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## The Dual-system Apprenticeship Pilot (DSAP) Project

## **Process Evaluation Report**

**Presented to** 

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## **EXECUTIVE SUMMARY**

#### 1. Introduction

The Dual-System Apprenticeship Pilot (DSAP) Project has been in existence since April 2013 and aims to, firstly, test the value of dual-system apprenticeships for South Africa, i.e. their practicality for local conditions, their effectiveness, their costs and benefits, and their appeal to local employers, and secondly, establish whether National Certificate (Vocational) programmes at public TVET colleges can provide the requisite knowledge component of trade apprenticeships.

#### 2. Evaluation Scope

This evaluation is a process evaluation and therefore focuses on the implementation of the DSAP. A process evaluation is a compulsory component of an outcomes evaluation. If one wants to assess whether a programme has reached its outcomes, one also needs to consider the implementation aspects of the programme, which is the process evaluation component.

The following evaluation objectives and corresponding evaluation questions were identified in order to guide the process evaluation of the DSAP:

Evaluation Objectives	Evaluation Questions
	• How has the intervention been implemented in terms of its delivery?
To contribute to learning about the	Have the implementing partners done what they undertook to do?
effectiveness, efficiency and	This will involve verifying that the required inputs were provided as
impact of the pilot project;	per the project Business Plan and will include checking records of
To provide recommendations on	inputs, processes, activities, events and outputs.
how future project design and	• Have they done it well? i.e. an appraisal of the quality of project
management may be improved;	implementation through site visits, telephonic and face-to-face
	interviews with relevant people, review of documents, etc.
To craft experience based content	What can be learned from this experience thus far?
omagazing from the evaluation	• What are the strengths and successes of the project? What were the
that can be used for learning in	weaknesses or failures? How can we account for them?
terms of replication	What lessons learned from this project could inform the planning
	and implementation of similar initiatives in future?

This report, therefore, sets out to answer the evaluation questions identified above and will provide key findings and recommendations emanating from the review of the Project's documentation as well as from inputs gained through interactions with key Project stakeholders.

#### 3. Evaluation Approach

The evaluation process for the DSAP followed these overarching steps:

1. A comprehensive review of existing project documentation was undertaken;



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- 2. Preparatory semi-structured interviews with key SSACI project staff were conducted in order to clarify questions emanating from the document review process;
- 3. Data was then collected and subsequently analysed; and
- 4. A draft report was compiled and submitted to SSACI for comment and feedback.

#### 4. Evaluation results

The report provides a comprehensive discussion on findings and recommendations. The overarching conclusions of the report are provided here:

# How has the intervention been implemented in terms of its delivery, have implementing partners done what they undertook to do and have they done it well?

The DSAP is delivered to the beneficiaries, namely the students, via a number of implementing partners. These partners include the colleges, employers and SETAs. The degree to which these implementing partners are able to deliver the DSAP to the students is greatly influenced by a number of factors, such as their own capacity and infrastructure, as well as their expectations and understanding of the DSAP. SSACI plays a managing and coordinating role in this. The ability of the implementing partners to deliver the DSAP to the apprentices has been somewhat over-estimated and in this way SSACI has had to provide additional support and guidance on a number of issues throughout the Project thus far.

For example, challenges were experienced with regards to the contracting processes which are facilitated by the merSETA. The colleges did not always adhere to the pre-determined student selection criteria and some employers did not apply due diligence to the selection and interviewing processes of apprentices. The remaining responsibilities of the role players were largely fulfilled but there is room for improvement of implementation as discussed by the recommendations provided in this report.

#### 2. What are the strengths and challenges of the Project and lessons learned?

#### Strengths

- The DSAP has provided a facilitated space where lecturers and employers are able to meet and discuss issue related to training towards industry standards. Although the desired depth of discussion regarding curriculum integration has not been fully realised, discussions at both sites show that issues around curriculum integration have begun to gain momentum.
- Employers involved in the DSAP are positive about the DSAP and see the value in forging closer relationships with the colleges in order to begin to bridge the divides that exist between college training and workplace training.



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- Through the DSAP lecturers have been exposed to industry and industry standards for competence more than they would have had they not been part of the DSAP (whether being part of the COMET or attending monthly meetings). Some lecturers reported that these experiences have benefited the way in which they teach all their students, not just DSAP apprentices, and they are also much more aware of how they set up their own assessments.
- Through the DSAP, the apprentices have obtained exposure to the type of workplace that they hope to enter one day. They have therefore become more career-focused, motivated and interested in their college work. They have also learned about the importance of safety at the workplace and the spectrum new tools and equipment available.

#### Challenges

- It is impossible to conduct the selection process of colleges and employers in isolation of broader challenges that impact heavily on, firstly, the perceptions related to workplace training and secondly, the ability of colleges and companies to successfully participate in the implementation of the DSAP. Implementing partners can only implement according to their own capacity where they are limited, limited implementation of the DSAP will take place. This is evidenced in a number of related challenges, namely:
  - A college that is under administration,
  - $\circ$  Lack of adequate capacity among lecturers to teach on the DSAP,
  - Limited pool of good quality potential apprentices to choose from,
  - Acquiring the right types of employers to form part of the DSAP those with adequate infrastructure and capacity.
- The legislative environment is prescriptive about the nature of contracts (learnership vs. apprenticeship); the stipends to be paid (sectoral determination vs. bargaining council) and also what qualifies as a trade or not (welding as a trade vs. mechatronics as not a trade). The challenge is therefore how to mitigate these issues in a project that has a very limited lifespan.
- Apprentices found the workload quite heavy and are concerned about whether they will be able to cope with the existing workload as well as additional support classes. In addition, their lack of basic technical competence has resulted in preventing them (in most cases) from gaining actual, authentic workplace experience. Strike action and protests that took place at the PE site resulted in classes falling behind by 5 weeks which placed further pressure on students, lecturers and employers to complete the training of apprentices.
- In a Project of this magnitude where there are many different role players, communication becomes a critical challenge. Currently the monthly site meetings are the only face-to-face platform where role



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players can meet which leaves limited time for in-depth discussion around project implementation as well as curriculum integration.

- Integration of the NCV curriculum with the workplace training has been particularly challenging. The colleges are required to follow the NCV curriculum and aligning this with what is taking place in the workplace has been problematic. This is further exacerbated by the following:
  - There are different levels of workplace exposure to training some apprentices are trained at the training facility of the workplace under simulated conditions whereas others are trained onsite, in the production facility. This makes it very difficult for the college to gauge their levels of workplace training.
  - The logbooks have not been adequately completed and signed-off by all employers this makes it even more difficult to determine which apprentices received which workplace training and where the gaps have arisen.



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## **1** INTRODUCTION

The Dual-System Apprenticeship Pilot (DSAP) Project has been in existence since April 2013 and aims to, firstly, test the value of dual-system apprenticeships for South Africa, i.e. their practicality for local conditions, their effectiveness, their costs and benefits, and their appeal to local employers, and secondly, establish whether National Certificate (Vocational) programmes at public TVET colleges can provide the requisite knowledge component of trade apprenticeships<sup>1</sup>.

The Swiss-South African Cooperation Initiative (SSACI) is managing this pilot project and has commissioned the services of external evaluators to conduct an impact evaluation and cost-benefit analysis of the DSAP. This encapsulates the following<sup>2</sup>:

- 1. A formative process evaluation which will be conducted in 2014 and 2015, that will track the operational planning and implementation of the project and will serve to inform decisions on how these could be improved.
- 2. A summative impact evaluation, to be conducted in the first half of 2016, will assess the extent to which the project has met its stated objectives and produced the desired outputs and outcomes. It will inform decisions on whether and to what extent dual-system apprenticeships are useful and practical in South Africa and, if so, how best to implement them. This will also include a cost-benefit analysis.

This process evaluation report therefore serves to address the first of the two evaluation processes described above.

## 2 EVALUATION METHODOLOGY

#### 2.1 Evaluation Scope

This evaluation is a process evaluation and therefore focuses on the implementation of the DSAP. A process evaluation is a compulsory component of an outcomes evaluation. If one wants to assess whether a programme has reached its outcomes, one also needs to consider the implementation aspects of the programme, which is the process evaluation component. Process evaluation verifies what the programme is and whether it is delivered as intended to the targeted recipients. It addresses issues about the effectiveness and efficiency of programme operations, service delivery and whether it is successful in reaching the target group as planned (dosage and coverage).

<sup>&</sup>lt;sup>1</sup> DSAP Year-end Report, 2013 <sup>2</sup> DSAP Call for Expression of Interest



The following evaluation objectives and corresponding evaluation questions were identified in order to guide the process evaluation of the DSAP:

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This report, therefore, sets out to answer the evaluation questions identified above and will provide key findings and recommendations emanating from the review of the Project's documentation as well as from inputs gained through interactions with key Project stakeholders.

## 2.2 Evaluation Approach

Programme Evaluation is the use of social science research methods to systematically investigate the effectiveness and efficiency of social intervention programs. It draws on the techniques and concepts of social science disciplines and is intended to be useful for improving programs and informing social action aimed at ameliorating social problems<sup>3</sup>. A process evaluation is a necessary forerunner to any outcomes evaluation and is mostly concerned with how activities are implemented, the level of functioning of processes, communication between the different levels of the project, etc.

The evaluation process must be closely aligned to the "life cycle" of the intervention so that evaluation objectives mirror the various stages of the design and implementation of an intervention. The evaluation process requires a systematic approach to determine whether the conditions for successful design and implementation have been met.

The evaluation process for the DSAP followed these overarching steps:

- 5. A comprehensive review of existing project documentation was undertaken;
- 6. Preparatory semi-structured interviews with key SSACI project staff were conducted in order to clarify questions emanating from the document review process;

<sup>&</sup>lt;sup>3</sup> Evaluation: A systematic approach, 2004 (p. 28)



- 7. Data was then collected and subsequently analysed; and
- 8. A draft report was compiled and submitted to SSACI for comment and feedback.

#### 2.3 Data Collection and Analysis

Data collection activities for the evaluation involved interacting with the following key role-players:

- Lecturers: West Coast College and Port Elizabeth College
- Apprentices: West Coast and Port Elizabeth
- Employer representatives: Dormac, Westarcor, VWSA and Continental
- merSETA representatives
- SSACI project staff

Appendix 7.1 shows a detailed breakdown of the participants involved in this phase of data collection.

Data was collected as follows:

- 10 x focus group interviews
- 11 x individual interviews (either face-to-face or telephonic)
- site visits attending project meetings

Consent was obtained by all participants by means of completing attendance registers.

#### 2.4 Limitations

The biggest limitation of this evaluation is that the evaluation team were not part of the conceptualisation and design phase of the DSAP. This has been particularly challenging in that not all of the crucial processes undertaken to implement the DSAP have been consistently documented and updated as the Project progressed. This problematized the analysing of the various project documents.

## **3 THE DUAL-SYSTEM APPRENTICESHIP PILOT PROJECT**

#### 3.1 Background and Rationale for the DSAP

"South Africa has set itself the ambitious goal of producing 50'000 new artisans by 2015. To this end, various initiatives are under way to increase the number of apprentices being enrolled, improve the quality of their training, accelerate their progress, increase the pass rate in trade tests and generally remove systemic



blockages"<sup>4</sup>. As such, a number of key national strategies and action plans prioritise the need to train qualified artisans in the country.

South African has been implementing British-style apprenticeships that provided structured on-the-job training in artisan trades since the mid-nineteenth century<sup>5</sup> but challenges related to flaws in curricula and delivery systems and low through-put rates necessitated an "overhaul of the national public TVET system, including apprenticeships & colleges" <sup>6</sup>.

As such, the Minister of the Department for Higher Education and Training (DHET), Dr Bonginkosi Nzimande, proposed the implementation of a 'dual system' apprenticeship training model in South Africa after he was exposed to its use and success in Germany and Switzerland. This proposal was tabled at the Swiss-South African Chamber of Commerce in Zurich in 2011 and after delays related to funding, it was formalised in April 2013. A Memorandum of Agreement on the management of the project was signed with the Swiss-South African Co-operation Initiative (SSACI) and the Department of Higher Education and Training represented by the Chief Directorate INDLELA<sup>7</sup>. SSACI is a public-private development partnership between the Swiss government's international agency for development and cooperation and Swiss companies trading in South Africa<sup>8</sup>.

The concept of a 'dual system' apprenticeship training model has been operational in European countries like Germany, Switzerland and Austria for quite some time. The model requires apprentices to rotate between their host company and the selected training institution within a one week cycle, spending typically three to four days at the workplace and the remaining days at the college. This model identifies the employers as the 'lead role player' "who are primarily responsible for defining the training curriculum and methodology, the trainees' work assignments and organisation, some aspects of assessment, and the overall management of the programme"<sup>9</sup>.

The excerpt<sup>10</sup> below describes the advantages and benefits of the dual system model for employers, apprentices and colleges.

The dual system of apprenticeship training, as practised in Switzerland, Germany and Austria has in all three countries demonstrated definite specific advantages for <u>employers</u>:

• The training curricula are very market-driven

<sup>&</sup>lt;sup>10</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 3



<sup>&</sup>lt;sup>4</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 2

<sup>&</sup>lt;sup>5</sup> Ken Duncan, "Apprenticeships Redux: How South African almost dismantled its apprenticeship system and is now reviving it", p. 2 <sup>6</sup> Ken Duncan, Pan African Conference 2014 presentation

<sup>&</sup>lt;sup>7</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 2

<sup>&</sup>lt;sup>8</sup> Engineering News, Vol 34 Nr 27, 18-24 July 2014, p. 14

<sup>&</sup>lt;sup>9</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 3.

- Having apprentices in college for just 1½ days per week and the remaining 3½ days on the job has proved less disruptive to the company's production than the 3-month block-release system currently used in South Africa
- Fewer gaps between college and company in terms of technology, practice and ethos (e.g. discipline, timekeeping, quality standards)
- Apprentices are quickly acculturated into the company and become productive from an early stage
- Research in Switzerland and Germany alike has consistently shown that there is a net cost-benefit to the host company of ±10% in the first year of the apprenticeship, rising to as much as 25% in the final year (reference research articles)
- The user-friendliness of the system encourages participation by small-to-medium enterprises and thus unlocks their training capacity

Advantages of the dual system for the <u>apprentice</u> reportedly include:

- Close integration of theory and practice, leading to more thorough learning
- Immediate reinforcement of learning
- Real-life working conditions at all times
- Early development of a sense of responsibility and productive value
- Higher first-time, trade-test pass rates and employment rates

Advantages for <u>colleges</u> may include:

- Closer alignment of the college curriculum with the needs of industry
- Regular interaction between college staff and companies, often leading to other forms of partnerships between college and company
- Skills transfer amongst college staff

The DSAP Business Plan (p. 2) states that the dual system approach to apprenticeships is "considered worthy of investigation because:

- It is viewed by many experts as a contributor to national competitiveness, by making apprentices productive in the shortest possible time
- Its learners produce work of a consistently high standard (For example, Switzerland is always placed in the top three teams at the biennial World Skills contests)



- It opens pathways to skilled employment. About 80% of Swiss and German youths undergo artisan learning after completing their compulsory basic education and most go straight from training into employment, leading to an exceptionally low youth unemployment rate
- The user-friendliness of the system encourages high participation by small-to-medium size enterprises • (SMEs). Currently, in South Africa, very few SMEs host apprentices".

#### 3.2 The DSAP Project Design

#### 3.2.1 Scope, Objectives and Beneficiaries

The Project seeks to contribute to the achievement of a key skills development outcome that is encapsulated in the Minister's Performance Monitoring and Evaluation (PME). This outcome relates to developing a "skilled and capable workforce to support an Inclusive Growth Plan"<sup>11</sup>. As such, the DSAP aims to "increase the number of qualified and employed artisans...this project has the purpose of piloting a Dual System of Apprenticeships in South Africa in close collaboration with public TVET Colleges and employers between April 2013 and June 2016"<sup>12</sup>.

The DSAP overall objective is to pilot a dual-system of apprenticeship training in South Africa in close collaboration with public TVET Colleges, that will enhance national artisan development by<sup>13</sup>:

- Developing a dual-system curriculum for each of the trades selected for the project.
- Producing evidence on whether a dual system approach to apprenticeship training would be more efficient, cost-effective and/or lead to a higher level of learning than the traditional 'block-release' apprenticeships
- Developing a replicable model of implementation for dual system apprenticeships that will result in high quality and holistic competence for artisans:
- Producing at least 60 qualified artisans per year across at least three different trades (i.e. Welders, Electricians, Mechatronics trade).
- Develop a model for fostering stronger college-industry partnerships. •

The Project is intended to benefit the apprentices, colleges and employers (as direct beneficiaries) by<sup>14</sup>:

Increasing the through-put rates of apprenticeship training programmes, thereby 'increasing the flow • of artisans'

<sup>&</sup>lt;sup>14</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 6



<sup>&</sup>lt;sup>11</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 2

<sup>&</sup>lt;sup>12</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 4

 Improving communication between the colleges and employers, who will benefit from the constructive partnerships emanating from the need to align the college curricula with the needs of industry. This will have 'a wash-back effect on the labour market-aligned training competence of college lecturers'

Broader beneficiaries<sup>15</sup> for the Project include:

- The SETAs which will have increased opportunities for artisan development.
- The Quality Council for Trades and Occupations (QCTO) which will 'gain from the project's experience of implementing occupational training that integrates the three essential curriculum components (i.e. trade knowledge, practice and work experience), as well as the development of instruments for the assessment of the development of occupational competence in apprentices'.
- The DHET terms of direct system-feedback required to guide future policy development.
- The country the 'development of holistically competent artisans will benefit the South African nation at large both in terms of global competitiveness and in combating unemployment and poverty'.

#### 3.2.2 Project Management, Communication and Reporting

This section presents a summary of the structures and key activities identified for the project management aspects of the Project. This is followed by a discussion related to the extent to which the stakeholders fulfilled their contracted roles and responsibilities. Lastly, the Project's overarching communication and reporting structures are highlighted.

#### 3.2.2.1 Project Management Structures and Key Activities

The DSAP Business Plan (p. 7) details that SSACI is responsible for the operational management of the Project. In order to achieve this, the following key activities (and the person/s responsible) were identified:

- A dedicated project manager, to oversee day-to-day operations and to document the implementation of the project, capture insights and experience gained, and record learnings, thereby ensuring that a replicable model is available at closure of the project,
- A curriculum-development facilitator to support the colleges in their development of integrated learning programmes for the target trades,
- Occasional short-term inputs from local and international experts to ensure that the curriculum and training are aligned with best practice and occupational competence requirements; such experts may

<sup>&</sup>lt;sup>15</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 6



be drawn from the DHET, Umalusi, QCTO and its Development Quality Partners and Assessment Quality Partners for the selected trades, SETAS, industry practitioners, etc.),

• An external evaluator conduct baseline, formative and summative evaluations of the project.

"The required human resources for the DSAP are shown in the following project management organogram"<sup>16</sup>:



The organogram focuses on the participation of colleges but does not reflect the inclusion of employers as key implementing partners in the Project.

#### 3.2.2.2 Roles and Responsibilities of Stakeholders

Summaries of the roles and responsibilities of the stakeholders for the Project are available in Appendix 7.2.

In terms of roles and responsibilities stipulated for apprentices detailed in the learnership contract<sup>17</sup>, due to the fact that they are intricately connected to the apprentices' study-type responsibilities, there is no indication that they have not fulfilled them adequately.

There is good alignment between the learnership agreement and employer contract<sup>18</sup> in terms of detailing the roles employers fulfil in the Project. To a large extent employers have been implementing according to these roles and commitments in terms of paying students on time, tracking of attendance, induction, etc. However,

<sup>17</sup> LPM-FM-002 Learnership Agreement Form (Excluding Skills Programme) (Due for Review on 09 Jul 2014)
 <sup>18</sup> DSA-FM-002 DSAP Funding Agreement (Pilot 1) (Due for Review on 26 Nov 2015)



<sup>&</sup>lt;sup>16</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 7

when it comes to DSAP-specific tasks, the following has emerged and will be discussed in more detail later in the report:

- Documented monitoring of DSAP apprentices at the workplace has not sufficiently taken place. .
- The type of training provided is not necessarily always aligned to the apprenticeship curriculum.
- There is a lack of attendance from Westarcor at the WC site meetings

The learnership agreement and the College MoU detail the colleges' key responsibilities in the DSAP. Overall, both colleges have fulfilled the overarching obligations in terms of undertaking activities to integrate the curriculum; planning and timetabling; and conducting assessments (including assisting with the COMET) during the implementation of the Project. However, with regard to initiating the learner selection processes, it has been noted that West Coast College did not fully comply with the student selection requirements (Grade 12 with Maths and Science)<sup>19</sup>.

merSETA's roles have been highlighted in the employer contract. It has disbursed the grant payments to employers and has had representation at all the DSAP project meetings. To date, merSETA has not had to mediate any complaints from employers, colleges or apprentices<sup>20</sup>.

### 3.2.2.3 Communication and Reporting Structures

Formalised opportunities for communication within the DSAP take the form of monthly site project meetings and bi-monthly Steering Committee meetings.

The monthly site project meetings are currently both hosted by the respective colleges. The following stakeholders are required to attend:

- The college lecturers •
- Employer representative/s ٠
- SSACI representative/s
- merSETA representative/s

The meetings are chaired by the SSACI representative and follow an agenda that generally traces operational procedures and processes.

Detailed minutes are taken and these serve at the Steering Committee meetings.

<sup>&</sup>lt;sup>20</sup> Interview with Helen Brown, 24 November 2014



<sup>&</sup>lt;sup>19</sup> Feedback provided by Ken Duncan, 20 November 2014

The Steering Committee convenes "bi-monthly or as agencies demand to receive reports, review progress, examine finances and provide strategic direction"<sup>21</sup>. It is comprised of the representatives from the following organisations/departments:

- DHET's Skills Branch
- DHET's VCET Branch
- DHET's International Relations Unit
- DHET's Office of the CFO (Development Support Division)
- SETAs
- SSACI
- GIZ

Key issues and challenges emerging from monthly site project meetings are then tabled at the steering committee where decisions and/or action plans are discussed.

## 4 DESCRIPTION AND ANALYSIS OF THE DSAP IMPLEMENTATION

This section describes the implementation process of the DSAP and specifically examines two sites, namely the West Coast College and Port Elizabeth College sites. The other sites that have been earmarked for the Pilot will not be discussed here but will be form part of the next phase of the evaluation.

This section draws on a number of project documents as well as inputs collected during evaluation interactions with project staff, colleges, employers and DSAP apprentices.

#### 4.1 Signing-on of Colleges, Trades and Employers for Each Site

At the time of commencement of the DSAP, the first implementing partner selected was the colleges. This was followed by the identification of a potential trade which was reviewed and finalised by the Steering Committee. Upon finalisation of college participation, an employer recruitment exercise was undertaken. These processes are discussed in more detail below.

#### 4.1.1 Description of Signing-on Processes

In terms of the selection of colleges, merSETA approached two colleges, West Coast College (WC College) and Port Elizabeth College (PE College). At this time, no formal selection criteria were documented<sup>22</sup> and the merSETA selected the colleges based primarily on their technical teaching infrastructures, as well as on the

<sup>&</sup>lt;sup>22</sup> Interview with Claudia Rudolph, 14 November 2014



<sup>&</sup>lt;sup>21</sup> DSAP Revised Business Plan, 26 Sept 2014, p. 7

willingness of employers associated with those colleges to participate in the Project<sup>23</sup>. These two colleges were then invited to complete an expression of interest that initiated their application to participate in the DSAP.

The Steering Committee approved the selection of both colleges as well as their respective trades<sup>24</sup>; welding at WC College and mechatronics at PE College. Finally, an information session hosted by SSACI was presented to each college, where a 'road mapping' exercise was completed in an effort to prepare them for the upcoming processes. This included compiling to-do lists and clarifying roles and responsibilities.

In terms of signing-on of employers, employers affiliated with the merSETA were contacted (with the use of a contact list provided by the merSETA)<sup>25</sup>. Interested employers were invited to attend an information session presented by SSACI and those who wished to participate, were required to complete an expression of interest document that detailed (amongst others) the following:

- Skills Levy Number
- Affiliation to a SETA
- Size of company
- Whether company has SETA workplace approval
- Number of apprentices company can accommodate
- Number of qualified artisans able to mentor the apprentices

Table 2 summarises the companies selected to participate in the Project, as well as their fulfilment of the set criteria:

	West Coast		Port Elizabeth		
CRITERIA	Dormac	Westar-	VWSA	Johnson	Conti-
		cor		Controls	nental
Affiliation to appropriate SETA	٧	٧	٧	٧	V
Relevant workplace approval (or in process of)	٧	٧	٧	٧	V
Dominated DSAP-assigned project manager <sup>26</sup>	٧	٧	٧	٧	V
Suitable apprentice/ artisan ratio	٧	٧	٧	٧	V

These employers were invited to attend a meeting with SSACI where the selection process of potential apprentices was discussed.

<sup>&</sup>lt;sup>26</sup> Steering Committee minutes June 2013



<sup>&</sup>lt;sup>23</sup> Interview with Helen Brown, 25 September 2014

<sup>&</sup>lt;sup>24</sup> Steering Committee minutes June 2013

<sup>&</sup>lt;sup>25</sup> Interview with Claudia Rudolph, 14 November 2014

According to the DSAP Employer Guide for Learner Selection, "The DSAP apprentice selection process aims to present every potential host employer with a broad candidate pool of top level NCV 2 learners. In order to ensure that all employers gain access to the same pool of learners, and thus have a fair chance of selecting their 'best candidates', the following process was designed"<sup>27</sup>:



The criteria used by the colleges to select the candidates were as follows:

- A grade 12 exit level exam (preferably with Maths and/or Science);
- High pass marks in all core and fundamental subjects;
- A high level of commitment to studies and the trade;
- Substance abuse-free and medically suitable for the trade.

The DSAP Employer Guide for Learner Selection very clearly details the steps identified above. It also provides suggestions related to how employers can approach the interview process, identifying appropriate questions to pose to candidates.

SSACI understands the selection of DSAP apprentices as follows<sup>28</sup>:

• Pre-selection by the colleges – the colleges are responsible for academically screening the students and then compiling an appropriate candidate pool.

<sup>&</sup>lt;sup>28</sup> Feedback provided by Ken Duncan, 20 November 2014



<sup>&</sup>lt;sup>27</sup> DSAP Employer Guide for Learner Selection, p. 4

• Final selection by the employers – the employers are responsible for appropriately selecting the apprentices by making use of their existing internal screening processes that are appropriate for their field/trade (e.g. suitability to the trade, physical assessments etc.). These processes are usually undertaken/ administered by most Human Resource departments at companies.

Once apprentice selection was finalised, the contracting phase commenced, which is discussed later in the report.

#### 4.1.2 Analysis of Signing-on Processes

The DSAP mechanism relies on the involvement of colleges and employers who can collaboratively provide a meaningful learning experience for apprentices. For this to take place, it is imperative that the Project attracts colleges and employers who are able to:

- incorporate the DSAP into their existing organisational structure and training culture, and,
- meaningfully participate in the achievement of the DSAP's aim of providing students with an integrated learning experience.

For this to take place, the selection of appropriate colleges and employers is crucial. To assist in the selection of colleges, SSACI identified and drafted very particular and focused criteria for future intakes.

Furthermore, it is impossible to conduct the selection process of colleges and employers in isolation of broader challenges that impact heavily on, firstly, the perceptions related to workplace training and secondly, the ability of colleges and companies to successfully participate in the implementation of the DSAP.

Similarly, challenges related to securing participation from appropriate employers in the DSAP have been summarised by SSACI as follows:

- Lack of employer confidence in government programmes<sup>29</sup>: Many employers have expressed reluctance to take on the risks of a project as innovative as the DSAP, citing bad experiences with previous initiatives. Few employers have queried the value of exploring new approaches to apprenticeship training but all have expressed concerns about the possibility of unforeseen costs and administrative responsibilities arising further down the line. Of even greater concern to the employers is the possibility (very real to some of them) that the colleges or SETAs will fail to deliver on their part of the bargain, leaving the company to make up the resulting deficits. ... It is clear, however, that much work will have to be done to build employers' confidence in state systems.
- Employers' reluctance to participate in the project are varied, but some of the reasons cited are<sup>30</sup>:

<sup>&</sup>lt;sup>30</sup> DSAP report for the Minister, 19 September 2014



<sup>&</sup>lt;sup>29</sup> SSACI Year-end Report 2013, p. 4

- The metal workers' strike employers are unwilling to train during times of uncertainty;
- The pipeline of work many of the employers are involved in project based work and are reluctant to commit to a 3-year apprenticeship agreement, when workflow is uncertain;
- Required stipends employers, particularly small employers, state that they cannot afford bargaining council rates for apprentices that spend a large share of their time at college and not in the workplace;
- Limited capacity small employers often do not have the capacity and resources to assign to the project. Employers are expected to attend project meetings, provide feedback and sign logbooks. In many cases they are just too busy running their businesses to attend to these administrative requirements.

During evaluation fieldwork, concerns regarding the pre-selection criteria of apprentices were raised by employers, stating that more emphasis should be placed on establishing whether the prospective apprentice does indeed have a genuine interest in the trade<sup>31</sup>. By offering bursaries and stipends, it may be attracting the wrong apprentices into the programme who see this as a means to an end and not necessarily as a career path. This sentiment was echoed by lecturers from PE College<sup>32</sup>.

At Westarcor, for example, the DSAP apprentice intake began with 6 and by the end of the first year, it had dropped down to 3. One of these apprentices exited from the Project as he was not physically able to handle the welding machinery due to complications with his wrists. Another was not able to sufficiently deal with the workshop pressure, and the third wasn't that interested anymore. In a way, this is to be expected. Prospective apprentices only really know whether they are suited to their profession once they find themselves in the working environment and, it can be argued that it is best they find this out at the beginning than after spending 3 to 5 years training in a profession that they will never enter because they are just not suited to it. From the perspective of managing expectations, it might be necessary for DSAP project staff to prepare employers for this potential result so that they are not caught off-guard if this happens.

The following findings have thus emerged from this discussion:

 Selection of implementing partners is critical and has far-reaching effects on the success of the Project. For instance, the selection of the PE College and the mechatronics trade where the trade test is reliant upon external legislative and quality assurance procedures that are administered by other role-players. As such, any further delays in the finalisation of the trade test for mechatronics has logistical and ethical considerations for the Project roll-out in Port Elizabeth.

<sup>&</sup>lt;sup>32</sup> Focus group with lecturers, PE, 21 October 2014



<sup>&</sup>lt;sup>31</sup> Interview with employer, 15 October 2014

- The DSAP involves an additional administrative, logistical and management burden on lecturers and employers as it is implemented over and above existing training programmes in both colleges and companies. The selection of future colleges and employers should take into consideration that the additional workload associated with implementing the DSAP will be felt by companies and colleges who are functioning at optimal levels. This burden will be even bigger for colleges and companies who are not at functioning optimally.
- Finally, the apprentice selection mechanism works on the premise that colleges pre-select the best available candidates (based on their academic performance) and those employers then apply appropriate screening processes to select the most suitable apprentices for their trade/field. It is therefore imperative that, as far as possible, colleges adhere to the academic criteria set for student selection to avoid unnecessary complications arising from this process<sup>33</sup> and that employers apply due diligence to the interviewing and selection processes of potential apprentices<sup>34</sup>.

## 4.2 Contracting of Stakeholders

The merSETA initially drafted a 'commitment of participation' that was signed by the two colleges. It was later decided that there was a need for a more comprehensive MoU that encompassed agreements between DHET, the SETAs and SSACI. This 'multilateral MoU' required legal approval from the DHET, which, to date, has not taken place yet.

To formalise their involvement in the DSAP, employers were required to sign the following:

- a formal commitment completed once the apprentices had been selected
- the funding commitment based on the new national funding policy for the DSAP
- apprenticeship/learnership agreements with each apprentice

The legislative context informing the issuing of apprenticeship contracts provided a number of challenges within the first intake of the DSAP. Most specifically, these related to the following:

- With the repeal of the Manpower Training Act, there was no legal framework for traditional apprenticeship contracts. The DG had directed that learnership agreements be used for workplacebased training programmes (including apprenticeships)<sup>35</sup>.
- Revised and finalised merSETA learnership contracts became operational on 01 July 2014<sup>36</sup>.
- The Steering Committee was in agreement that it is of utmost importance to provide employers for the next DSAP intake with a consistent contract template and clear guidance on stipends to be paid.

<sup>&</sup>lt;sup>36</sup> Steering Committee minutes October 2014



<sup>&</sup>lt;sup>33</sup> SSACI Year-end Report 2013, p. 4

<sup>&</sup>lt;sup>34</sup> SSACI Year-end Report 2013, p. 5

<sup>&</sup>lt;sup>35</sup> Steering Committee minutes March 2014

For instance, three different types of contracts (Dormac: Apprenticeship agreement; Westarcor: Older version of apprenticeship agreement; VWSA, Johnson Controls and Continental: Learnership agreement) have been signed by employers and apprentices which has resulted in much confusion around the rules governing each of the type of contract currently in use. In addition, currently, there is no consistent national minimum stipend for DSAP apprentices in one and the same trade. For instance, sectoral determination and Bargaining Council rates differ significantly (R250 p/week for sectoral determination versus R1107.90 p/week for Bargaining Council rates)<sup>37</sup>.

 In order to safeguard the employers' position that the DSAP employment will be limited to the duration of the apprenticeship it was discussed that all employers should be provided with a template for a limited duration employment contract in addition to the new learnership contract format<sup>38</sup>.

Particular challenges surrounded the contracting (and subsequent stipends) of apprentices at Westarcor<sup>39</sup>. Firstly, the company employs an incentive system for apprentices, where they are able to earn more the further they progress in their training. Westarcor was reluctant to pay the apprentices a wage that was higher than what its other employers were earning, who were on minimum wage. This would then negate their incentive scheme and potentially cause dissatisfaction with the other apprentices in the workplace. Secondly, the grant received was not enough to cover the higher stipend and the company battled to justify spending more on 'outside' apprentices before investing further in their own apprentices.

The employer has signed a formal commitment as well as a funding agreement but to date there have been some delays in terms of them having signed apprenticeship contracts with their DSAP apprentices. The employer and apprentices initially signed an older version of the apprenticeship agreement earlier in the year and this needed to be replaced. merSETA indicated that they believe the employer signed the new apprenticeship agreements in October 2014 however, the signed documents have not been lodged at the merSETA yet as they appear to be misplaced<sup>40</sup>. The merSETA is investigating this issue.

The lack of standardised contracts and the uneven allocation of stipends for apprentices with the same levels of competence have thus far resulted in confusion and distress across the Project. Whilst it would be ideal if this could be addressed before the next DSAP intake, the current labour legislations regulating the contracting and payment of apprentices is challenging (as discussed in the points above) and is unlikely to be resolved quickly<sup>41</sup>. As such, the DSAP will continue to operate in a context where it can do little to control for these crucial elements of the Project.

<sup>&</sup>lt;sup>41</sup> Feedback provided by Ken Duncan, 20 November 2014



<sup>&</sup>lt;sup>37</sup> DSAP report for the Minister, 19 September 2014

<sup>&</sup>lt;sup>38</sup> Steering Committee minutes May 2014

<sup>&</sup>lt;sup>39</sup> Interview with Employer, 15 October 2014

<sup>&</sup>lt;sup>40</sup> Interview with Tsholo Mungoni, 24 November 2014

#### 4.3 College/workplace Dual System Implementation

This section examines the implementation of the DSAP at the colleges and workplaces at each of the sites.

#### 4.3.1 Broader Context of the Sites

Both the West Coast (Saldanha/ Vredenburg) and Port Elizabeth (Nelson Mandela Bay - NMB) have been identified as Industrial Development Zones (IDZ) in South Africa. IDZs are purpose-built industrial estates, linked to an international port or airport, which have been specifically designated for new investment by export oriented industries and related services<sup>42</sup>.

In PE, this has been centred on the new deep-water harbour, Coega that was built<sup>43</sup>. The IDZ in NMB is an attempt to reindustrialise a part of South Africa that saw a significant decline in jobs and manufacturing during the 1980s. It is hoped the IDZ could begin to tackle some of the developmental challenges facing NMB, of most relevance here, high levels of poverty and unemployment. Despite this, NMB offers many economic opportunities, namely "good world-class infrastructure for investment at the Coega IDZ and deep-water Port of Ngqura as well as a vibrant automotive manufacturing centre and Logistics Park". As a result of this and other factors related to the historic automotive industry in PE, there are a vast number of potential employers who could form part of the DSAP. For instance, opposite the road from PE College is General Motors (GM) which could be an ideal potential employer. But due to a number of factors that relate to perceptions of the College as being sub-standard and also Government's historic role as the main provider of vocational skills training coupled with, multinational companies such as GM that have their own training facilities and curricula, there exists a great need for more engagement with these various role players to raise awareness around projects like the DSAP in order to garner interest and eventually buy-in.

On the West Coast, industrial companies range from iron and steel suppliers to fishing companies, from oil refurbishing to lumber suppliers. There is a concentration of heavy steel and mineral industries and supporting services within the Saldanha Bay Municipal area. Concentration has occurred due to the location of the Saldanha Harbour. In addition, this area is located next to the Saldanha /Sishen railway line which transports raw mineral materials, from north of the West Coast Region and Sishen where the majority of these minerals are mined, to Saldanha<sup>44</sup>. The motivation to align with the IDZ is therefore based on stimulating sustainable Local Economic Development and employment opportunities due to the IDZ's aims to encourage international competitiveness and sustainable economic growth through strategic investments in export manufacturing industries in the Saldanha Bay municipal area<sup>45</sup>. It is, however, unclear how far this process is from being implemented and much of the planned developments have been put on hold in order to establish whether the

<sup>&</sup>lt;sup>45</sup> Obtained 15 November 2014 [http://www.saldanhabay.co.za/pages/IDP/idp.html]



<sup>&</sup>lt;sup>42</sup> Obtained 15 November 2014 [http://www.saldanhabay.co.za/pages/IDP/idp.html]

<sup>&</sup>lt;sup>43</sup> Nelson Mandela Bay Municipality IDP 12<sup>th</sup> edition, 2013-2014 p.3

<sup>&</sup>lt;sup>44</sup> Saldanha Development Zone, Pre-Development Feasibility Study. 2009. Demacon

IDZ will materialise. This has affected the extent to which employers in the area have taken on apprentices due to the uncertainty surrounding the IDZ.

Given this identification of the Saldanha Bay Municipal area as a potential IDZ, various government departments (national and provincial) have initiated various vocational training strategies. This has resulted in an increased demand for workplace training opportunities for apprenticeships/learnerships<sup>46</sup>. The college is therefore struggling to secure sufficient numbers of employers for DSAP (as well as its other apprenticeship programmes). Furthermore, it appears as though these government-led training initiatives in this area compete with each other which cause additional challenges in rolling out similar projects.

#### Socio-economic environment

In terms of the socio-economic environment in which the DSAP is being implemented at site level, the table below<sup>47</sup> shows the differences between the two sites in terms of a number of economic aspects. What is of particular concern is the high unemployment rate, and especially the youth unemployment rate, which is 47% for PE and 30% for Saldanha. This enforces the importance of educational and skills development programmes in this area.

Census 2011	NMB	Saldanha	South Africa
Total population	1 152 115	99 193	51 770 560
Working age (15-64)	68.5%	69.5%	
Unemployment rate	36.6%	23.4%	29.8%
Youth unemployment rate	47.3%	30.4%	
No schooling aged 20+	3.0%	2.4%	8.6%
Higher education aged 20+	12.0%	9.3%	11.8%
Matric aged 20+	30.5%	28.4%	28.9%

#### College context (college management status, infrastructure at colleges, resources and capacity)

Before 1999, the West Coast College (as it is known today) consisted of several small satellites that were merged together in 2003 and officially declared as a TVET college. It was the last TVET College to be formed in the Western Cape. The West Coast College is unlike the other colleges that formed around a hub of existing technical systems and had to be established from scratch. Today it consists of 5 campuses: Citrusdal, Atlantis, Malmesbury, Vredendal and Vredenburg. The college has continued to expand its courses and total student numbers had grown to 8 450 in 2013<sup>48</sup>.

<sup>47</sup> Census. 2011. Obtained 15 November 2014 [http://beta2.statssa.gov.za/?page\_id=993&id=saldanha-bay-municipality] & [http://beta2.statssa.gov.za/?page\_id=1021&id=nelson-mandela-bay-municipality]

<sup>&</sup>lt;sup>48</sup> Obtained 15 November 2014 [http://www.westcoastcollege.co.za/]



<sup>&</sup>lt;sup>46</sup> Interview with WC College lecturers, 13 October 2014

Through its involvement with the merSETA, the WC College was approached to become part of the DSAP. In terms of staff participating in the DSAP from the WC College, there are three persons – one Welding lecturer and 1 HOD and 1 support staff member. The College has no reported management deficiencies and has the basic required infrastructure to host the DSAP for Welding. A few capacity constraints were mentioned, specifically with regards to the workshop training facilities at the college that cannot accommodate large numbers of students<sup>49</sup>. Apprentices must observe each other in small groups and only a few will have the opportunity to practice hands-on<sup>50</sup>, highlighting the importance of having access to workplace experience. Also, the lecturers pointed out that for the next intake of DSAP apprentices, the numbers should be decreased to allow for the limited space at the College.

The Port Elizabeth College (PE College) was founded in January 2002 as a result of the merger between the three technical colleges in Port Elizabeth, namely, Russell Road, Bethelsdorp and Iqhayiya. It consists of 5 campuses across Central, Struandale, and the Northern Areas. Through its involvement with the merSETA, the PE College was approached to become part of the DSAP. In terms of participating staff from the PE College, there are 6 lecturers involved in teaching DSAP apprentices as well as the HOD and 2 support lecturers who teach the Fundamental subjects (Maths and English) and Computer studies. The College has been placed under administration so there are some concerns around management structures and financial management at the College. This has implications for the morale of college staff and lecturers<sup>51</sup>.

In addition, throughout the site project meetings, PE College reported lacking in both capacity and resources. The College has been searching for additional DSAP lecturers but has not, to date, found suitable candidates. The need for updating existing equipment in order to teach apprentices the basic competence skills has also been raised by the College and a resource requirement list was shared at the August site meeting. The PE College lecturers involved in the DSAP had identified a particular piece of equipment to be bought and had obtained a quote for this. The HOD requested support during the September monthly site project meeting to take this quote to the financial manager of the college and it was recommended that the employers and merSETA support the HOD with the justification of the purchase to the financial manager of the college by accompanying him to this meeting. At the time of writing the report, this had not yet taken place. It might be good practice from a project implementation point of view to conduct a 'capacity and resource requirement list' at all future potential colleges so that any such challenges can be dealt with during the selection phase of implementation of the DSAP.

<sup>&</sup>lt;sup>51</sup> DSAP Report to Steering Committee, 23 October 2014



<sup>&</sup>lt;sup>49</sup> Interview with WC College lecturers, 13 October 2014

<sup>&</sup>lt;sup>50</sup> WC College apprentice focus group, 14 October 2014

#### The DSAP Trades (learnerships vs. apprenticeships)

At WC College, DSAP apprentices are training in the Welding trade. They are involved in apprenticeships at their employers and at the College whilst following the NCV curriculum. This is how the DSAP was envisaged to take place.

However, at PE College, DSAP apprentices are involved in learnerships at their employers, not apprenticeships, and they also follow the NCV curriculum at the college. This is due to the fact that mechatronics is not a registered trade yet. Steps have been taken to have it registered and a trade test put in place which is vital to the success of the DSAP project at this site. To this end progress has been made and the National Artisan Moderating Body (NAMB) is waiting for confirmation from merSETA that mechatronics has been registered as a qualification. Therefore the apprentices are currently operating under a learnership agreement with the employers. Mechatronics is a complex trade and involves a number of elements. This means that the workload and practical skills that need to be learnt by apprentices is onerous<sup>52</sup>.

The learnership and apprenticeship processes are quite different. The learnerships are structured and guided by the South African Qualifications Authority (SAQA) which provides the National Qualifications Framework (NQF) where content of the training is aligned with unit standards that form the basis of assessment of competence. In essence, at PE College the DSAP is running as a parallel system where the employers are following the NQF curriculum and the college is following the NCV curriculum. The struggle to integrate these two systems is apparent when examining the minutes from monthly site project meetings at PE College as well as from the Steering Committee meetings. Employers and the College mainly seem to discuss operational challenges of implementing the required integration activities of the DSAP, such as the logbooks. Logbooks make sense in the context of apprenticeships but maybe less so in the context of learnerships where a Portfolio of Evidence (POE) is required. For this reason, it is critical that a platform is created where the College lecturers can engage with the trainers from the employers (not the HR staff member or the Head of the training unit) but those who work with the apprentices so that, together, they can map and align these two parallel systems into a more integrated Dual System. From here, it will hopefully be easier to see how the logbook and the POE can work together without causing duplication of efforts or confusion.

#### **4.3.2** Implementation of the DSAP at the Colleges

This section details how the DSAP was implemented at the WC and PE Colleges by means of a table. The elements included in the table are discussed below.

<sup>&</sup>lt;sup>52</sup> DSAP Report to Steering Committee, 23 October 2014



COMPARISON	WEST COAST SITE	PE SITE
Trade	Welding	Mechatronics
1. Number of DSAP	24	16
apprentices	Dormac: 22	Volkswagen: 12
	Westarcor: 3	Johnson Control: 2
		Continental: 2
2. Rotation cycle	Every 7 days, a group of 11 apprentices are at the workplace for 7 days <sup>53</sup> while the remaining 11 are at the college. After 7 days, they rotate again.	Every 2 weeks at the workplace for 2 weeks and then rotate back to the college for 2 weeks.
3. Number of DSAP	1 lecturer for Welding Level 3 and 2	6 lecturers and 1 DSAP support staff
Lecturers and Subjects	DSAP support staff (HOD). Other	(HOD). Subjects:
	subjects:	Mechatronic Systems Level 2 and 3,
	Maths, English, Life Orientation,	Mechanical subjects Level 3 and 4,
	Material Technology, Engineering	Electro Technology Level 2, 3 and 4,
	Practical and Maintenance,	Stored Programme Systems Level 3.
	Engineering Graphics and Design	Fundamental subjects: Maths, English, Life Orientation, Introduction to
		computers Level 3 (these have 2
A Trading of student		additional lecturers)
4. Tracking of student	Exams, practical marks	Exams, practical marks
academic performance		
5. Tracking of student	Comet	Comet
competence performance		

#### **1.** Number of DSAP apprentices

There are currently a total of 40 DSAP apprentices across both sites. At the WC College, 40–30 potential apprentices were initially selected, but 5 have dropped out of the programme. At PE College, there are currently a total of 16 DSAP apprentices. Here, two apprentices dropped out but were replaced by two new apprentices (from the NCV). These two new apprentices have a lot less time compared to the others in which to complete the DSAP.

#### 2. Rotation cycle

At WC College, apprentices see their Welding lecturer only one day out of the 7 day college rotation, for one lesson. During this time, DSAP apprentices have to catch up in their own time what they have missed while at the workplace and apprentices indicated they find this very stressful<sup>54</sup>. When they are at the college, they have to catch-up on all the work they missed and often, they feel very tired after having worked shifts in some cases. This is not necessarily undesirable as they gain exposure to the realities of their future vocation and through this exposure they may decide that this is not the type of career for them<sup>55</sup>.

<sup>&</sup>lt;sup>55</sup> Interview with Claudia Rudolph, 14 November 2014



<sup>&</sup>lt;sup>53</sup> The college plans on changing this to a 10-day timetable from 2015. It is not clear how this will impact on the DSAP with regards to employers, however, from a project meeting in September, there were indications that this would not adversely affect the employers.

<sup>&</sup>lt;sup>54</sup> WC College apprentice focus group, 14 Oct 2014

The initial rotation cycle at PE College consisted of one week at workplace, one week at college but during the March site project meeting, employers requested that this be changed to a two-week rotation. This came into effect from July onwards. However, by September 2014, this bi-weekly rotation had only been tested for two or three rotations due to disruptions such as strike action at the college as well as the exams. It was decided that the college and employers would provide more feedback on this system once it has been implemented over a longer period of time<sup>56</sup>.

#### 3. Subjects and DSAP lecturers

At WC College, there is one main lecturer involved in teaching Welding to the DSAP apprentices. An additional two WC College staff (including the HOD) support the Welding lecturer in the DSAP. At PE College, there are 6 lecturers involved in teaching mechatronics to DSAP apprentices. An additional two lecturers provide teaching in fundamental subjects to the DSAP apprentices as well as computer training. The HOD plays a supportive and coordinating role at the PE College.

#### 4. Tracking of apprentice academic performance

At WC College, marks for NCV students and DSAP apprentices consist of an exam mark as well as a practical test mark. During the May site project meeting at the WC site, it was reported that DSAP apprentices had shown an improvement in their academic marks. DSAP apprentices were struggling with Maths marks and it was suggested that this be investigated further to identify the root causes for this low performance in Maths<sup>57</sup>. Additional support measures have also been implemented by the college. The Maths marks were discussed in more detail during the September site project meeting. During this discussion, copies of the exam results for DSAP apprentices and NCV students were provided. The lecturer pointed out that with regards to Maths there is a significant difference between the test marks and the task marks (practicals) for students. This can be due to the level of assessment used in the tasks as opposed to the tests. However, the lecturer expressed his concern that the marks are not a true reflection of what students know and that the curriculum needs adjustment. The lecturer feels that the content of the NCV curriculum is good but the time allocated to practical vs theory is not good. This may also explain why there is such a difference between the test and task marks<sup>58</sup>. A positive observation during this meeting was that although the Maths marks are still low, it can be seen that the DSAP apprentice marks are not worse than the NCV student marks. This indicates that the time away from class is not necessarily negatively affecting DSAP apprentice marks. The final marks for the year, due in December 2014, will hopefully be used to demonstrate this.

At PE College, the exam results of apprentices were a cause for concern at the Steering Committee Meeting of July 2014. Here, the strike action at the college during the first term was discussed as a contributory factor of

<sup>&</sup>lt;sup>58</sup> DSAP Monthly Project Meetings, WC, 25 September 2014



<sup>&</sup>lt;sup>56</sup> DSAP Monthly Project Meetings, WC, 23 September 2014

<sup>&</sup>lt;sup>57</sup> DSAP Monthly Project Meetings, WC, 21 May 2014

the low exam marks<sup>59</sup>. At the monthly site project meeting in August, it emerged that some apprentices had failed their exam re-writes. The minutes from this meeting explains, "it was agreed that VW would be able to replace these learners, but with an extended period for the new learners (to compensate for the missing workplace experience) and no additional funds being provided by merSETA"<sup>60</sup>.

In terms of exams, the college requested that DSAP apprentices have extra time at the college before the final exams in order to have more time to prepare for the exams. As passing the NCV is a requirement to remain on the DSAP, this additional time is a priority for all implementing partners. It was agreed that the necessary timetables would be provided to employers to assist in their planning. In addition, VWSA noted in this meeting their concern over the "current level of hand skills (illustrated by an assessment shown to the meeting) and the amount of time required to implement the catch up plan to get the students to level 3" <sup>61</sup>. This resulted in implementing additional support in the form of training on Saturdays for apprentices at VWSA. The low level of technical competence of DSAP apprentices is pointing to potential delays in achieving practical competence via the trade test.

This emerged from both sites. It might have to be considered to extend the DSAP from a three-year programme to a four-year programme.

#### The DSAP-NCV Exam Failure Policy

The NCV exam failure policy was discussed at the WC as well as the PE meeting. At the March site project meetings at WC and PE, it was agreed that DSAP apprentices would be required to obtain a pass mark of at least 50% in all core subjects and 40%/30% in all fundamental subjects. Furthermore, it was decided that lecturers should inform the apprentices that a mark of 50% in all subjects would be expected of a DSAP apprentice. Should an apprentice fail an exam, they are allowed one re-write where after, should they fail again, the apprentice will be taken off the DSAP and would have to return to the full-time NCV. This failure policy was communicated orally to the apprentices on the day of this monthly site project meeting. Apprentices were also informed that attending the fundamental classes and the provided additional learner support would be compulsory and failure to attend would result in non-payment for the day.

It was reported at the next meeting that an official document containing the DSAP failure policy was formulated and handed to students to sign. However, there is an issue with a re-write scheduled for June in the document – this is not practical and will be revised to show that the only re-write opportunities will take place the following year in March<sup>62</sup>. In essence then, DSAP apprentices have a total of three chances to pass: June exams, November exams and the March exams in the following year. It was suggested that this

<sup>&</sup>lt;sup>62</sup> DSAP Monthly Project Meetings, WC, 25 June 2014 & 25 September 2014



<sup>&</sup>lt;sup>59</sup> Steering Committee minutes July 2014

<sup>&</sup>lt;sup>60</sup> DSAP Monthly Project Meetings, PE, 19 August 2014

<sup>&</sup>lt;sup>61</sup> DSAP Monthly Project Meetings, PE, 19 August 2014

discussion be put on hold until after the Trade Test regulations have been finalised by the NSA. A comment was made that, "this will have to be borne in mind when there are new Trade Test guidelines – it may mean two sets of guidelines for two different groups of DSAP students. The other option for those students who do not pass is for them to become full time apprentices although this is not ideal..." because employers such as Dormac, "...would have invested R90 000 per student" by that time.<sup>63</sup> Even if DSAP apprentices fail their exams, they would need to be allowed to attend lectures at the next NCV level (until their re-write in March) in order for them not to fall behind the rest of the DSAP group in their learning<sup>64</sup>. It was recommended at the 22 October site project meeting that clarity around re-writes and exam failure policies should be included into a 'DSAP Code of Conduct' document which will also contain information on absenteeism, etc.

#### 5. Tracking of apprentice competence performance

In order to track the progress of apprentices' competence levels, it is necessary to have an assessment tool that can gauge this. The Competence Measurement in Education and Training (COMET) is a formative competence assessment tool that was introduced by the merSETA in partnership with the University of Bremen (Germany). As stated, "COMET is unique in its ability to measure competence across different occupations; to enhance the development of competence; to contribute to shaping a vocational identity; and, to inform a didactical model for vocational education and training"<sup>65</sup>. Although the trade test is used as an assessment of apprentice competence, this is a purely summative exercise and does not provide time to take corrective action as it takes place at the end of the apprentice's training period.

The COMET was first piloted in South Africa in 2011 in the electro-mechanical (Millwright) occupation. This involved 300 apprentices from 6 different education and training institutions. The purpose was to assess the competence of apprentices with the COMET but also to pilot the Dual System Apprenticeship. In order to do this "testing has to take into account the principles and objectives of vocational education and training (Rauner, *et al*, 2012b). COMET identifies three dimensions as integral to TVET: a content dimension; an action dimension; and a requirement dimension"<sup>66</sup>. It is believed that the COMET as a diagnostic tool has been successful in the following: "...it successfully assessed the competence of individual apprentices; it enhanced teaching and learning through the preparation of TVET lecturers; it pointed out the strengths and weaknesses of the current delivery model; and it enabled comparisons between TVET institutions and between TVET sectors of different countries"<sup>67</sup>. During this process, lecturing staff and industry partners (or 'raters' –

<sup>&</sup>lt;sup>67</sup> merSETA - ILO Publication. May 2014. Large scale measurement of vocational competence development during apprenticeship training, p. 3



<sup>&</sup>lt;sup>63</sup> DSAP Monthly Project Meetings, WC, 25 September 2014

<sup>&</sup>lt;sup>64</sup> DSAP Monthly Project Meetings, PE, 18 March 2014

<sup>&</sup>lt;sup>65</sup> merSETA - ILO Publication. May 2014. *Large scale measurement of vocational competence development during apprenticeship training*, p. 1

<sup>&</sup>lt;sup>66</sup> merSETA - ILO Publication. May 2014. *Large scale measurement of vocational competence development during apprenticeship training*, p. 2

assessors) were also trained to assist in assessment of the COMET. Due to the success of the pilot, the merSETA commenced with extending the COMET to include mechatronics technicians, welders and electricians. It was noted in the May 2014 Steering Committee meeting that fitting and machining and also motor mechanics would be added to the test in 2014.

The COMET was therefore also implemented at the WC College and PE sites and commenced with the development of test tasks. The COMET that was administered in April 2014 therefore served as a test validation exercise where after a number of changes were made to the tests. Once this round of tests was analysed and the necessary changes made to the COMET, a finalised version of the COMET was implemented in September 2014 to approximately 900 apprentices throughout sites in South Africa<sup>68</sup>. The test results should be ready by December, where it is hoped to be presented at a symposium in December 2014.

#### 4.3.3 Implementation of DSAP at the workplace

After discussing how the DSAP was implemented at the colleges in the previous section, it is now necessary to examine how the DSAP was implemented at the different employers or workplaces that form part of the WC and PE sites. The table provides a brief comparison between the different employers on a number of factors that are discussed in more detail in this section.

	WEST COAST SITE		PORT ELIZABETH SITE	
	Dormac	Westarcor	VWSA/Johnson Controls	Continental
1. Previous experience with	Yes	Yes	Yes	Yes
apprenticeship / learnership				
programmes				
2. Presence of an in-house	No	No	Yes	Yes
training curriculum				
3. Stipend amounts	Bargaining	Sectoral	Sectoral	Bargaining
	Council	determination	determination	Council
4. Commencement of workplace	06 January 2014	02 December	25 November 2013	
training		2013		
5. Induction process	Yes	Yes	Yes	Yes
6. Rotation cycle	Weekly rotation		Bi-weekly rotation	
7. Where workplace training	Onsite	Onsite	Training centre	Onsite
takes place	Offsite		Onsite	
8. Scope of training available	Unpredictable		Predictable	
9. Identified areas for apprentice	NA		Hand skills and electrical	
support at workplace				
10.Tracking of student	Logbook		Logbook and Portfolios of Evidence	
competencies				

<sup>68</sup> DSAP Monthly Project Meeting, WC, 22 October 2014



#### 1. Previous experience with apprenticeship programmes

Whilst all the current employers are experienced in terms of providing workplace training to apprentices, their experience is largely related to the traditional forms of apprenticeship/learnerships where they:

- are not required to liaise as extensively (if at all) with colleges in terms of curriculum and scheduling issues; and
- are able to implement their own training curricula as planned without having to necessarily take a whole separate system (i.e. the college and its associated training processes) into consideration.

Furthermore companies generally work from a trade training schedule which is, in essence, the 'written curriculum'. It cannot, therefore, be assumed that all companies have the necessary levels of teaching and learning experience that are required to take the written curriculum and contextualise it appropriately.

#### 2. Presence of an in-house training curriculum

At the WC site, neither of the employers has a fully-fledged training curriculum in place, but employs a schedule/workplace rotation that allows students to progress through the various stages of experience.

The PE site on the other hand differs in that VWSA and Continental are accredited training providers and VWSA has an established and fully functioning Training Centre and training course in the form of a learnership. As such, sophisticated planning and scheduling procedures are followed to ensure that all the apprentices within each organisation are accommodated sufficiently at the core workplace training areas.

#### 3. Stipend

As previously discussed, the uneven spread of stipends paid to apprentices has been a particular challenge to the Project and is unlikely to be resolved in the near future.

#### 4. Commencement of the DSAP at sites

It was decided that there would be different commencement dates for the different colleges in order to accommodate the different stages where the DSAP was at. A number of factors had to be considered, such as when employers wanted apprentices to commence at their workplace, as well as the apprentices' examination schedules in October/November 2013 at the college. Due to these considerations, some apprentices commenced at the workplace during November/December 2013 to allow them to gain some practical work exposure at their host employer. Once colleges resumed training in January 2014, the learning switched to the dual timetable<sup>69</sup>.

<sup>&</sup>lt;sup>69</sup> Steering Committee minutes June, July, September 2013



#### 5. Induction

Employers provided induction sessions (to a greater or lesser extent) for their apprentices. In general, the induction sessions encapsulated elements of the companies' in-house inductions, where attention is focused on introducing the new employee to the organisations' formal human resources (explanations of policies; codes of conduct etc.)<sup>70</sup>. SSACI was present at the VWSA induction session with the DSAP apprentices and witnessed the contract signing process.

Initially, SSACI did not envisage the need to provide employers with guidance around induction, but it emerged that some companies did not undertake this core element of the Project sufficiently.

The induction session presents a critical, formalised opportunity for employers to deal with issues related to the following:

- HR matters and the contents of the contract expectations around working hours (including weekends and holidays, where necessary), stipends, overtime, reporting structures within the organisation.
- Apprenticeship matters identification and allocation of artisan/s to train and mentor the apprentice/s; role clarification of employer, college lecturers, merSETA etc.; reporting structures within the DSAP; rotation between college and workplace; explanation of processes related to the assessment of competence (with reference to the logbook).
- Unique workplace matters discussion of procedures for onsite/offsite work (health assessments etc.); clarification of what work will be done during 'quiet time' for the company (where relevant); discussion on the expenses related to purchasing consumables for apprentices to get an understanding of the costs related to workplace practice.

More oversight over the induction sessions is required in future to ensure that this platform is adequately used to manage expectations, to 'set the scene' for the DSAP by relaying crucial information in a consistent and systematic way, and to pay due diligence to the overall contract signing process<sup>71</sup>.

#### 6. Rotation

As previously discussed, the rotation system at WC site is weekly, whilst at the PE site it is bi-weekly.

Of particular interest is the added complexity related to the rotation system employed at Dormac at the WC site. The employer has signed on 22 apprentices but is unable to host them all simultaneously during their

 <sup>&</sup>lt;sup>70</sup> Interview with Claudia Rudolph, 14 November 2014
 <sup>71</sup> Ibid.



scheduled workplace training every second week. As such, the apprentices have been divided into two groups of 11 and they then rotate between the workplace and the college on a weekly basis<sup>72</sup>.

This implies that at any given time in the year (apart from college examination periods) Dormac has 11 apprentices in the workplace, while the college has the remaining 11 apprentices.

This results in the following significant implications:

- Employer: has to keep 11 apprentices busy throughout the year which differs from the other DSAP employers in that there is no week where the apprentices are not at Dormac.
- College lecturers: have to repeat the same classes weekly to accommodate the split rotation of the Dormac apprentices.
- Dormac apprentices: there is an inherent inequality in the amount of exposure to offsite workplace experience accrued. This systemic bias is something that the employer cannot address in that it literally comes down to 'luck of the draw' in terms of what work is available at any given point in time. This would not necessarily be problematic if the students were all in one group but the split rotation has resulted in the uneven acquisition of offsite work experience for apprentices, with one group consistently having more exposure<sup>73</sup>.

#### 7. Where workplace training and experience takes place

At the WC site, both employers offer onsite<sup>74</sup> training opportunities for apprentices, to a lesser or greater extent.

In the case of Westarcor, onsite training provision is in line with their operational structure, in that the majority of the work is conducted on the premises – so apprentices are exposed to authentic real-world experiences on a daily basis.

Dormac, on the other hand, conducts a large portion of its core operations offsite (on a rig, for example) and as such, the apprentices' exposure to this real-world learning situation is dependent on whether there is a current job that requires them to be offsite, and then crucially, whether they are actually scheduled to be 'at work' for that time. This means that when the apprentices are not offsite, they are either working on actual, authentic jobs that take place in the onsite workshop, or are exposed to simulated practice opportunities onsite.

At the PE site, VWSA and Johnson Controls apprentices are trained together for the majority of the time at the VWSA premises. Given the existing training programmes running at VWSA, the company has a fully-fledged

<sup>&</sup>lt;sup>74</sup> 'Onsite' is understood to include all elements of work that take place on the employers' premises. 'Offsite' relates to work undertaken off the employers' premises.



<sup>&</sup>lt;sup>72</sup> Focus group with Employer, 22 October 2014

<sup>&</sup>lt;sup>73</sup> Focus group with Employer, 22 October 2014

Training Centre on the premises. It was never the initial intention of the DSAP to have apprentices actually spending time at the Training Centre (as the assumption was that they would be competent enough to move straight into working in the Production Plant), but experiences thus far related to the apprentices' lack of necessary hand skills, for example, has resulted in apprentices not really gaining actual authentic workplace experience as they have spent the majority of their time at the VWSA Training Centre.

As such, the actual implementation of the DSAP at the workplace needs to take the differing operational structures of employers as well as apprentice competences into consideration as this impacts on the various 'depths' of workplace experience apprentices are acquiring:



The assumption cannot necessarily be made that apprentices, by virtue of being 'at the workplace', are acquiring the same depth of authentic experience. For example:

- At Dormac: apprentices are exposed to both onsite and offsite workplace experiences. The interplay between these two contexts is important. The offsite workplace experience is crucial because when apprentices are onsite; they may not necessarily be engaged in 'authentic' work experience (depending on whether there is actual work available) and may be exposed to more 'simulated' experiences<sup>75</sup>.
- At Westarcor: apprentices are exposed to onsite workplace experience<sup>76</sup>.

<sup>&</sup>lt;sup>76</sup> Interview with Employer, 15 October 2014



<sup>&</sup>lt;sup>75</sup> Focus group with Employer, 22 October 2014

- At VWSA and Johnson Controls: apprentices are exposed to an additional layer of simulated exposure in the Training Centre. Their more 'authentic' work experience would be actually working in the onsite Production Plant<sup>77</sup>.
- At Continental: apprentices are exposed to onsite workplace experience.

This apprentice highlighted the importance and excitement associated with working in a real-world situation at WC: "There was a time where a rig was here. Was very exciting, it broadens your mind-set about welding and boiler making. To see what is waiting for us in the industry. We got induction cards and also went for a medical. We had access to these things and it was a good time to learn"<sup>78</sup>.

#### 8. Scope of training available

The scope of the workplace training provided by the two employers in the WC site is unpredictable. The employers' ability to provide apprentices with workplace experience is heavily reliant upon the availability and securing of work contracts, which results in:

- Apprentices not necessarily gaining experience in the full spectrum of competencies required, as the job-at-hand may only require a certain type of welding<sup>79</sup>, for example.
- Lulls and 'quiet time' during parts of the year where apprentices are not necessarily able to practice other competencies adequately and are then engaged in 'housekeeping' tasks for the employers.

At the PE site, the nature of the workplace operations, being more 'production' orientated implies that the scope of training offered by the three employers is more predictable. This is also aided by the fact that there are existing training programmes, curricula and schedules in place to guide the apprentices' progression through various 'stations' within the production line. As such, there is no real reliance on outside factors (i.e. securing of job tenders etc.) to provide a training 'space' for apprentices, as the onsite/plant structures can adequately dictate the possible scope of training. In this way, the 'predictable' nature of production-type companies appears to simplify the process of aligning workplace and college training.

#### 9. Identified areas for apprentice support at workplace

The apprentices at the PE site require specific additional support (thus far) in hand skills and electronics. This has had significant implications for the implementation of DSAP at PE in the sense that it was assumed that students would have a certain level of competency in each of these by the time they entered the workplace. In an attempt to bridge this gap, VWSA provided a supplementary training programme (offered on a Saturday

<sup>&</sup>lt;sup>79</sup> Focus group discussion with apprentices, WC site, 14 October 2014



<sup>&</sup>lt;sup>77</sup> Focus group with Employer, 20 October 2014

<sup>&</sup>lt;sup>78</sup> Focus group discussion with apprentices, WC site, 14 October 2014

morning at the Training Centre) to apprentices. Whilst crucial in the endeavour to bring the apprentices up to standard, the introduction of additional training resulted in increased pressures on the apprentices' workload.

#### 4.4 Curriculum Integration

Curriculum integration refers to all discussions and activities around aligning the NCV curriculum with the workplace training outcomes.

#### 4.4.1 Description of Curriculum Integration Processes

A fundamental design element in the DSAP is the integration and alignment of the NCV curricula with the corresponding SETA Trade Test and training schedule, so as to ensure that the dual-system mechanism (rotation between the college and the workplace) can take place meaningfully. This is particularly important given the emphasis in the model to provide apprentices with an opportunity to take the theory and simulated experiences gained in the college and apply it (within a few days) in a real-world working environment. The entrenchment of theory and practice that takes place within close succession of each other, in an authentic setting, is a distinguishing feature of the DSAP.

The curriculum integration process encapsulates the following elements:

- The alignment of the NCV curriculum with the apprenticeship training schedules;
- The monitoring and tracking of the integrated curriculum through the completion of logbooks that are signed off by apprentices, colleges and employers (which implies a level of synchronisation and alignment); and
- The various assessment opportunities.

The Project scope, as detailed in the Revised Business Plan, states that dual-system curricula will be developed for each of the trades. It was envisaged that this would be done by involving "[c]ommunities of expert practitioners in technical and pedagogical fields [that] will assist in integrating all three levels of the existing NCV curricula with the SETAs' trade training schedules, the QCTO's descriptions of occupational competences and the employers' operational needs, and then in developing sequenced learning programmes that will include content, methodology, lesson plans and assessments"<sup>80</sup>. These experts would be sourced from the DHET, Umalusi, QCTO and its Development Quality Partners and Assessment Quality Partners for the selected trades, SETAs, industry practitioners, international experts, etc.<sup>81</sup>. In addition, the Project made provision for the appointment of a dedicated curriculum developer who would form part of the SSACI project staff.

 <sup>&</sup>lt;sup>80</sup> DSAP Revised Business Plan, 24 Sept 2014, p. 4
 <sup>81</sup> Steering Committee minutes June 2013



The monitoring tool that is able to assess the extent to which the integration of the curriculum has taken place is the logbook. SSACI designed a training logbook that was approved by merSETA ETQA, in an effort to "ensure that no matters of quality assurance will arise at a later stage, which may delay trade access/certification of DSAP learners"<sup>82</sup>. The logbook serves to document the cumulative learning and experience that has taken place for each apprentice throughout the course of the apprenticeship. It consists of two components:

- A training record that shows the alignment between the NCV and the apprentice training. The apprentice, the college lecturer and the employer are required to sign off to certify that the apprentice has indeed completed the required task.
- A weekly narrative record of training apprentices are required to complete a short description of their activities (in the workplace and in the college) on a weekly basis<sup>83</sup>. This is also signed off by all three.

The correct completion of the logbook is crucial and apprentices are advised as follows: "Be aware that this logbook is proof of your training, and thus the entrance ticket for you to take a trade test and become a fully qualified artisan"<sup>84</sup>. It is the responsibility of the merSETA (via their regional offices) to regularly audit the quality of the logbooks<sup>85</sup> as part of their monitoring and verification processes<sup>86</sup>. However, as the logbooks are such a critical indicator of Project progress, it is highly recommended that SSACI also monitor the extent to which logbooks are completed.

Lastly, in terms of assessment, the apprentices are exposed to the following:

- Internal formative and summative examinations and practicals at the college;
- Formative and summative assessment at the workplace;
- The COMET; and
- The Trade Test (summative assessment).

## 4.4.2 The Curriculum Integration Process at Site Level

The table below presents a summary of the Project's key activities and associated outputs related to the integration of the curricula<sup>87</sup>:

<sup>&</sup>lt;sup>87</sup> DSAP Revised Business Plan, 24 Sept 2014, p. 10



<sup>&</sup>lt;sup>82</sup> Steering Committee minutes September 2013

<sup>&</sup>lt;sup>83</sup> Logbook Final Mechatronics

<sup>&</sup>lt;sup>84</sup> Ibid.

<sup>&</sup>lt;sup>85</sup> Feedback provided by Ken Duncan, 20 November 2014

<sup>&</sup>lt;sup>86</sup> Interview with Tsholo Mungoni, 24 November 2014

Activity	Output
Lead project facilitator managing curriculum integration and DSAP process in selected 3 colleges (Lead facilitation);	Curriculum integrated for first level and three trades; Assessment specifications and processes aligned with latest national requirements
Local technical/non-technical experts assist TVET colleges in curriculum integration and assessment process (up to 2 per college with 2-3 days per month)	Curriculum integrated for first level Assessment specifications and processes aligned with latest national requirements (NCV, trade test)
International technical/non-technical experts (3 experts – one for each college – each for 7 days) assist TVET colleges in aligning training to international best practices	Curriculum and actual training aligned to international best practices

The collaboration of technical and pedagogical experts, the Project curriculum developer, and the colleges are emphasised as key design elements in the goal of integrating the curricula in the DSAP. During the first year of the Project, however, whilst some progress has been made in both sites related to the curricula (discussed further in the following section), this crucial mechanism has not been optimally realised. From a project management perspective, this is largely attributed to the following:

- Reordering of Project priorities: the dedicated curriculum developer joined the Project in this capacity
  in May/June of 2013. In October 2013 the Project Manager resigned and the curriculum developer
  took over the project management activities in addition to her curriculum-focused responsibilities. As
  a result, the priority of developing and aligning the curricula was surpassed by the need to ensure that
  sites were operational (that employers were identified and contracted, that the necessary processes
  surrounding student selection were finalised etc.).
- Technical and pedagogical experts have not yet been involved in the Project: a list of potential experts
  was drafted<sup>88</sup> but thus far there has been no evidence of these individuals being contracted or
  incorporated into the curriculum design and alignment process.

As such, the intended dosage<sup>89</sup> of curriculum development/integration support by the Project to the colleges has been significantly less than anticipated. As summarised by the curriculum developer, "still it appears that now that we are getting further into training a lot of integration with the workplace and more communication between college and industry needs to happen to ensure that the standard of training remains high and achieves the desired outcomes"<sup>90</sup>.

The following section presents a summary of the progress made and challenges arising from the curriculum development and integration at each site.

<sup>89</sup> Dosage refers to the amount of planned level of intervention activities to the intended beneficiaries

<sup>&</sup>lt;sup>90</sup> Email correspondence with Claudia Rudolph, 01 October 2014



<sup>&</sup>lt;sup>88</sup> Steering Committee minutes July 2013

#### 4.4.2.1 Curriculum Integration at WC Site

A mapping exercise of the existing NCV curriculum and the merSETA's trade training schedule for welding was completed. During this process, the lecturers at WC College compared the content associated with the NCV codes and the corresponding apprenticeship codes and found approximately 80-90% congruence in terms of theoretical content. Some gaps, however, emerged in covering some of the practical elements<sup>91</sup> of the trade.

A discussion<sup>92</sup> with the lecturers at WC site revealed the following concerns surrounding the curriculum:

- Constraints related to the curriculum: they are required to follow the NCV curriculum and are somewhat constrained in terms of how to address practical components they cannot adapt the curriculum if the employer is offering practical skills that are ahead of the actual curriculum. If the practical skill that the employer exposes the apprentices to is only at a later level, the lecturer may not necessarily address that in the class, which makes it more difficult to keep the curriculum aligned. This was echoed by the apprentices who stated that their trainer at Dormac was attempting to help them but they then realised that "what he is teaching us is different to what we are doing in the curriculum"<sup>93</sup>.
- Various levels of workplace exposure: they will need to ascertain what additional training each apprentice needs (due to the apprentices being exposed to varying levels of experience, as discussed earlier) and will have to address this during the 'brush up' sessions before the Trade Test. There is no other place where an assessment can be made to address the varying levels of training received.

In an attempt to provide more guidance to the college and the employers regarding gaps that still remain at the end of the NCV, one of the WC College lecturers designed an additional learning content overview document. The rationale behind this document was that it could serve as a discussion and planning tool to address remaining gaps ahead of time and not only at the brush-up at the end<sup>94</sup>.

The points below summarise key observations and/or concerns raised by employers regarding their experiences of the curriculum integration process:

 Employers are not adequately informed by the Colleges as to the teaching and examination schedules: At Dormac, this was expressed as a challenge in that "we don't know what they are doing at the college, so we can't push [the apprentices] if we don't know what they know. The college and the employer must come together and make a programme for the students to go forward". At Westarcor, the concern was not so much about being able to integrate the various aspects of welding (as this

<sup>&</sup>lt;sup>94</sup> DSAP Monthly Project Meetings, PE, 25 June 2014



<sup>&</sup>lt;sup>91</sup> Interview with Claudia Rudolph, 29 September 2014

<sup>&</sup>lt;sup>92</sup> Interview with WC College lecturers, 14 October 2014

 $<sup>^{\</sup>rm 93}$  Focus group discussion with apprentices, WC site, 14 October 2014

would happen anyway given the broad spectrum of work available to the apprentices) but was focused more on not knowing when the examinations etc. were taking place, which has implications for their planning and work allocation processes.

- Some employers are not signing the logbooks optimally: the trainers at Dormac confirmed that the logbooks have not been signed regularly<sup>95</sup>. They noted that the students need to understand the importance of providing proof of the work completed before the logbook can be signed.
- Keeping apprentices busy during quiet times: At Dormac the concern was raised around keeping apprentices busy during quiet times, particularly during December holidays. The trainers state that the apprentices can practice on scrap metal available during these times. This is perhaps a missed opportunity as apprentices could be clocking up valuable experience if the employer was able to address gaps in the curriculum during these times.

An apprentice succinctly stated the importance of the interplay between theory and practice: "If we do more practical then it can help us with the theory. I didn't understand the gauges well but now it is second nature. We have sketches and stuff in our heads because we do it every day. With arc welding, you know the negative cable goes here... you don't need to study where the cable goes. If you do it practically, you can learn better"<sup>96</sup>.

#### 4.4.3 Curriculum Integration at PE Site

Curriculum matters at the PE site are considerably more complex than at the WC due to the nature of the parallel systems (learnership and apprenticeship) at play. This has problematized the alignment of the NCV curriculum and the apprenticeship training in that there is significant incongruity between the "practical standard accepted by the college and those accepted by the workplace" <sup>97</sup>.

At a dedicated curriculum integration workshop in July 2014, a comparison of the specific topics in the NCV level 2 curriculum with the unit standards of the level 2 learnership was presented by the college, "highlighting some differences but noting that the college was generally responsible for the delivery of the NCV and the employers for the unit standards of the learnership"<sup>98</sup>. At this workshop, VWSA reported that it had conducted a 'recognition of prior learning' (RPL) assessment on the DSAP apprentices and that they had shown low levels of competence, particularly related to hand skills and electronics, pointing to a gap

<sup>&</sup>lt;sup>98</sup> PE Curriculum integration workshop, 22 July 2014



<sup>&</sup>lt;sup>95</sup> Interview with Employers, 22 October 2014

<sup>&</sup>lt;sup>96</sup> Focus group discussion with apprentices, WC site, 14 October 2014

<sup>&</sup>lt;sup>97</sup> DSAP Report to Steering Committee, 23 October 2014

"between the standard of simulated practical training provided to the learners by the college and the standards expected/provided by industry"<sup>99</sup>.

Furthermore, the implementation of the logbook was challenging, as the learnership model makes use of the portfolio of evidence that shows the cumulative learning of the apprentice. In terms of the apprenticeships, the logbook serves a similar purpose. Therefore, the fact that the PE apprentices are functioning in a learnership environment implies that the employers require the portfolio of evidence and the college requires the logbook. The need has now arisen for both documentation processes to be followed.

In summary, "the programme currently being run was not sufficiently integrated to be considered a true 'dual system' but was more like two separate learning programmes being run in parallel, with a certain amount of synchronisation"<sup>100</sup>.

Several remedial actions<sup>101</sup> have been tabled at the site project meetings in an effort to address this issue:

- VWSA would need to share their training manuals for RPL for the college to be able to better prepare the apprentices for the upcoming assessments.
- Colleges will run an intensive practice session for apprentices on hand-skills. This will be done on Friday afternoons and Saturday mornings. VWSA will also have students practice their hand skills in the training centre.
- Colleges will also address gaps in apprentices' electrical competencies and thereafter electronic competences.
- College representatives would visit VWSA to gain a first-hand understanding of the company's
  production-processes and performance standards and to attend the exit level assessments for each
  unit standard at VWSA in order to better understand what is expected by industry and how industry
  assesses the apprentices' skills.
- The college would explore the possibility of hiring dedicated dual-system instructors.

A discussion with the PE College lecturers highlighted their concerns around curriculum issues for the DSAP:

- Limited time to complete the curriculum The protests resulted in the college losing 5 weeks in total of contact time with the apprentices. It has been impossible to catch this up because they only spend half the amount of time with the DSAP apprentices.
- Differing NCV levels between the college and the workplace At the company, the apprentices are on level 2 but at the college they are on level 3, which is problematic because apprentices are really

<sup>&</sup>lt;sup>101</sup> PE Curriculum integration workshop, 22 July 2014



<sup>99</sup> Ibid.

<sup>&</sup>lt;sup>100</sup> DSAP Report to Steering Committee, 23 October 2014

behind in their work. At the moment, they are not 'up to scratch' on theoretical knowledge for level 3 and while the non-DSAP students are also struggling with this level, the DSAP apprentices are struggling even more. There is going to be a problem when apprentices get to Level 4 because it requires much more work than Level 3 and they may struggle to finish in time.

- The assessment of the apprentices' competencies by VWSA it would have been more beneficial to have had this process done earlier so that remedial action could have taken place timeously.
- A dedicated team is required to teach on the DSAP it is very challenging for the lecturers to teach their normal classes as well as the DSAP, given the time and capacity demands made by both. They would like to visit the workplace and have more engaging consultations with workplace, where issues related to the integration of the subjects, planning work tasks, etc. can be discussed in detail, but their current working environment does not allow enough time for this. Another point related to this is that coordination between the lecturers is complex as there is no real platform at the college where issues in DSAP can be discussed. Departmental meetings are not really adequate for this opportunity. There should also be a timetable that specifically sets out DSAP scheduling.

Employers shared the following insights related to curriculum integration:

- College capacity it cannot be expected of the current teaching staff to run their day-to-day tasks with their workload and then still integrate whatever we're doing into their teaching. They don't have the resources or the capacity<sup>102</sup>.
- The importance of the logbooks: "[the lecturer] would tell us what they had covered in their log books and I would let the managers know where to focus. Their logbooks are important here – [the training coordinator from VWSA] is a scheduler – who looks at what they had completed and then places them where they should be"<sup>103</sup>.

#### 4.5 Benefits of the DSAP

A number of benefits thus far have been identified by the lecturers and apprentices.

#### **Benefits for lecturers**

Lecturers at both colleges expressed positive experiences with the DSAP. Although they acknowledge that much still needs to be done to attain an optimally functioning Project, they feel they can already see differences in the apprentices (described below). In addition, they also commented that through their involvement in the DSAP they have had access to additional opportunities such as meeting more regularly with employers from industry and being involved in the COMET. These types of experiences have benefited

<sup>&</sup>lt;sup>103</sup> Interview with VWSA Employer, 21 October 2014



<sup>&</sup>lt;sup>102</sup> Interview with Employer, 21 October 2014

the way they teach all their students, not just DSAP apprentices, and they are also much more aware of how they set-up their own assessments.

#### **Benefits for apprentices**

Lecturers at both colleges highlighted their observations of how the DSAP has benefited apprentices thus far<sup>104</sup>:

- Improved attitudes towards college and coming to class lecturers commented they enjoy teaching the DSAP apprentices because they are more engaged during class.
- Apprentices are described as being more 'future' directed and seem to think about their careers more seriously than their non-DSAP counterparts.
- There has also been an improvement in student motivation.
- Lecturers also commented that the quality of apprentice also seems to be much better in terms of work quality, social, communication and, generally, better well-rounded apprentice/ worker for the workplace.
- DSAP apprentices have also become role models to other students in NCV level 2.

Apprentices at both colleges expressed the following similar benefits:

- They are much more excited about their future careers which make them more motivated to work harder.
- They are much more aware of safety requirements and are very serious about wearing their protective clothing (PPE).
- The workplace exposure has already meant a lot to the DSAP apprentices. They are much more aware of what will be expected of them once they become qualified. They have also received exposure to new tools and technology which they would never have had if there were not at the workplace.

#### **Benefits for employers**

Despite the challenges of the DSAP, employers are generally positive about the dual-system and find working more closely with the colleges of particular benefit as a first step towards bridging the gaps between industry and college training.

## 4.6 Future Intakes at Each Site

A number of factors should be taken into consideration for future intakes at each site.

 $<sup>^{\</sup>rm 104}$  Focus group with lecturers, WC and PE, 14 and 21 October 2014



- There will not be enough matric candidates to establish a suitably-sized candidate pool for 2015. It was agreed to nevertheless start putting together the candidate pool based on June 2014 exam results, including candidates who do not have matric but are 18 years and older<sup>105</sup>.
- In an effort to increase the number of employers at the site, there may be a possibility to explore employers who are based in Cape Town<sup>106</sup>. Accommodation, however, will be a challenge. A potential solution could be to secure hostel accommodation for apprentices in Cape Town and put them on a 10 day rotation.
- The college indicated that it would not be advisable to take more than 20 students, given the potentially smaller candidate pool. Dormac indicated that an intake of 10 every year might be more viable for them<sup>107</sup>.

#### **PE Site**

- Given the lack of apprentices' basic competencies, any future intake of apprentices would be put on a 4-week hand-skills programme to ensure that their hand-skills were up to standard before they were accepted into the company<sup>108</sup>.
- At the September 2014 site meeting, "it was discussed that DSAP apprentices would need to be carefully selected by the college to ensure that only the right candidates would enter Mechatronics in future, minimum medical tests e.g. colour blindness would need to be performed by the college before entrance into the NCV course to avoid disappointment by apprentices due to non-compliance with medical requirements at a later stage". Given SSACI's understanding that the employers are responsible for the more 'trade-specific' selection criteria, this decision by the meeting may need to be re-evaluated.
- Given the absence of a mechatronics trade test, employers expressed the need to potentially look at other trades that may be required in the region: e.g. Tool-making, Fitting and Turning, Electrical<sup>109</sup>.
- The college has concerns regarding its capacity for a new intake for a different trade (e.g. electrical) and stated that it be given sufficient notice of a new intake in order to mobilise the necessary resources (e.g. hire additional lecturers) to accommodate DSAP in another trade <sup>110</sup>.

<sup>&</sup>lt;sup>110</sup> DSAP Monthly Project Meetings, PE, 23 September 2014



 <sup>&</sup>lt;sup>105</sup> DSAP Monthly Project Meetings, WC, 25 September 2014
 <sup>106</sup> Ibid.

<sup>&</sup>lt;sup>107</sup> DSAP Monthly Project Meetings, WC, 25 September 2014

<sup>&</sup>lt;sup>108</sup> PE Curriculum integration workshop, 22 July 2014

<sup>&</sup>lt;sup>109</sup> Ibid.

## **5 FINDINGS AND RECOMMENDATIONS**

The following findings and recommendations have emerged from the process evaluation. These are presented in terms of: selection and recruitment of colleges, employers and students; contracting of role players; induction; curriculum integration; and communications. Lastly, findings related to the implementation of the model itself are presented.

#### 1. SELECTION AND RECRUITMENT PROCESSES

1.1. The selection of appropriate colleges and employers are critical success factors for the DSAP. Participation in the DSAP involves a significant amount of extra work which has been experienced by companies and colleges who are functioning at optimal levels. This burden will be even bigger for colleges and companies who are not functioning optimally.

RECOMMENDATION: SSACI should develop a comprehensive employer selection process that takes companies and their existing/planned training models as well as their organisational culture into account.

1.2. A potential danger inherent in the DSAP is the fact that due to limited interest from companies, the Project is forced to accept all companies who wish to participate. Currently, this is not necessarily problematic, as the current employers are generally well suited to the DSAP, in that, for example, none are small companies with limited HR and training capacity and all have had experience of providing apprenticeship/learnership training prior to participating in the DSAP.

RECOMMENDATION: SSACI must develop a 'capacity and resource requirement list' at all future potential colleges and companies so that any such challenges in this regard can be identified timeously.

1.3. The quality of the students from which the college can select potential DSAP candidates is limited in the sense that these students are typically weaker in terms of academic performance. This is particularly challenging in that those students who have a Grade 12 qualification (as well as Maths and Science as subjects) are in the minority. This impacts on the number of candidates available for DSAP who meet these criteria. Furthermore, participating in the DSAP requires students to be able to function well on their own as they are out of the classroom for half the curriculum and need to continuously catch-up on content, whilst dealing with the associated pressures of shift-work etc. at the workplace. This places an extra layer of stress on DSAP apprentices. In both sites, additional support has been provided to the apprentices, which was intended to address skills shortages. This however, further contributed to increasing their already burgeoning workload and apprentices may be falling further and further behind.



RECOMMENDATION: Whilst not much can necessarily be done about the quality of the student entering the TVET facilities, add-on support initiatives are not necessarily addressing the cause of the problem, but rather the symptom. As such, it is recommended that a quarterly 'student needs assessment' be conducted by SSACI to establish what the learning challenges for apprentices are. This should then be informed by the shared curriculum planning tools/schedules between the employer and the college, so that rather than introducing more ad hoc support (that then reduces the apprentice's time to engage in other critical teaching and learning tasks) a holistic and integrated plan can be developed.

1.4. Student selection into the DSAP does not currently adequately determine the apprentices' commitment to the respective vocation. The availability of stipends and bursaries can have the unintended consequence of attracting students into vocations that they are not really passionate about. If this is not sufficiently addressed, the investment made by the government, the colleges and the employers will not render the desired results as apprentices may fall out of the programme.

RECOMMENDATION: SSACI to facilitate a targeted career guidance session (in partnership with employers and colleges) to potential candidates that could raise awareness regarding the realities associated with the trade. This could include a presentation by an apprentice at one of the companies who is on a senior level and/or a recently qualified artisan in that trade.

#### **CONTRACTING PROCESSES**

1.5. The lack of standardised contracts thus far has resulted in confusion and distress across the project. In addition, the uneven allocation of stipends for apprentices with the same levels of competence has resulted in dissatisfaction among the apprentices.

RECOMMENDATION: SSACI should ensure that employers and apprentices understand the two different types of contracts and the two different stipend amounts that can be applicable to the apprentices. This should be clearly communicated particularly to the apprentices so that they do not see this as something negative but rather something that is part of working life (where you sign different contracts at different wage levels).

#### INDUCTION

1.6. The induction session with apprentices presents a critical, formalised opportunity for employers to deal with issues related to HR, DSAP and the workplace. This opportunity has not been used optimally as a platform where expectations and open discussions around the realities of the working world have been tabled.



RECOMMENDATION: More oversight over the induction sessions is required in future to ensure that this platform is adequately used to manage expectations, to 'set the scene' for the DSAP by relaying crucial information in a consistent and systematic way, and to pay due diligence to the overall contract signing process.

#### **CURRICULUM INTEGRATION**

1.7. The support that has been provided to facilitate the integration of the curricula at both sites has not been sufficient to bring about the desired results. There has been a lack of technical and pedagogical expertise related to how to bridge the different divides between the NCV curriculum, the apprenticeship training activities as well as the learnership unit standards. Thus far, the curriculum mapping (paper) exercises have been conducted by the colleges and there has been some curriculum integration-focused discussion at the site project meetings.

RECOMMENDATION: SSACI should arrange for the already identified technical and pedagogical experts to provide input to address this issue.

1.8. The monthly site meetings address all issues related to the Project, with curriculum integration identified as an agenda item. Given the complexities surrounding the curriculum integration processes and the fact that this is the only time that the employers and the lecturers meet face-to-face, it may be more beneficial to the Project's overall outcomes if the meetings served as more of a structured platform where industry and the college can grapple with the intricacies of teaching and learning in the classroom and the workplace.

RECOMMENDATION: SSACI to broaden the invited parties to include the training personnel at the companies as well. Given the varying levels of training experience at the companies, the meetings may serve as an enlightening and insightful opportunity for trainers and lecturers alike.

RECOMMENDATION: SSACI to investigate the possibility of rotating the current meeting venues at both sites, i.e. month 1 at the College, month 2 at employer 1, month 3 at employer 2, etc. This way the trainers at each site may be more able to attend if it was hosted at their workplace every third month or so. Furthermore, it will provide further opportunities for the lecturers to visit the workplaces.

RECOMMENDATION: SSACI to revise the current meeting format to focus on key curriculum issues each month. These meetings should be more planning orientated, where (at least in the beginning) the lecturers and the employers discuss the planned teaching activities using the actual course framework from the college, the logbook and the training schedule as discussion tools. This will serve to familiarise all parties with the documents.

1.9. The tools (logbook and training schedule) that have been developed for the monitoring of the curriculum integration at both sites are not being used optimally. For instance, employers at WC are



not aware of the training schedule and are also uncertain about how to use the logbook. At the PE site, there is also uncertainty around how to integrate the use of the logbook and the required POE.

**RECOMMENDATION:** SSACI should re-emphasise the role and importance of the monitoring tools used to track the extent to which curriculum integration is taking place.

RECOMMENDATION: Although the merSETA is legally responsible for auditing the logbooks, SSACI should conduct more frequent logbook audits to ensure they have been completed correctly by all parties.

1.10. Apprentices within the WC site have been exposed to various levels of workplace experience. As such, the college will be required to ascertain what additional training opportunities each apprentice requires, at the 'brush up' stage right before the trade test, which implies an extra level of college administration associated with this.

RECOMMENDATION: The logbook should be used more as a 'planning tool' by the employer so that when there are 'quiet times' the trainers can determine which training area needs more attention.

RECOMMENDATION: In order to address the unavailability of extra consumables for training purposes, it is recommended that a possible solution could be that the college assist by providing the consumables to employers. It will be the responsibility of the college lecturer to work with the employer to identify the types of consumables required and also to apply for funding for this (possibly from the SETAs). It would be necessary for SSACI to determine the viability of this.

1.11. Apprentices at both sites are concerned about the gaps in their practical training that could have severe implications for them passing their respective trade tests.

RECOMMENDATIONS: It is imperative that these concerns be addressed by sharing the anticipated remedial action plans with apprentices to allay anxieties and keep morale amongst apprentices up.

#### COMMUNICATIONS

1.12. There does not seem to be enough communication between all the role players. The monthly site project meetings with colleges and employers attempt to serve this purpose but not everyone attends the meetings. This results in a number of miscommunications and misunderstanding with regards to critical aspects of the DSAP. For instance, the employers are uncertain as to when core activities are taking place in the DSAP (such as when the examination periods etc. are).

RECOMMENDATION: The colleges to send their course outlines and teaching schedules to the employers, emphasising key information such as term and examination dates. These can be followed up during formalised meetings or communication.



#### **IMPLEMENTATION OF THE DSAP MODEL**

- 1.13. The DSAP operates in a context with many key role players so the establishment of trust and collaboration is paramount. If this cannot be achieved this poses a great risk to the Project. A central role to establishing trust and fostering solid partnerships has to do with managing expectations. If role players feel their expectations are not met, this could have very negative results for the Project. *RECOMMENDATION: SSACI must be clear with regards to what their expectations are of the implementing partners and also what the implementing partners are expecting to gain from the DSAP Project. These expectations should be agreed on by everyone and documented accordingly.*
- 1.14. The fact that the implementing partners are often also beneficiaries of the Project could be challenging. It is the role of SSACI to provide technical support and, often contribute to capacitating the implementing partners so that they are able to contribute to the success of the Project. This can sometimes prove very difficult because in some cases, the implementing partner's capacity needs may be beyond the scope of the Project and it will not be possible to capacitate them to the point where they can be an implementing partner.

RECOMMENDATION: Linked to the point above, SSACI needs to examine the expectations from all the role players and they need to determine whether it is feasible to expect them to deliver as expected.

RECOMMENDATION: SSACI should determine whether a standardised implementation plan is possible given the various contexts (which require large amounts of engagement).

1.15 Through the findings and recommendations discussed here, a number of additional activities required by SSACI and the implementing partners have been suggested to improve the implementation of the Project at current sites and also at prospective sites. It is recognised that these activities may expand the initial scope of the DSAP and it is important that this be discussed as soon as possible. For example, will some of the recommendations render the DSAP non-viable? Are expectations of results of the DSAP feasible, given how the DSAP is currently being implemented?

RECOMMENDATION: In order to address the above, SSACI needs to convene a Theory of Change workshop that takes a critical look at the design of the model in South Africa in order to incorporate the lessons learned after the first year of implementation. From here, a logic model can be developed which provides the underlying programme theory of the intervention so that a results chain can be determined which shows how project activities are connected to the results.

RECOMMENDATION: In addition to existing measures of determining Project feasibility, SSACI should document and log how much support is required (within the current ambit of the Project as well as any additional support required), to contribute to an understanding of whether the DSAP model is feasible to be replicated on a broader level. For instance, the extensive recruitment activities that have been



undertaken to recruit suitable employers needs a critical discussion around whether this could be replicable on a larger scale.

## 6 SUMMARY AND CONCLUSION

As discussed in section 2.1, the table shows the evaluation questions that guided the process evaluation according to the evaluation objectives:

Evaluation Objectives	Evaluation Questions
1. To contribute to learning	1.1 How has the intervention been implemented in terms of its delivery?
about the effectiveness,	1.2.a Have the implementing partners done what they undertook to do? This will
efficiency and impact of the	involve verifying that the required inputs were provided as per the project Business
pilot project; AND	Plan and will include checking records of inputs, processes, activities, events and
To provide recommendations	outputs.
on how future project design	1.2.b Have they done it well? i.e. an appraisal of the quality of project implementation
and management may be	through site visits, telephonic and face-to-face interviews with relevant people,
improved;	review of documents, etc.
2 To craft experience based	2. What can be learned from this experience thus far?
content experience-based	2.1 What are the strengths and successes of the project? What were the weaknesses
evaluation that can be used for	or failures? How can we account for them?
learning in terms of replication	2.2 What lessons learned from this project could inform the planning and
	implementation of similar initiatives in future?

These evaluation questions have been collapsed and are addressed here.

# 1. How has the intervention been implemented in terms of its delivery, have implementing partners done what they undertook to do and have they done it well?

The DSAP is delivered to the beneficiaries, namely the students, via a number of implementing partners. These partners include the colleges, employers and SETAs. The degree to which these implementing partners are able to deliver the DSAP to the students is greatly influenced by a number of factors, such as their own capacity and infrastructure, as well as their expectations and understanding of the DSAP. SSACI plays a managing and coordinating role in this. The ability of the implementing partners to deliver the DSAP to the apprentices has been somewhat over-estimated and in this way SSACI has had to provide additional support and guidance on a number of issues throughout the Project thus far.

For example, challenges were experienced with regards to the contracting processes which are facilitated by the merSETA. The colleges did not always adhere to the pre-determined student selection criteria and some employers did not apply due diligence to the selection and interviewing processes of apprentices. The remaining responsibilities of the role players were largely fulfilled but there is room for improvement of implementation as discussed by the recommendations provided in this report.



#### 2. What are the strengths and challenges of the Project and lessons learned?

#### Strengths

- The DSAP has provided a facilitated space where lecturers and employers are able to meet and discuss issue related to training towards industry standards. Although the desired depth of discussion regarding curriculum integration has not been fully realised, discussions at both sites show that issues around curriculum integration have begun to gain momentum.
- Employers involved in the DSAP are positive about the DSAP and see the value in forging closer relationships with the colleges in order to begin to bridge the divides that exist between college training and workplace training.
- Through the DSAP lecturers have been exposed to industry and industry standards for competence more than they would have had they not been part of the DSAP (whether being part of the COMET or attending monthly meetings). Some lecturers reported that these experiences have benefited the way in which they teach all their students, not just DSAP apprentices, and they are also much more aware of how they set up their own assessments.
- Through the DSAP, the apprentices have obtained exposure to the type of workplace that they hope to enter one day. They have therefore become more career-focused, motivated and interested in their college work. They have also learned about the importance of safety at the workplace and the spectrum new tools and equipment available.

#### Challenges

- It is impossible to conduct the selection process of colleges and employers in isolation of broader challenges that impact heavily on, firstly, the perceptions related to workplace training and secondly, the ability of colleges and companies to successfully participate in the implementation of the DSAP. Implementing partners can only implement according to their own capacity where they are limited, limited implementation of the DSAP will take place. This is evidenced in a number of related challenges, namely:
  - A college that is under administration,
  - Lack of adequate capacity among lecturers to teach on the DSAP,
  - o Limited pool of good quality potential apprentices to choose from,
  - Acquiring the right types of employers to form part of the DSAP those with adequate infrastructure and capacity.
- The legislative environment is prescriptive about the nature of contracts (learnership vs. apprenticeship); the stipends to be paid (sectoral determination vs. bargaining council) and also what



qualifies as a trade or not (welding as a trade vs. mechatronics as not a trade). The challenge is therefore how to mitigate these issues in a project that has a very limited lifespan.

- Apprentices found the workload quite heavy and are concerned about whether they will be able to cope with the existing workload as well as additional support classes. In addition, their lack of basic technical competence has resulted in preventing them (in most cases) from gaining actual, authentic workplace experience. Strike action and protests that took place at the PE site resulted in classes falling behind by 5 weeks which placed further pressure on students, lecturers and employers to complete the training of apprentices.
- In a Project of this magnitude where there are many different role players, communication becomes a critical challenge. Currently the monthly site meetings are the only face-to-face platform where role players can meet which leaves limited time for in-depth discussion around project implementation as well as curriculum integration.
- Integration of the NCV curriculum with the workplace training has been particularly challenging. The colleges are required to follow the NCV curriculum and aligning this with what is taking place in the workplace has been problematic. This is further exacerbated by the following:
  - There are different levels of workplace exposure to training some apprentices are trained at the training facility of the workplace under simulated conditions whereas others are trained onsite, in the production facility. This makes it very difficult for the college to gauge their levels of workplace training.
  - The logbooks have not been adequately completed and signed-off by all employers this makes it even more difficult to determine which apprentices received which workplace training and where the gaps have arisen.



## **7** APPENDICES

## 7.1 List of DSAP Evaluation Participants

NAME	ROLE/POSITION IN ORG	NATURE OF INTERVIEW	DATE OF INTERVIEW		
SSACI PROJECT STAFF					
Ken Duncan	CEO	Face-to-face	3 November 2014		
Claudia Rudolph	Interim project manager/ Curriculum developer	Telephonic	29 September 2014		
			14 November 2014		
Roanna Verrinder	Consultant	Face-to-face	18 September 2014		
		Telephonic	22 September 2014		
		Face-to-face	12 November 2014		
WEST COAST COLLEGE					
Gerhard Coetzee	Lecturer	Focus group	14 October 2014		
Marinus Engelbrecht	Lecturer				
DSAP apprentices group 1 (Dormac)	Apprentices	Focus group	14 October 2014		
DSAP apprentices group 2 (Dormac)	Apprentices	Focus group	14 October 2014		
DSAP apprentices group 3 (Westacor)	Apprentices	Focus group	14 October 2014		
DORMAC					
Carina Niemandt	HR Manager	Face-to-face	22 October 2014		
Shayne Brooks	Trainer/Artisan	Focus group	22 October 2014		
Hiram	Trainer/Artisan				
Leon	Trainer/Artisan				
WESTACOR					
Gideon Dixon	CEO	Face-to-face	15 October 2014		
PORT ELIZABETH COLLEGE					
David Pinches	Lecturer	Focus group	21 October 2014		
Graham Blaauw	Head of department				
Nico van den Berg	Lecturer				
Saadick Ismael	Lecturer				
Julian Atwell	Lecturer				



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NAME	ROLE/POSITION IN ORG	NATURE OF INTERVIEW	DATE OF INTERVIEW		
DSAP apprentices		Focus group	21 October 2014		
		Questionnaire			
VOLKSWAGEN					
Deon Borchjes	Head of VW Training Academy	Focus group 20 Oct	20 October 2014		
Freddie Jones	VW Training Coordinator				
Deon van der Westhuizen	VW Trainer	Face-to-face	20 October 2014		
Candice Minnies	DSAP training coordinator	Face-to-face	20 October 2014		
CONTINENTAL					
Neil Abrahams	Training Manager	Face-to-face	21 October 2014		
merSETA					
Helen Brown	Senior Manager	Face-to-face	25 September 2014		
Olrika Pettit	Regional office - PE	Focus group	22 October 2014		
Saliem Dolley	Regional office- PE				



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## 7.2 Stakeholder roles and responsibilities

#### **Roles and responsiblilities for the Apprentices**

LEARNERSHIP AGREEMENT	
carry out all related work experience activities required and specified in the learning programme	

be available for, and participate in all knowledge, practical skills and work experience activities required by the learning programme

comply with the employer's workplace policies and procedures

complete any timesheets, projects and participate in all internal assessment activities that are required for the final external summative assessment at the end of the learning programme

be available for final external summative assessment of occupational competence on the date and place scheduled

### **Roles and responsiblilities for the Employers**

LEARNERSHIP AGREEMENT	EMPLOYER CONTRACT	
comply with all duties in terms of the Skills Development	conduct the recruitment and selection of Apprentices in	
Act and all applicable legislation	accordance with the provisions of clause 5 of this	
	Agreement;	
provide the facilities and resources required for the work	train the Apprentice according to the training schedule for	
experience components of the learning programme	the relevant trade and any other applicable legislation,	
	guidelines and standards;	
provide the learner with supervision, mentoring and	use the selected public TVET College as its institutional	
coaching at work	training provider; in the event of the TVET College being in	
	default of their accreditation requirements, immediately	
	inform the SETA in writing of this default;	
complete the learner's work records	ensure TVET College to provide the training under this	
	Agreement records and retains details of the training	
	received by each Apprentice, including successful	
	completion of modules in a training record	
release the learner during normal working hours to attend	advise Apprentices of its workplace policies, procedures	
off-the-job education and training required by the learning	and regulations which Apprentices must adhere to;	
programme;		
pay the learner the agreed learning allowance, both while	provide Apprentices with the agreed allowance in terms of	
the learner is working for the employer and while the	clause 7.5 of this Agreement;	
learner is attending approved off-the-job training;		
conduct on-the-job assessment, or cause it to be	for the duration of the DSAP, permit access by SETA or	
conducted	Department of Higher Education & Training or Auditor	
	General officials to the Participating Employer's premises	
	for the purpose of conducting their monitoring and	
	evaluation site and audit visits;	
keep up to date records of learning and periodically	endorse and submit to the SETA confirmation that the	
discuss progress with the learner and the Skills	Apprentice has successfully achieved simulated	
Development Provider	competence against the training schedule for the relevant	
	trade by submitting the training record of the Apprentice	
	signed by the Apprentice, the Participating Employer and	
	the training provider instructor;	
if the learner was not in the employment of the employer	subject to the Apprentice having first advised and informed	
at the time of concluding this agreement, advise the	the Participating Employer thereof, acknowledge the	
learner of: the terms and conditions of his/her	Apprentice's right to forward complaints to the SETA	



LEARNERSHIP AGREEMENT	EMPLOYER CONTRACT	
employment, including learning allowance; workplace	regarding any aspect of the implementation of this	
policies and procedures	Agreement through the SETA's Regional Client Services	
	offices; and	
apply the same disciplinary, grievance and dispute	perform all other services necessary to be rendered in	
resolution procedures to the learner as to other employees	order to achieve the objectives of the DSAP and this	
	Agreement including participation in DSAP meetings as and	
	when requested.	
pay the learner on time the agreed learner allowance		
submit the signed learnership agreement to the SETA for		
registration		

#### **Roles and responsiblilities for the Colleges**

Learnership Agreement	COLLEGE CONTRACT?	
provide the knowledge and practical skills components	Employer Advocacy and QRC: Market DSAP to potential	
specified in the learning programme;	employers; Secure Host employer commitments;	
	Participate in QRC research	
provide the learner support as required by the learning	Learner selection and preparation	
programme		
record, monitor and retain details of training provided to	Curriculum integration: Applicable curricula integrated to	
the learner in terms of the Learning Programme and	understand overlaps and gaps; Curricula adjusted to three	
periodically discuss progress	year training record; QCTO alignment for newly registered	
	qualifications; Share and review planned curriculum with	
	employers	
conduct internal assessments for the knowledge and	Timetable and resource allocation: Plan timetables and	
practical skills components specified in the learning	resource allocation for first year (weekly and monthly	
programme	planning) considering employer requirements; Present	
	overall timetables to employers for discussion and	
	agreement; Plan individual lesson plans and methodologies	
issue statements of result.	Assessment process: Design assessment plan/process and	
	have it signed off by relevant Quality Assurance Partner;	
	Agree on integrated summative format	
	COMET: Participate in COMET orientation; Design and	
	develop COMET test tasks in collaboration with merSETA	
	facilitators; 5 COMET test tasks completed prior to	
	validation; First COMET test series implemented; Support	
	implementation of COMET process each year	

#### **Roles and responsiblilities for merSETA**

#### **EMPLOYER CONTRACT**

disburse the discretionary grant payments to the Participating Employer in accordance with the terms and conditions of this Agreement;

constitute and maintain a dedicated DSAP administrative platform which will be based at the SETA's Head-Office;

timeously investigate any report from a Participating Employer regarding a default on the part of the TVET College in terms of its accreditation status;

timeously consider any requests for a change of the institutional training provider arising from a default by the TVET College in terms of its accreditation status;

timeously consider any requests for a termination of a Apprenticeship/Learnership Agreement under the DSAP between



#### **EMPLOYER CONTRACT**

the Participating Employer and a particular Apprentice as stipulated in the signed Apprenticeship/Learnership Agreement; and

consider any complaints received from Apprentices regarding the implementation of the DSAP in the established manner and through its regional SETA offices.



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