### CONTENTS

Welcome to the final edition of our e Quality Edge for 2018	1
The Virtuous Cycle By Larry Borowitz	2
Quality Day event demonstrates commitment to excellence By SAQI Staff	4
World Quality Day Forum at SARS By SAQI Staff	5
World's largest 3D Printer Article supplied by SAQI member Project Pro	6
World Quality Day 2018 at NCP CHLORCHEM	7
The Nominations Committee Can Secure The Board's Long-term Health By Junadi Jooste & Jene' Palmer	8
It's exciting but a bit scary too! By Dr Richard Hayward	10
SAQI Quality Training 2019	11
The interest of the contract o	

No 226 • December 2018

# Welcome to the final edition of our e Quality Edge for 2018



We continue to report back on an exciting and fruitful South African National Quality Week (NQW) held in November. As a follow up to our SAQI Knowledge Forum hosted by Discovery Vitality we are publishing an article entitled "The Virtuous Cycle" by Larry Borowitz. We also take the opportunity in this edition to give feedback on the some of the other events that SAQI was involved with during this special week. We will be covering the SARS World Quality Day Forum and SAQI will give feedback on the keynote address at the forum that took a view on our NQW theme of Changing the

Mind–Set on Quality. We will also cover World Quality Day celebrations at our long standing member NCP.

There is much talk around at the moment about the 4<sup>th</sup> Industrial Revolution and we are publishing an article about the unique 3D Printer currently being used at the CSIR.

Terry Booysen continues his corporate governance series and tells us that the Nominations Committee can secure the board's long-term health. Richard Hayward explains that "it's exciting but a bit scary too".

Finally SAQI takes this opportunity to wish all its members and associates a merry and joyful festive season and a happy new year.

Please feel free to pass on our newsletter to your network and we look forward to input from you for our next edition early next year.

Paul Harding SAQIMD

Quality: helping South Africans live, learn and work better

### The Virtuous Cycle

### How effective quality measurement enables process optimisation

**By Larry Borowitz** 

For any organisation to thrive, it needs data regarding its quality which accurately reflects its adherence to standards, or put another way—it needs data which accurately reflects the variation in its processes and their related process capability.

By businesses understanding the capability of their processes through meaningful measurement, they are able to optimise their processes through what is termed "The Virtuous Cycle".

This article will explain how Discovery Health, South Africa's largest private health insurance corporation, has deployed The Virtuous Cycle, and grown into an organisation billing more than R70 billion per annum.

In any organization, but particularly in a service organisation like Discovery Health, the ability to measure quality is always a challenge due to the multiplicity of processes and the variation in the functions delivered through these processes.

### Defects per million opportunities (DPMO) and its impact

Discovery Health has achieved the measurement of the overall quality of the business, as well as all its constituent parts, using defects per million opportunities (DPMO).

Over a number of years, each function and its processes were defined in detail so that opportunities could be measured per process and then random samples taken to calculate the defects of those opportunities, measured in millions. The size of this endeavour cannot be underestimated – and the impact cannot be over-emphasised.

DPMO was used as the unit of measure for quality for three main reasons. The first was that it was more granular than percentages and indicated processes' capability very effectively. Secondly, it was meaningful to staff at all levels once some training was completed who could then relate to the values far better than Sigma levels. Thirdly, since DPMO has related Sigma levels, which are used as an international benchmark for quality, it gave Discovery Health a meaningful performance metric to compare itself on a global scale.

The measurement of defects on the inputs to processes using DPMO, has had a material impact on the organization's ability to embed a culture of continual, sustainable improvement and has provided high quality data about quality. Since defects are measured on an opportunity level, they can be tabulated to present an individual's performance as well as the related process' capability. This results in each staff member getting detailed, regular feedback on where they are going wrong and identifies opportunities for improvement. At the same time, each process

owner can identify where their processes are deficient and implement corrective and preventative actions.

By understanding which opportunities linked to the activities and work instructions in a process have defects, process owners can question not only the execution of the activity, but also if the activity and its related detail are even necessary in the process. In many cases, this results in processes being leaned when activities are actually removed or streamlined. In scenarios where it is determined that the activity was actually necessary but the tasks were being poorly executed, the insight that the quality data gives results in corrective actions like mistake proofing, retraining and process re-engineering.

### The Virtuous Cycle in action

Figure 1 below depicts the "Virtuous Cycle.

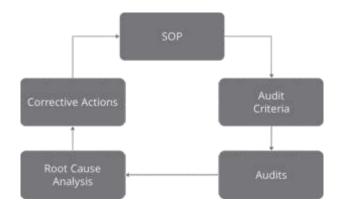


Figure 1

- The cycle starts with the SOP's which define the detailed activities and related tasks at an opportunity level.
- Audit criteria are then defined based on the contents of the SOP. The audit criteria are documented such that they can be verified as complying or not complying with the opportunities as defined in the SOP.
- Audits are then conducted by independent auditors using the audit criteria which is agreed by the business owner and the auditors.
- Root cause analysis is then conducted on the errors identified.
- Corrective actions are then put in place.
- SOP's are updated to reflect the enhanced processes and the cycle then starts again.

The power behind The Virtuous Cycle is that it truly brings Lean and Six Sigma together to enhance process capability. It

...continue on page 3

showcases how accurate, meaningful data gives insights into shortcomings of processes which can then be acted upon to create leaner processes with improved quality.

To make the Virtuous Cycle succeed, it is imperative that processes are owned by the business area responsible for their execution. They should not be owned by the quality or process improvement departments. Ownership of the processes by the business areas results in accountability for ensuring the processes are optimised and the desire to lean the processes is driven by the business area as the errors and inefficiencies identified are theirs to fix.

By following The Virtuous Cycle, processes move from "wallpaper" to processes which are used and referenced by the business. The reason for this is that because the contents of the processes (as reflected in the SOP's) are used for audits, staff will refer to the SOP's before doing their work to prevent errors occurring and being penalised for their errors made.

The Virtuous Cycle is dependent on trust by the various stakeholders. When opportunities are defined accurately, and audits take place using these opportunities, the level of trust in the audit results increases as there is mutual agreement on the definition of opportunities and disputes are far easier to resolve.

### Difference between transactions and interactions

A transaction is defined as the completion of a process which is not personalised for a stakeholder. This could include a new business capturer entering information from a form into a computer or a claims capturer entering a claim for processing.

Transactions will not have any "soft skills" or "qualitative" opportunities associated to them e.g. tone or empathy. Transactional processes are typically more predictable and have less variation.

An interaction is defined as a personalised response to a stakeholder's engagement with the organisation. Examples could include a call centre agent talking to a customer or a correspondence agent responding to an e-mail from a customer.

Interactions do have "soft skills" or "qualitative" opportunities associated to them. It is not possible to objectively measure the soft skills as the impression of these varies from person to person (e.g. how does one rate "friendly"?). Interactions are more varied and less predictable.

A very common mistake made in organisations is that they score subjective criteria as if they are objective (e.g. they will score the "empathy" of an agent on a particular call and count it towards the person's quality score). The problem with this approach is that it is well-nigh impossible to formally agree on what the standard of "empathy" is. When it comes to resolving a dispute of whether an agent displayed empathy or not, it is normally a zero sum game where an agent will argue they were empathetic while their manager will argue to the contrary, with no side agreeing who was right.

Therefore, the correct approach to take is that objective criteria relating to the content of a call should be measured and a quality score applied using DPMO. Subjective criteria can be monitored

and an *opinion* expressed by the auditor or manager on these criteria. However, the subjective criteria should not count towards the overall DPMO. Because the opinions do not count towards a formal quality score, debates around subjectivity are avoided and the relationship between the auditor and auditee vastly improve because only objective criteria are scored.

By measuring objective criteria, the critical elements of an interactive process are audited and The Virtuous Cycle can be applied. At the same time, the results received for qualitative criteria are not ignored but used for discussions around performance and ways to improve interactions with stakeholders.

The critical elements of interactions are consistency, relevance, accuracy and completeness. By having clearly defined objective criteria for interactions, one ensures that the information given is always the same, irrespective of which staff member interacts with a stakeholder. One also ensures the information given is meaningful and on-point for the topic under discussion. The information will also be accurate and the need for a stakeholder to re-engage with the organisation will be reduced because all information regarding the request will be given in full the first time.

### Sustainable success

The DPMO in Discovery Health has decreased by 43% over a 4 year period and also created substantial savings for the organisation.

The use of DPMO across Discovery Health to measure quality continues to add significant value to Discovery's customers through continual service improvement and enables Discovery Health to grow its business while reducing costs through leaner processes and less rework.

By having trustworthy, high quality data which can be used to gain insights into processes, businesses can apply The Virtuous Cycle and make themselves more efficient and effective internally while to their external customers and stakeholders, they impress with unparalleled, continuously improving service.

### About the author:

Larry Borowitz hails from Johannesburg, South Africa. He has university degrees in Information Systems and is a certified Lean Six Sigma Master Black Belt.

Larry has been employed by Discovery Health since 2003. He is currently Head of Service Lab Operations Management, a department responsible for enabling process and service optimisation and measuring and monitoring key service metrics like quality and stakeholder perception. He has been responsible for, inter alia, the company's quality management system and the adoption of Lean Six Sigma tools and principles within the organisation.

In his career, Larry has garnered a wide array of management, systems and consulting experience through the positions he has filled in various capacities at firms like Deloitte Consulting and at some of South Africa's leading technology companies.

Larry is married and has three children.

## Quality Day event demonstrates commitment to excellence

By SAQI Staff

SARS colleagues had a great opportunity to find out what quality is all about, and what it means for SARS at this year's Quality Day event, held at Head Office on 19 November. With the support of SARS leadership, the Enterprise Quality Management (EQM) Unit dedicated the Quality Day event to educating and opening a platform for discourse around the very important topic of quality. Speaking of this year's theme, which is 'Changing the mind-set on Quality', the Commissioner referenced Henry Ford who once said that "quality means doing it right when no one is looking". He further said that Quality is the pride of workmanship and it should be a fabric of the organisation, adding that with the wealth of knowledge and skills that SARS employees possess, in time this will become a reality and not just a statement.

One of the key deliverables for the day was the video launch of SARS' quality statement. At SARS, quality is defined as delivering products and services that are complete, on time, and in accordance with the agreed standard, as expressed by taxpayers and traders. The video highlighted why quality matters within the organisation, and how it was important for SARS to continually improve the service it offers to traders and taxpayers — through placing quality at the forefront of all service — in order to achieve its mandate.

A presentation by guest speaker, Dr Douglass Matorera, challenged the audience to consider their outlook and philosophy on quality, while the panel discussion that later ensued around quality management in SARS ploughed deeper into what was required in order to build a SARS where quality is at the centre of everything we do.

Speaking on behalf of leadership, the Commissioner emphasised their support and commitment to quality and excellence in SARS, so that taxpayers and traders can get outstanding service and ultimately build SARS' brand, credibility and reputation. "As an institution, we want to be associated with not just service, but quality service," he said.

As a reminder of their commitment to this, EXCO members of the various SARS divisions were honoured with certificates that outline the organisation's quality statement. "The Quality Statement certificates you have given us will be a constant reminder that we do not only have to preach Quality, but to live and breathe Quality in our respective divisions," said Hlengani Mathebula, the Chief Officer for GISC.



From left to right: Sibusiso Chiliza (Executive: Enterprise Quality Management), Firdous Sallie (Discussion Panellist), Bongiwe Mabanga (Group Executive: Governance, Risk & Quality), Johnstone Makhubu (Discussion Panellist), Rae Vivier (Discussion Panellist), Ramesh Jinabhai (Executive: Enterprise Risk Management), and Moses Mathebula (Discussion Panellist).



### World Quality Day Forum at SARS

### Changing the Mind — Set on Quality

**By SAQI Staff** 



### South African Revenue Service

One of the NQW events that SAQI was invited to attend was a Quality Day celebration on the 19<sup>th</sup> November at the South African Revenue Services auditorium in Brooklyn Pretoria. An inspiring opening address and welcome was given by the Acting Commissioner of SARS Mark Kingon.

### **Keynote Address**

Dr Douglas Matorera was invited to give the keynote address using the SAQI topic for National Quality Week of "Changing the Mind-Set on Quality". It was interesting to see this topic presented from a different perspective.

Below is an extract from the keynote presentation

Dr Matorera first spoke about Changing a Mind-set.

- Means
  - o Changing a way of thinking
  - o Changing our philosophy about something
  - o Transforming our mental models
- There are 2 drivers to changing a mind-set on Quality
  - o We are doing well on quality but we have strengths and opportunities to drive further improvements lets be proactive on quality
  - o We are sure we aren't doing well on quality let's address our weaknesses and threats.
- Changing a mind-set on quality requires
  - A way of thinking, a philosophy, about the WHAT and the WHY of quality – TQM, BPR
  - For profound change of the mind-set we need to romp in the HOW, the methodology of doing the quality – QFD, SIGMA Series.

Dr Matorera then asked the question: Is barrenness infertility?

- A philosophy on quality that lacks the HOW (methodology) about doing that quality is barren
  - o Are processes, procedures, activities arising from the philosophy and piggybacking into the philosophy?
- Equally a methodology on quality that is not illuminated and guided by a philosophy is infertile
  - o Lean versions or anorexia
  - o Six Sigma without the 1S, 2S, 3S, 4S nor 5S

### Both philosophy and methodology need each other

- o They are the bedrock of the strategies
- o The philosophy scopes the vision
- o The methodology actualises the vision

So why doesn't change (of Mind-Set) happen easily?

- It disrupts the status quo
  - o Didn't the cell phone disrupt the status quo
- It makes me (and you) vulnerable
  - Didn't we go to school because ignorance was making us vulnerable
- We don't understand why the change now
  - o This is the real but most latent source of dislike for change
- We need to embrace change and create strategic capabilities for change and distribute leadership for change.

### So what now?

- We need a mental model that disrupts our traditions
  - o We need to perceive quality in the context of our reality
  - o We need to see quality as a mobile, slippery and organic challenge
- We need an integrated system of quality models
  - o We need a robust framework of getting FACTS on quality standards, processing the fact and (re) defining quality.
- Quality is what the "receivers" of our products or our services say it is
- Beware quality that derives from 1, 2, or 3 perspectives.



**Dr Douglas Matorera** 



### World's largest 3D Printer

**Article supplied by SAQI member Project Pro** 

Collaboration between the CSIR and Aerosud Innovation Centre, an aeronautical engineering and manufacturing company, has developed an advanced 3D printer for metal components as part of project Aeroswift.

According to CSIR spokesperson David Mandaha, the programme was initiated after shortcomings with commercially available metal additive manufacturing technology were identified. The system can also be used to produce parts for the power generation, automotive tooling, defence and manufacturing sectors.

The 3D printing machine situated at the CSIR national laser centre allows for the printing of components up to 2m long, 600mm wide and 600mm high. It also uses a hot and inert processing environment to ensure strict compliance to aerospace manufacturing standards.

He said the Aeroswift team had developed new technologies to upscale the additive process to go faster and larger than other systems. In addition, this project aims to transform the country from an exporter of raw materials to an exporter of semin-finished or finished goods, which can be sold at a premium.

The envisaged use of the 3D printer system is in factories where titanium metal parts are being produced for the world market.

During proof-of-concept trials, the machine achieved production speeds of up to 10 times faster than those of currently available commercial laser melting machines. Furthermore, its production chamber's volume measures about four times that of the biggest commercial machines currently available.

Mandaha said the Aeroswift project resulted in a metal- additive manufacturing system which uses a laser to melt titanium powder to produce metal parts for the commercial aerospace manufacturing sector. The system has the ability to produce geometrically complex parts according to a customer's specification, minimising material wastage while processing difficult-to-machine materials. Compared to other manufacturing technologies, which often rely on the removal of material through a machining process to produce a final component, additive manufacturing relies on various technologies to fuse powdered or wire-based materials.

"In South Africa, the Aeroswift project has the potential to advance economic development and improve market competitiveness by unlocking the growing additive manufacturing industry" said Mandaha.



### **World Quality Day 2018 at** NCP CHLORCHEM



Article supplied by SAQI member Project Pro

NCP Chlorchem, is a South African based leading manufacturer of Chlorine, Caustic Soda and Chlor-Alkali Derivatives, with major markets being the local FMCG, plas-tics, pulp and paper, mining as well as portable and effluent water treatment indus-tries, whom sells its chemicals and services to a diverse range of local and overseas markets. NCP Chlorchem hosted its Quality Week from the 5 - 9 November 2018.

Quality awareness was created in a number of ways starting with a Quality Poster Competition. The theme of the competition was "What does quality mean in your department?"





The participating departments' posters were judged by an independent panel of NCP personnel.

The response to the competition was so overwhelm-ing that instead of just having one winner, NCP's Man-aging Director, Andre Harding agreed to having a 1st, 2nd and 3rd runner up and in addition to this, a special trophy was

named and awarded to each participating department.

The winning posters were as follows:







NCP plans to display the winning poster at various locations and use it as a means to bring about awareness with regards to quality in our environment.

Furthermore, each employee was also asked to sign the quality commitment poster which will be displayed for all to view.



Lastly, a treat of Quality Street sweets was handed out to each NCP employee as a token of appreciation.



The numerous Quality activities were successful in creating an added awareness to working in an environment that puts Quality first!



## The Nominations Committee Can Secure the Board's Long-term Health

By Junadi Jooste (CGF: Lead Independent Consultant) and peer reviewed by Jene' Palmer (CGF: Director)

Corporate failures result from poor governance. There are a multitude of reasons for poor governance, but at the heart lies the composition and effectiveness of the board. Clearly, it is time for the Nominations Committee to take a stronger and more definitive role in ensuring the long-term health of the board and thereby the organisation.

One of the most fundamental roles of the Nominations Committee is to carefully and critically evaluate whether potential candidates are suitable for the directorship role they are expected to fulfil. This process is typically limited to once-off criminal checks, financial checks and qualification verifications. Moreover, these checks are performed at a superficial level to ensure that the "box has been ticked" from a governance perspective - and therein lies the risk for organisation.

The Nominations Committee must consider broadening the scope of its candidate vetting process to include matters such as continuing professional development ('CPD') confirmations, skills and personality assessments, lifestyle audits, wellness checks and reviewing the number of external board appointments. Indeed, these checks, verifications and assessments should be reperformed on a regular basis to ensure that directors remain fit for purpose for the duration of their appointment.



### **Continuing professional development**

For good reason many professional bodies (for example the South African Institute of Chartered Accountants) require their members to maintain a minimum number of CPD credits or risk being discredited as a member. Clearly, the failure to keep up to date on the changing professional landscape will negate the value which a director with specific qualifications is expected to bring to the board. Whilst King IV™ recommends that the board implement CPD programmes, it remains the director's responsibility to ensure that they keep abreast of new and changing developments in their professional field. It is therefore incumbent on the Nominations Committee to ensure that directors' CPD credits remain valid for the duration of their tenure as directors.

### Skills, competency and personality assessments

Skills, competency and personality assessments are often only performed when making executive appointments. However, the absence of diversity and key expertise are primary contributors to poor performing boards. Matching board skills to future organisational skills requirements is critical in an era where digital technology and business models are rapidly evolving and strongly influencing strategy formulation. Performing regular skills, competency and personality mapping exercises should be a standard element of the Nominations Committee work plan. Furthermore, ensuring that boards comprise a satisfactory mix of gender, race, ethnicity and temperament will bring different and (possibly) more robust dimensions to board discussions and reinforce a stakeholder-inclusive approach to sustainability. In addition, these skills, competency and personality mapping exercises should inform board CPD and induction programmes as well as board succession planning initiatives.



### **Lifestyle audits**

Today, lifestyle audits are becoming a critical management tool to detect fraud and corruption. Whilst these lifestyle audits are not conclusive proof of illicit activity, they can raise red flags about matters which may negatively impact the organisation - not least of which may include financial loss and/or reputational damage. The Nominations Committees should therefore ensure that lifestyle audits are performed not only on incoming directors, but on existing directors too.

### Health and wellness checks

There is no doubt that the ever-increasing pace of change in our business (and therefore our personal) lives contributes to increased stress which medical research confirms contributes to various non-communicable diseases, such as coronary heart disease. Whilst many organisations arrange health wellness days for their employees as part of their internal stakeholder engagement strategies, only a few organisations extend health assessments to their directorship. Progressive Nominations

...continue on page 9



Committees should recognise the benefits of performing these health assessments and use them to assist the board in proactively managing board succession risk.



### **External directorships**

A McKinsey survey of 1100 directors in 2017 reported that directors spend on average two days less on board related matters as compared to 2015 (24 days vs 26 days). These statistics are quite concerning bearing in mind that many directors at the same time also acknowledge that boards need to spend more time on strategy. Be that as it may, a simple mathematical calculation using this information gives a reasonable indication of the maximum number of boards that a director can be expected to serve at any one point in time.



To ensure that directors can dedicate sufficient time to perform their fiduciary duties to the organisation, the Nominations Committee should periodically confirm the total number and the nature of the external boards and committees being served by each of their directors and relay any concerns (risks) in this regard to the director in question as well as the chairman of the board. Decisive action must be taken by the board when it is evident that a director is not able to fulfil his/her commitment to the organisation.

Understanding which other boards are served by the organisation's directors serves a dual purpose. Firstly, it gives insights into how much time the director has available to dedicate

to the organisation and secondly, it gives the Nominations Committee a mechanism for verifying the information contained in the director's Register of Interest. Identifying potential conflicts of interest and helping the director and the board to manage such conflicts must form an important component of the Nominations Committee's ongoing director vetting process.

The Nomination Committee should regularly assess its own performance to ensure that it is indeed positively fulfilling its mandate to make recommendations to the board and shareholders regarding director appointments. Well-informed board appointments are more likely to result in competent and effective boards. Furthermore, by actively ensuring that directors remain fit for purpose, the Nominations Committee can help the board to govern the organisation in a sustainable manner.

### For further information contact:

CGF Research Institute (Pty) Ltd Jene' Palmer (Director)

Tel: +27 (11) 476 8264 / Cell: +27 (0) 82 903 6757

**E-mail:** jpalmer@cgf.co.za **Web:** www.cgf.co.za

Junadi Jooste (CGF: Lead Independent Consultant) Tel: +27 (0) 11 476 8264 / Cell: +27 (0) 82 777 0861

**E-mail:** junadi@castlegc.co.za

Web: www.cgf.co.za





### Quality in Schools

Many of our readers are parents themselves or interact often with children. We have asked our education editor, a retired headmaster, to share thoughts on how to get Quality principles and practices instilled in young people.

By Dr Richard Hayward

### It's exciting but a bit scary too!



There's a sweet start to a child's very first day at school in Germany. Traditionally the child is given a huge cone filled with delicious delights.

Most children see the start of the new school year as an adventure. If it's the first day at primary school, parents often take photos of their children in their smart new uniforms. Those children entering high school are often excited at the thought of learning new subjects and starting to take up different extramural activities. Yet it's not all happy excitement. There's a bit of anxiety too.

In fact, every child experiences a degree of anxiety even if the child is simply going to a higher Grade in the same school. There could be different classmates and teachers. New friendships need to be started. Sport team selections are going to be made with elation for some and disappointments for others. Extra expectations as regards classroom performance, sporting abilities and time spent on homework will be made.

Often the anxiety is fleeting and minor. Most children deal well with this reality of school life. Anyway, a little anxiety is healthy to improve performance. Yet there are those times when the anxiety can start becoming a source of serious concern. Such anxiety levels are unhealthy. Symptoms could be:

- Becoming aggressive and argumentative
- Feelings of worthlessness
- Headaches and stomach aches
- Reluctance to go to school
- Thoughts of death or suicide
- Trouble falling asleep

There's a need to give help when a child is anxious. An excellent starting point is simply to be a good listener. When children are anxious about an aspect of school life, listen intently. Sometimes

they want to talk to a person who is empathic and understands them. By simply listening, you'll help them to start working out their own solutions to the challenges confronting them.

Too often a child thinks that their anxiety is unique. "Everyone else in the class understands the Maths," claims the child. The chances are that it's not true. Some children camouflage their anxiety from others. Research has shown that in any classroom at any time, 12-15% of the children will be experiencing some form of anxiety.

After the listening, it's time for action. In the instance of the child in the above paragraph, there might be a need for a short-term tutor to help get the Maths up 'to speed'. Maybe there's a need to give help as regards time-management to deal with the daily demands of school.

Adults need to ensure that they themselves aren't the cause of the anxiety. Take your own anxiety temperature. If you're anxious and stressed, your children are likely to take the cue from you.

If the school has a counsellor, make an appointment to speak to that person. Talk to the child's class or register teacher. Caring and nurturing schools will guide and keep a watchful eye on the anxious child.

There could be those times when the anxiety reaches a level where help is needed beyond the professional expertise of the school. If not dealt with effectively, anxiety could lead on to long-term depression. There could be OCD (Obsessive Compulsive Disorder) issues, for example, where a child experiences pervasive, unwanted obsessions and worries. A child could have severe behavioural issues. Specialists such as paediatricians, psychologists, psychiatrists and therapists have roles to play.

Support given to an anxious child doesn't aim to take away all anxiety. Mild levels of anxiety are good. Nobody is totally immune from anxiety. When managed well, it motivates the child to study hard for an exam, learn their lines for a school play and 'up our game' on the sports field.

Your common-sense support lets the child understand that it's OK to sometimes be anxious. Such support helps the child manage anxiety to ensure that school days are indeed sweet days.

### References

Miller, C undated. Back to school anxiety. Available at https://childmind.org/article/back-school-anxiety/

Young, Kundated. Anxiety in kids: how to turn it around and protect them for life. Available at http://www.heysigmund.com





All courses offered by the South African Quality Institute are presented in association with other course providers and are available to all organisations and individuals. SAQI can assist with the training of a company's workforce and all training packages can be run in-house at cheaper rates. A special discount applies to SAQI members. For more information or to register contact Vanessa du Toit at (012) 349 5006 or

SAQI reserves the right to change details of the programme without prior notice. **click here** for all course synopsis. The courses listed below form part of a specific Certificate and all modules should be successfully completed to qualify for the Certificate. Training is presented on the CSIR campus in the east of Pretoria.

All courses completed previously will receive credit when proof of successful completion is received. All prices include VAT @ 15%.

						2019					
Code	Course	Days	Cost	Feb	Mar	Apr	May	Jun			
L2	Certificate in Quality Control for Manufacturing	10	22,790-00	Feb	Mar	Apr	May	Jun			
B41	Introduction to Quality Control	2	5165-00	18-19							
B90	Introduction to Statistical Techniques	3	6230-00	20-22							
B91	Introduction to Statistical Process Control (SPC)	3	6230-00		11-13						
B79	A3 Problem Solving	2	5165-00		14-15						
L2	Certificate in Quality Control for Services	10	21,725-00								
B30	Introduction to Quality Control	2	5165-00		4-5						
B31	Introduction to Statistical Techniques	3	6230-00		6-8						
B33	Introduction to Quality Circles	2	5165-00			2-3					
B34	A3 Problem Solving	2	5165-00			4-5					
L3	SAQI Certificate in Quality Assurance*	13	29,020-00	Feb	Mar	Apr	May	Jun			
B48	ISO Requirements 9001:2015	3	6230-00		27-29						
B24	Knowledge Management	2	5165-00			8-9					
B16	Internal Quality Auditing	3	6230-00			10-12					
B92	Advanced QualityTechniques	3	6230-00				6-8				
B77	Advanced Product Quality Planning (APQP)	2	5165-00				9-10				
L4	SAQI Certificate in Quality Management*	3	31,610-00	Feb	Mar	Apr	May	Jun			
B38	Development of a QMS	3	6230-00				22-24				
B01	Organisational Excellence	2	5165-00					4-5			
B58	Policy Deployment (Hoshin Kanri)	2	5165-00					6-7			
B74/B76	Lean for Manufacturing/Service Industries	4	9885-00								
B93	Cost of Quality	2	5165-00								

Inhouse Training: vanessa@saqi.co.za • Public Training: info @saqi.co.za





For a list of other courses provided, please visit www.saqi.co.za Inhouse courses provided to 10 or more delegates. Enquire from vanessa@saqi.co.za



No. 226