Learner Grant System and Administration policy still needs full implementation in the sense that not all SETAs adhere to the provisions thereof.

- ***Priority 4: Sustain and apply a ring fenced artisan learner (apprentice) grant and disbursement system and processes across all SETAs. (This will ensure the equitable grant disbursement of all artisans training funded by SETA within the Mandatory and PIVOTAL grant system is equitable and the general processes outlined are followed by all SETAs).***
- The developing concept of Centres of Specialization at TVET colleges must also operate within this artisan funding regime for all workplace learning.

13.5. Establishment of a NAMB artisan quality assurance system supported by the Artisan Automated Trade Test System within the QCTO quality standards

- ***Priority 5: Establish and support a user friendly artisan training quality assurance system and processes in line with the National Artisan Moderation Body (NAMB) and the Quality Council for Trades and Occupations (QCTO). (This will safeguard the quality standards of artisan training in the country and mainstream artisan training practices).***
- The primary NAMB functions in terms of the Skills Development Amendment Act 2008, section 26A which must be fulfilled are:
 - a. Trade test assessment instruments.
 - b. Moderation of trade testing.
 - c. Accreditation of trade test centres and providers.
 - d. Registration of assessors and moderators.
 - e. Maintenance of artisan national learner register database.
 - f. Artisan certification.

13.6. Establishment of an INDLELA artisan research and development unit

- ***Priority 6: Establish and maintain an Artisan Research and Development mechanism at INDLELA. (This will assist INDLELA to have an instrument for scientific artisan development planning projection)***

- The current National Artisan Development Support Centre (NADSC) and the National Artisan Moderation Body (NAMB) is able to collect artisan data from SETAs and employers however the capacity and capability to analyze this data beyond the ordinary is limited.

13.7. Resources

It is critical to ensure that the implementation of the strategy is done through aligning resources to enable efficiency and effectiveness in achieving the strategy objectives. Resource alignment to the strategy is required in relation to human resources, information technology and the various acts. The primary policies which will facilitate the implementation of the National Artisan Development Strategy are:

- The Skills Development Amendment Act 2008, in particular section 26A.
- The Workplace Based Learning Programmes Agreement Regulation 2017
- Trade Test regulation 2015
- Generic Artisan Learner Grant System and Administration 2013

13.8. Project Management

A key component of the deliverables is the establishment of a project focused approach within the Chief Directorate in order to manage the implementation of the strategy. The Chief Director will establish Project Management Committees each with their own scope in relation to delivering the artisan development strategy.

In order to ensure that the strategy is not only words on paper but a reality a master plan will be developed by the Chief Directorate: National Artisan Development in order to identify objectives, deliverables, activities and timeframes required for successful implementation. The project management process will address the following:

- Establishment of Project Management Steering Committees for the priority areas.
- Specify detail of activities and milestones for these PMSC.
- Specify reporting structures and timelines.

13.9. Results Framework

Project Name	National Artisan Development Strategy Implementation Plan
Project Objective	The primary objective of this project is to streamline artisan training in the country without suppressing innovation so that sufficient supply of artisans for the labour market and entrepreneurship is ensured. An environment conducive to artisan development which possesses the intelligence to detect threats, opportunities, strengths and weaknesses is the prerequisite to achieving this objective.
Project Outcomes	<p>The following outcomes are envisaged:</p> <ul style="list-style-type: none"> (a) Consolidated Artisan Stakeholder Management system. (b) Expanded artisan training in State Owned Companies and other national and local government departments. (c) Implementation of the A21 artisan training model. (d) Consolidated artisan learner funding system. (e) Established NAMB artisan quality assurance system supported by the Automated Artisan Trade Test System within the QCTO quality standards. (f) Established INDLELA artisan research and development unit.
Project Activities	<p>The following are the project's main activities which will have sub activities:</p> <ul style="list-style-type: none"> (a) Establish a national artisan advisory body (NADAB) as the primary advisory structure to DHET on issues of artisan development. (b) Promote a strong base of artisan training in state owned entities and other government departments through negotiated artisan training quotas and usage of training facilities. (c) Establish and support a national artisan training system based on the simultaneous delivery of the three learning components. (d) Sustain and apply a ring fenced artisan learner (apprentice) grant and disbursement system and processes across all SETAs. (e) Establish and support a user friendly artisan training quality assurance system and processes in line with the National Artisan Moderation Body (NAMB) and the Quality Council for Trades and Occupations (QCTO). (f) Establish and maintain an Artisan Research and Development mechanism at INDLELA.

13.10. Activity Framework

Main Activity	1. Establish a national artisan advisory body (NADAB) as the primary advisory structure to DHET on issues of artisan development.		
Outcomes: 1. Main artisan stakeholder structure is created and managed	Outputs 1. Organised business, organised labour, State Owned Companies and other State Departments are represented in NADAB.	Sub-activities 1. Consultation with the said stakeholders to garner representation. 2. Establish terms of reference for NADAB 3. Formalise a submission for the recognition of NADAB. 4. Strengthen Decade of the Artisan Campaign and World Skills South Africa.	Inputs 1. National Artisan Development Unit to drive the process. 2. National Artisan Development Unit budget.
Outcome Indicators: The National Artisan Development Advisory Body established. Baseline: Informal NADAB Target: Establishment of NADAB by 2018	Output Indicators: Functional NADAB exists. Baseline: Unstable NADAB existing. Target: Establishment of NADAB		
Main activity	2. Promote a strong base of artisan training in state owned entities and other government departments through negotiated artisan training quotas and usage of training facilities.		
Outcomes: 2. Expanded artisan training in State Owned Companies and other national and local government departments.	Outputs 1. A strong base of artisan training in state owned entities and other government departments through negotiated	Activities 1. Audit artisan training at all state owned entities and negotiate future quotas. 2. Negotiate artisan training spaces and intakes at state	Inputs 1. National Artisan Development Unit to drive the process. 2. National Artisan Development Unit budget. 3. National Skills Fund

	artisan training quotas and usage of training facilities is fostered.	owned training centres. 3. Negotiate artisan training spaces and intakes at SANDF, SAPS, DCS and LG.	artisan training allocation.
Outcome Indicators: Increased artisan training numbers and facilities usage at SOEs, SANDF, SAPS, DCS and LG achieved through MoUs. Baseline: Visibly low artisan training numbers at these entities Target: Evidently increasing artisan training numbers and facility usage at these entities from 2018 onwards.	Output Indicators: From year to year artisan training quotas and usage of facilities MoUs are signed. Baseline: No existing MoUs Target: From year to year artisan training quotas and facilities usage MoUs are signed with all SOEs, SANDF, SAPS, DCS and LGs.		
Main Activity	3. Establishment and supporting of a national artisan training system based on the simultaneous delivery of the three learning components.		
Outcomes: 3. Visible implementation of the A21 artisan training model integrating the seven steps to becoming an artisan.	Outputs 1. All SETAs facilitate and fund A21 training. 2. All Employers deliver artisan training based on A21. 3. All sufficiently resourced TVET Colleges link	Sub- activities 1. Finalisation of the dual system pilot project. 2. Finalisation of the dual system apprenticeship project. 3. Finalisation of the national occupational trades' curriculum content.	Inputs 1. National Artisan Development Unit together with the TVET Unit to drive the process. 2. National Artisan Development and TVET Units budgets.

	to employers who contracted A21 learners.	4. Finalisation of the introduction of A21 model to TVET colleges. 5. Finalisation of the assessment instruments for A21 trades' occupations. 6. Foster NAMB /QCTO collaboration on workplace training quality assurance.	3. NAMB to develop assessment instruments.
Outcome Indicators: A dual system of artisan training marked by <i>contracting ab initio</i> is established as the only model integrating SETA, TVET Colleges and Employer artisan training. Baseline: Fragmented artisan training system and funding Target: Establishment of a dual system of artisan training by 2019	Output Indicators: 1. Numbers of artisan learners training on A21 model increases and historical trades' offerings diminish. Baseline: Fragmentation of artisan training and a disparity of esteem for qualified artisans. Target: By the year 2020 all artisan training system to be the A21 model		
Main activity	4. Sustain and apply a ring fenced artisan learner (apprentice) grant and disbursement system and processes across all SETAs.		
Outcomes: 4. A consolidated artisan learner funding system.	Outputs 1. All SETAs adhere to the processes as outlined in the GALGAP	Activities 1. Set monitoring, evaluation and intervention processes to administer the full implementation of GALGAP.	Inputs 1. National Artisan Development Unit to drive the process. 2. National Artisan Development Unit budget. 3. All SETAs
Outcome Indicators:	Output Indicators:		

<p>The Generic Artisan Learner Grant and Administration Policy is implemented fully.</p> <p>Baseline: Generic Artisan Learner Grant and Administration Policy (GALGAP)</p> <p>Target: Full implementation of the policy by all SETAs by 2019</p>	<p>Disclosure of artisan learner grants and equitable disbursement.</p> <p>Baseline: Selective implementation of provisions in GALGAP</p> <p>Target: Full implementation of the policy by all SETAs</p>		<p>4. SETA Coordinating Chief Directorate</p>
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Main Activity	5. Established NAMB artisan quality assurance system supported by the Automated Artisan Trade Test System within the QCTO quality standards.		
<p>Outcomes: A NAMB artisan quality assurance system supported by the Automated Artisan Trade Test System within the QCTO quality assurance standards.</p>	<p>Outputs A fully developed IT system for artisan quality assurance and trade testing.</p>	<p>Sub- activities</p> <ol style="list-style-type: none"> 1. Project Charter confirmation 2. Systems specification documents confirmation 3. Systems design 4. Systems development 5. Systems desktop testing 6. System practical testing and personnel training 	<p>Inputs</p> <ol style="list-style-type: none"> 1. National Artisan Development Unit to drive the process. 2. National Artisan Development budget. 3. NAMB 4. QCTO
<p>Outcome Indicators: An Automated Artisan Trade Testing System</p> <p>Baseline: No IT system in place</p> <p>Target: An Automated Artisan Trade Test system by end of 2019.</p>	<p>Output Indicators: An Automated Artisan Trade Test System in place.</p> <p>Baseline: No IT System in place</p> <p>Target: An Automated Artisan Trade Test system by end of 2019.</p>		
Main activity	6. Establish and maintain an Artisan Research and Development mechanism at INDLELA.		

Outcomes: A fully functional INDLELA Artisan Research and Development Unit (R&D) with a monitoring and evaluation capability.	Outputs 1. INDLELA Artisan Research and Development Unit	Activities 1. Set R&D unit up 2. Source funds from NSF 3. Recruit R&D staff	Inputs 1. National Artisan Development Unit to drive the process. 2. National Artisan Development Unit budget. 3. NSF Funding
Outcome Indicators: An operational artisan R&D unit at INDLELA is established. Baseline: No R&D unit existing Target: A R&D unit is established at INDLELA by end 2018.	Output Indicators: From year to year artisan training data from NADSC is analysed, translated and reported into usable information. Baseline: No existence of R&D unit, information from NADSC reports numbers only without artisan trends analysis. Target: A R&D unit is established at INDLELA by end 2018		

13.11. Milestones by Main Activities

Main activity 1: Establish a national artisan advisory body (NADAB) as the primary advisory structure to DHET on issues of artisan development.													
Milestone	Description	Achieved by											
		2017/18				2018/19				2019/2020			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
1. Main artisan stakeholder structure is created and managed.	Organised business, organised labour, State Owned Companies and other State Departments are represented in NADAB.					X							

Main activity 2: Promote a strong base of artisan training in state owned entities and other government departments through negotiated artisan training quotas and usage of training facilities.

Milestone	Description	Achieved by											
		2017/18				2018/19				2019/2020			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q2	Q3	Q4	Q 1	Q 2	Q3	Q4
2. Expanded artisan training in State Owned Companies and other national and local government departments established.	A strong base of artisan training in state owned entities and other government departments through negotiated artisan training quotas and usage of training facilities is fostered.						x						

Main activity 3: Establishment and supporting of a national artisan training system based on the simultaneous delivery of the three learning components.

Milestone	Description	Achieved by											
		2017/18				2018/19				2019/2020			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q2	Q3	Q4	Q 1	Q 2	Q3	Q4
3. Visible implementation of the A21 artisan training model integrating the seven steps to becoming an artisan.	A dual system of artisan training marked by <i>contracting ab initio</i> is established as the only model integrating SETA, TVET Colleges and Employer artisan training									X			

Main activity 4: Sustain and apply a ring fenced artisan learner (apprentice) grant and disbursement system and processes across all SETAs.

Milestone	Description	Achieved by											
		2017/18				2018/19				2019/2020			

		Q 1	Q 2	Q 3	Q 4	Q 1	Q2	Q3	Q4	Q 1	Q 2	Q3	Q4
4. A consolidated artisan learner funding system operational.	The Generic Artisan Learner Grant and Administration Policy processes are implemented fully by all SETAs.									x			
Main activity 5: Established NAMB artisan quality assurance system supported by the Automated Artisan Trade Test System within the QCTO quality standards.													
Milestone	Description	Achieved by											
		2017/18				2018/19				2019/2020			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q2	Q3	Q4	Q 1	Q 2	Q3	Q4
5. A fully developed IT system for artisan quality assurance and trade testing created.	A NAMB artisan quality assurance system supported by the Automated Artisan Trade Test System within the QCTO quality assurance standards.									x			
Main activity 6: Establish and maintain an Artisan Research and Development mechanism at INDLELA.													
Milestone	Description	Achieved by											
		2017/18				2018/19				2019/2020			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q2	Q3	Q4	Q 1	Q 2	Q3	Q4
6. INDLELA Artisan Research and Development Unit established	A fully functional INDLELA Artisan Research and Development Unit (R&D) with a monitoring and evaluation capability.					x							

13.12. Risk Analysis

Milestone	Risk	Management
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1. Establish a national artisan advisory body (NADAB) as the primary advisory structure to DHET on issues of artisan development	1. The apparent risk is the balance of power between business, labour and government.	1. Constant engagement to iron out differences.
2. Promote a strong base of artisan training in state owned entities and other government departments through negotiated artisan training quotas and usage of training facilities.	<ol style="list-style-type: none"> 1. Lack of artisan learner intake. 2. Under-utilisation of training centres. 3. Shortage of qualified artisan trainers 	<ol style="list-style-type: none"> 1. Audit of artisan learner intakes. 2. Audit of available and unused training centres 3. Recruitment of artisan trainers where necessary.
3. Establishment and supporting of a national artisan training system based on the simultaneous delivery of the three learning components.	<ol style="list-style-type: none"> 1. System readiness by TVET colleges in terms of appropriate workshops and uptake of occupational trades' qualifications. 2. Lack of proper systems for quality assurance at the workplace for workplace learning. 3. Integration of TVET and Skills Development Branch functions 	<ol style="list-style-type: none"> 1. Upgrade TVET colleges' workshops and/or link with SOC training centres. 2. Rapid development of National Trades Occupations Curriculum Content. 3. QCTO and NAMB collaboration to close this gap. 4. Closer collaboration between the TVET and Skills branches.
4. Sustain and apply a ring fenced artisan learner (apprentice) grant and disbursement system and processes across all SETAs.	1. Some SETAs fail to adhere to policy processes and do not comply.	1. Intervention by Chief Directorates SETA Coordination and INDLELA
5. Established NAMB artisan quality assurance system supported by the Automated Artisan Trade Test System	1. Lack of funding for the project	1. Source funds from different quarters.

within the QCTO quality standards.		
6. Establish and maintain an Artisan Research and Development mechanism at INDLELA.	1. Lack of funding for the unit	1. Source funding from NSF

14. Acronyms

A21 – 21st Century Apprenticeships
AD TTT – Artisan Development Technical Task Team
AET – Adult Education and Training
AQP – Assessment Quality Partner
ARPL – Artisan Recognition of Prior Learning
BBBEE – Broad Based Black Economic Empowerment
CD – Chief Directorate
CDO – Community Development Organisations
CDS – Career Development Services
CDW – Community Development Workers
COMET – Competence Measurement in Education and Training
CPD – Continuous Professional Development
CV – Curriculum Vitae
DBE – Department of Basic Education
DHET – Department of Higher Education and Training
DoA - Decade of the Artisan
DQP – Development Quality Partner
DSAP – Dual System Apprenticeship Project
DSPP – Dual System Pilot Project
EISA - External Integrated Summative Assessment
EPR – Expenditure Performance Review
FLC – Foundational Learning Competence
FLP – Foundational Learning Programme
GTPP – Generic Trade Preparation Programme
HRDC – Human Resource Development Council
HSRC – Human Resource Development Council
ILO – International Labour Organisation
LMIP – Labour Market Intelligence Partnership
LRA – Labour Relations Act
MES - Modules of Employable Skills
MTSF – Medium Term Strategic Framework
N - Nated
NAD – National Artisan Development
NADAB – National Artisan Development Advisory Body
NADQAC - National Artisan Development Quality Assurance Committee

NADSC – National Artisan Development Support Centre
NAMB – National Artisan Moderation Body
NAWDSAF – National Artisan Workplace Development, Support and Approval Forum
NCAP – National Career Advisory Portal
NCV – National Certificate Vocational
NDP – National Development Plan
NEETS – Not in Employment Education and Training
NGO – Non Governmental Organisations
NOCC – National Occupational Curriculum Content
NQF – National Qualifications Framework
NQF – National Qualifications Framework
NSC – National Senior Certificate
NSF – National Skills Fund
NTCS – National Trade Curriculum Statement
OECD – Organisation for Economic Cooperation and Development
OFO – Organising Framework for Occupations
OQ ID – Occupational Qualifications Identification
PAYE – Pay As You Earn
PoE – Portfolio of Evidence
PPP – Public, Private Partnership
PSET – Post School Education and Training
QA – Quality Assurance
QC – Quality Council(s)
QCTO – Quality Council for Trades and Occupations
SAIVCET – South African Institute of Vocational and Continuing Education and Training
SAQA – South African Qualifications Authority
SARS – South African Revenue Services
SDA – Skills Development Act
SDF – Skills Development Forum
SDP – Skills Development Provider
SETA – Sector Education and Training Authority
SGB – School Governing Body
SLA – Service Level Agreement
SME – Subject Matter Expert
SMME – Small Medium and Micro Enterprise
SOC – State Owned Company
SSACI – Swiss South Africa Cooperation Initiative
SSP – Sector Skills Plan

TTC – Trade Test Centre

TVET – Technical Vocational Education and Training

TWG – Technical Working Group

VCET – Vocational and Continuing Education and Training

WIL – Work Integrated Learning

WPBLPA – Workplace Based Learnership Programme Agreement

WSSA – World Skills South Africa

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