SASTA Congress – Training Workshop – 28-August-09	
Workshop Follow-up Report	
#	**1. Workshop Objectives**
1.1	1. Review the current status of training and development in the African Sugar Industry; 2. Identify the areas of greatest need; 3. Identify how to address the areas of greatest need – from determining needs through to organisational commitment and effective training delivery across the industry.
#	**2. Discussion Session**
2.1	**The Current Context** There was general acceptance of the current context of training and development in the sugar industry: • Mills suffering the consequences of the lack of effective planning for training and development; • The industry has an ageing workforce; • Succession planning has not been effective, hence the ongoing need to recall retirees to assist in the industry, particularly with regard to project work; • The industry is now subject to a substantial gap in terms of training and development.
2.2	**Multi-skilling** It was suggested that multi-skilling be adopted as a partial resolution of the skills shortage. Examples were given of personnel attending training in order to "skill up" in other disciplines, such as artisan to operator. Further discussion ensued regarding some of the challenges of multi-skilling and an example was given of operators being pre-tested for multi-skilling and only achieving a 9 – 11% pass rate. One of the barriers was identified as the lack of understanding of the overall operation of the mill and the various roles required in order to ensure optimum mill performance. A further comment was made that Operators could be "skilled up" to assist with maintenance during the off-crop. A concern was with regard to the level of skills, such as the challenge of developing Shift Foremen into Engineers. The final comment in this regard was that the approach to training and development needed to be in a broader context where the overall needs were assessed and the appropriate interventions identified to address those needs.
2.3	**Qualifications** Discussion then shifted to qualifications, where it was noted that qualifications do exist in various areas of technology and operations, such as the certificates at NQF 2 level for Supervisors and NQF 4 level for Engineers in Training (EITs). The AgriSETA had been active in this regard and developmental work was under way, including the Quality Council on Trades Occupations (QCTO). Whilst these qualifications are in place, it was noted that the development of content and delivery was not being done. Comment was made that the industry should bring back the "old" qualifications, such as the 3 year Diploma course and the Supervisor course. There was some disagreement regarding the resurrection of old courses to solve current problems.

2.4	**Training Delivery – e-Learning and Simulation** Debate then took place around delivery of training. e-Learning was identified as an effective medium as it allowed for distance-learning and learner-paced learning. The concern in this regard was that the development of content for e-Learning would have to be done, which is a massive task. Also, it was considered essential that an effective needs analysis would have to be done first in order to accurately identify the actual needs. Simulation was also discussed as a learning medium and it was agreed that this could be effective for certain training. Boiler operation is the classic example of effective use of simulation but it was noted that this could even be applied to pan boiling. The possibility of approaching suppliers of specialised equipment in this regard was suggested. Simulation also facilitated learner-paced learning at flexible times. A strong comment was made with regard to e-Learning: *"We don't want to lose the simulation issue – replacing plant with simulation as opposed to replacing trainers with e-learning"* It was agreed that the industry needs to get to grips with this for the industry's benefit and that we need to address this.
2.5	**Learner Profiles** The profile of the learner, as recipient of the training and development initiatives, was then discussed. The comment was made that the so-called "Generation-Y" learner was excellent at content knowledge but lacked in problem-solving and decision-making skills. An EIT commented that newly graduated Chemical Engineers do not want to compete with Operators; they are looking for innovation opportunities. Responses to this were: • That engineers could learn a lot from operational staff; • *"I like the idea of Chemical Engineers coming out of 'varsity looking for new, innovative opportunities."* • *"Engineers need to have the humility to learn but the creativity to ask the right questions. We need new engineers and scientists to have the necessary problem-solving and decision-making skills"* Cognisance also needs to be given to the fact that new engineers, technicians, artisans and operators are not being attracted to the sugar industry. This suggests that there needs to be both a short- and long-term initiative in this regard. It was noted that chemical engineering graduates leave university unaware that sugar is a chemical engineering industry. Further input was that EITs were not always successful and that the mentoring/coaching provided was also not always successful. Further comment that we were excellent at measuring process performance but poor at measuring human performance.

2.6	**Integrating Sugar Technology into existing courses** The opening comment in this regard was that there was definitely scope for integrating sugar technology into degree courses. The industry was looking for ways to spend money for the industry. Perhaps, rather than start our own courses, an introduction to sugar technology should be included in existing courses. It was then mentioned that sugar technology could be an elective in the Chemical or Mechanical Engineering curriculum and perhaps the EIT period could be reduced to one year. The university comment was as follows: *"Graduates always need some training. Experience cannot be taught and we cannot provide graduates with 30 years experience. We produce engineers for many industries and need to address new technologies and effectively solve problems. We do, however, need to know what the problems are with our graduates."* In-service training, such as that offered by the Graduate Schools of Business, were cited as a good example of the importance of this approach to training – the methodology works. Also, the Sugar Industry Trust Fund (SITF) supported under-graduate study and is concerned with: - Which degree programme to support; - The fact that they changed to rewarding 2nd year students due to the high 1st year drop-out rate, but this results in them losing good students to the competition. It is apparent that the SITF needs to collaborate with the industry.
#	**3. Summary and Way Forward**
3.1	**Closing comments** from delegates included: - The industry needs to review its recruitment processes; - We need to conduct an industry-wide needs analysis; - Yes, there needs to be a proper Gap Analysis; - Yes, but we need to ensure that the correct levels are identified and chosen; - The cooperation of the universities is essential; - There needs to be follow-up on the use of computer-based training.

3.2	**Facilitator comments** There will be specific instances where these comments do not apply, but they are intended to give an industry-wide perspective: - The re-employment and contracting-in of retirees from the industry is indicative of the challenge of competence the industry faces; - There is currently a serious shortage of competent personnel across the industry; - EIT programmes are generally working; - Mentoring, coaching and succession planning are not given the status they deserve as developmental tools. Does every manager or engineer have these as KPAs/KRAs/CSFs in the performance contract? - Future developments in the industry, such as new product streams, are going to exacerbate the demand for competence; - Engineers often graduate with expectations of a management position and are "reality-shocked" when expected to don PPE and work in the plant; - Training and development to address industry needs is generally addressed in an ad hoc manner by individual companies and not as an industry strategy; - Having said that, organisations such as Shukela Training Centre and SMRI certainly offer training that is recognised by the industry; - The short-term and long-term strategies to address the training and development needs must be differentiated from each other – there are short-term needs that must be addressed urgently and long-term sustainability requirements that must also be resolved. There may be common elements to the resolution, but they need to be kept in context; - There appears to be common recognition of the need to approach training and development at an industry level, but some reluctance to actually do it.

3.3	**Way Forward**
	1. Industry-wide coordination of training and development efforts;
	2. Development of short- and long-term strategies;
	3. A structured short-term approach is critical:
	    a. Current Status Assessment; Needs Analysis; Gap Analysis – all based on performance requirements;
	    b. Learner context assessment;
	    c. Design, develop and implement training content;
	    d. Evaluate training against performance requirements and improvement;
	    e. Go back to a.
	4. Liaison between industry representative bodies and appropriate education and training institutions to develop long-term actions to ensure industry viability and sustainability.

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