Aug-Sept—'2010

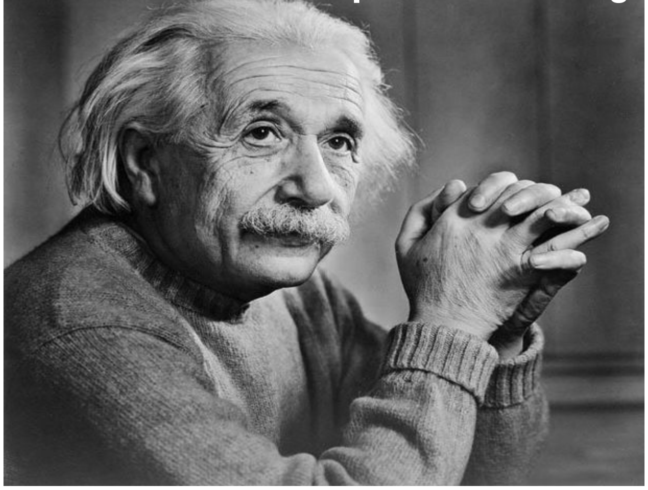
SSGC

The next Yellow Hat will carry the theme of Change. Please email your ideas to make the publication more participatory!

THE YELLOW HAT!

Wear the yellow hat and change the way you think, behave and live...

Einstein's secret to problem solving!



Einstein is quoted as having said that if he had one hour to save the world he would spend *fifty-five minutes defining the problem and only five minutes finding the solution.*

This quote illustrates an important point: before jumping right into solving a problem, we should step back and invest time and effort to improve our understanding of it. The most important step in problem solving is clearly defining the problem in the first place!

The Problem Is To Know What the Problem Is

hat most of us don't realize is that the quality of the solutions we come up with will be in direct proportion to the quality of the description of the problem we're trying to solve.

The good news is that the skill can be learnt by defining the problem from different perspectives and angles.

Some of the strategies that can help are:

1- Rephrase the Problem – Instead of the question ' how can you be more productive?', the problem can be rephrased into a request for suggestion 'how can we make this job easier?'

Words carry strong implicit meaning and, as such, play a major role in how we perceive a problem. The difference is that 'to be productive' might seem like a sacrifice you're doing for the company, while 'make your job easier' may be more like something you're doing for your own benefit, but from which the company also benefits.

In the end, the problem is still the same, but the feelings — and the points of view — associated with each of them are vastly different.

How it works?

Play freely with the problem statement, rewording it several times. Take single words that constitute the problem and substitute variations.

A rich vocabulary plays an important role here, so you may want to use a thesaurus to rephrase the problem.

2- Expose and Challenge Assumptions

Every problem — no matter how apparently simple it may be — comes with a long list of assumptions attached. Many of these assumptions may be inaccurate and could make your problem statement inadequate or even misguided.

The first step to get rid of bad assumptions. Write a list and expose as many assumptions as you can — especially those that may seem the most obvious and 'untouchable'. That, in itself, brings more clarity to the problem at hand.

Go further and test each assumption for validity: think in ways that they might not be valid and their consequences. What you will find may surprise you: that many of those bad assumptions are self-imposed — with just a bit of scrutiny you are able to safely drop them.

3-Chunk Up

Each problem is a small piece of a greater problem. In the same way that you can explore a problem laterally — such as by playing with words or challenging assumptions — you can also explore it at different "altitudes".

If you feel you're overwhelmed with details or looking at a problem too narrowly, look at it from a more general perspective.

In order to make your problem more general, ask questions such as: *"What's this a part of?"*, *"What's this an example of?"* or *"What's the intention behind this?"*.Another approach that helps a lot in getting a more general view of a problem is replacing words in the problem statement with hypernyms. Hypernyms are words that have a broader meaning than the given word. (For example, a hypernym of 'car' is 'vehicle').

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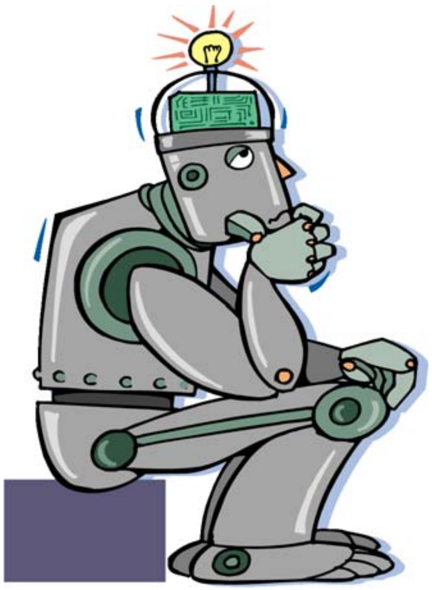
Top 10 thinking traps exposed!

Avoid being overly skeptical and negative on the change alternative. It is generally not as bad as we tend to assume.



Our minds set up many traps for us. Unless we're aware of them, these traps can seriously hinder our ability to think rationally, leading us to bad reasoning and making stupid decisions. Features of our minds that are meant to help us may, eventually, get us into trouble.

Here are the first 5 of the most harmful of these traps and how to avoid each one of them.

1. The Anchoring Trap: Over-Relying on First Thoughts

We must recognize that our minds have an initial bias caused by our initial impressions and experiences that serve as a starting point that often is not fair or real and this data **"anchors" our subsequent thoughts.**

What can you do about it?

Always view a problem from different perspectives. Avoid being stuck with a single starting point. **Think on your own before consulting others.** Get as much data as possible and explore some conclusions by yourself before getting influenced by other people's anchors.

Seek information from a wide variety of sources. Get many opinions and broaden your frame of reference. Avoid being limited to a single point of view.

2. The Status Quo Trap: Keeping on Keeping On

We tend to repeat established behaviors, unless we are given the right incentives to entice us to change them. **The status quo automatically has an advantage over every other alternative.**

What can you do about it?

Consider the status quo as just another alternative. Don't get caught in the 'current vs. others' mindset. Ask yourself if you would choose your current situation if it weren't the status quo.

Know your objectives. Be explicit about them and evaluate objectively if the current state of affairs serves them well.

Avoid being overly skeptical and negative on the change alternative. It is generally not as bad as we tend to assume.

3. The Sunk Cost Trap: Protecting Earlier Choices:

Be OK with making mistakes. Examine why admitting to earlier mistakes distresses you. Nobody is immune to errors, so you shouldn't make a big deal out of it — just make sure you learn from them!

Find people who are not emotionally committed to past decisions and ask their opinion.

Focus on your goals. We make decisions in order to reach *goals*. Don't become attached to the particular series of steps you took towards that goal; always consider how you can better fulfill that goal *from now on*.

4. The Confirmation Trap: Seeing What You Want to See

The *Confirmation Trap* means **looking for information that will most likely support your initial point of view** — while conveniently avoiding information that challenges it.

This confirmation bias affects not only where you go to collect evidence, but also how you interpret the data: we are much less critical of arguments that support our initial ideas and much more resistant to arguments against them.

No matter how neutral we think we are when first tackling a decision, our brains always decide — intuitively — on an alternative right away, making us subject to this trap virtually at all times.

What can you do about it? **Expose yourself to conflicting information.** Examine all evidence with equal rigor. Don't be soft on disconfirmatory evidence. Know what you are about: Searching for alternatives or looking for reassurance!

5. Get a devil's advocate.

Find someone you respect to argue against the decision you're contemplating making. If you can't find one, build the counterarguments yourself. Always consider the other positions with an open mind.

Don't ask leading questions. When asking for advice, make neutral questions to avoid people merely confirming your biases. "What should I do with my stocks?" works better than "Should I sell my stocks today?"

5. The Incomplete Information Trap: Review Your Assumptions

When 99% probability rests with one alternative we put 100% assumption in it without giving accommodation to 1% doubt. We keep mental images — simplifications of reality — that make we jump to conclusions before questioning assumptions or checking whether we have enough information.

What can you do about it?

Make your assumptions explicit. Keep in mind that for every problem you're using implicit information — your assumptions.

It's usually not hard to check the validity of assumptions, but first you need to know what they are.

Always favor hard data over mental simplifications. Our preconceptions — such as stereotypes — can be useful in many situations, but we should always be careful to not over-rely on them. When given the choice, always prefer hard data.

Get mentally fit with an Idea Quota!

Just like in a physical workout, to grow your creativity muscles you have to constantly push your limits, even if just a little bit. Every time you do that, you expand your comfort zone and make it increasingly easier to have plenty of ideas.

Thomas Edison, still the individual with the most awarded patents to date, had ambitious targets for himself: he had an "invention quota" of nothing less than **a minor invention every ten days and a major invention every six months**.

Edison firmly believed that he could never have gone so far without giving himself very aggressive targets. The lesson he gave us is that your expectations matter a lot: if you expect to have just a few ideas, you will settle the moment you reach that amount.

The first step to have great ideas is to adopt an attitude of having lots of ideas.

Putting it simply, using an Idea Quota means **committing to have a predetermined number of ideas during the day**.

The point of committing to a quota is that it forces you to **actively pursue new ideas**. Instead of just waiting and hoping for ideas, you give your mind a specific challenge to work on — activating your creativity and directing it to a tangible goal.

Although you can use quotas without specifying a central theme for your ideas, the technique works best when you direct it to very specific needs, such as:

- a challenge you're working on, either in your personal life or at work;
- an improvement you want to make in your life or business;
- finding answers to specific questions you have, either practical or more abstract.

How to Make the Idea Quota Work for You

1. Pay Attention to Your Problem Statement

Be extremely careful when defining your challenge: just by changing the way you state the problem, you will be able to greatly increase your idea output.

For example, when you define your challenge as "How to get a promotion?", what you may really mean is "How to earn more money?" — or something entirely different, depending on your situation. By digging for your underlying motivations you avoid being distracted by situations that may be just transitory.

By expanding your alternatives, you make the whole idea generation process much easier and more productive — but you also need to be careful not to make the problem too vague.

Honor Your Quota

Once you agree on a quota, **commit to it**. This is essential for the technique to work, as it shows you're serious about getting that amount of ideas.

One general advice, especially valid to help you reach your quota, is to be prepared to write down ideas anywhere and at any time.

By doing this, you won't miss any ideas and will have a big head start against your daily goal. If you don't reach your quota by taking notes throughout the day, then sit down at an appropriate time with the specific purpose of brainstorming ideas.

Granted, when your creativity is low, this can be hard – but just like in a physical workout, it's only by persisting that one can reap the greatest benefits.

3. Keep Ideas Flowing

When listing ideas, it's important **not to judge or evaluate them**. The point of the technique is to come up with as many ideas as you can, so try to focus on the sole goal of reaching the quota you defined, leaving any form of analysis for later.

When in doubt about an idea, don't get distracted by it — just write it down and move on. Two common examples of such distractions are: suspecting an idea is a duplicate of a previous one or believing the idea is completely unrelated to the subject at hand. Sure, don't count those ideas for the quota if you prefer, but do write them down, as they may trigger other valid ideas.

Test Drive It

Although it may be impractical to be in "Idea Quota mode" all the time, it is worth trying out for at least a week for a specific problem or improvement that needs to be made. Don't forget to be aggressive on the quota you set for yourself and you may be surprised about how many ideas you're capable of having.

Einstein's secret to amazing problem solving!

Continued from page 1

4. Chunk Down

If each problem is part of a greater problem, it also means that each problem is composed of many smaller problems. It turns out that decomposing a problem in many smaller problems — each of them more specific than the original — can also provide greater insights about it.

'Chunking the problem down' (making it more specific) is especially useful if you find the problem overwhelming or daunting. Just as in 'chunking up', word substitution can also come to great use here. The class of words that are useful here are hyponyms: words that are stricter in meaning than the given one. (E.g. two hyponyms of 'car' are 'minivan' and 'limousine').

5. Find Multiple Perspectives

Before rushing to solve a problem, always make sure you look at it from different perspectives. Looking at it with different eyes is a great way to have instant insight on new, overlooked directions.

For example, what would be the customer's viewpoint? the employees view? the Community perspective?

Also, imagine how people in various roles would frame the problem. How would a politician see it? A college professor? Try to find the differences and similarities on how the different roles would deal with your problem.

6. Use Effective Language Constructs

There isn't a one-size-fits-all formula for properly crafting the perfect problem statement, but there are some language constructs that always help making it more effective:

Assume many solutions. An excellent way to start a problem statement is: *"In what ways might I…"*. This expression is much superior to "How can I…" as it hints that there's a multitude of solutions, and not just one — or maybe none. As simple as this sounds, the feeling of expectancy helps your brain find solutions.

Make it positive. Negative sentences require a lot more cognitive power to process and may slow you down — or even derail your train of thought. Positive statements also help you find the real goal behind the problem and, as such, are much more motivating. For example: instead of finding ways to 'quit smoking', you may find that 'increase your energy', 'live longer' and others are much more worthwhile goals.

Frame your problem in the form of a question. Our brain loves questions. If the question is powerful and engaging, our brains will do everything within their reach to answer it. We just can't help it: Our brains will start working on the problem immediately and keep working in the background, even when we're not aware of it.

If still stuck, consider using the following formula for phrasing your problem statement:

"In what ways **(action) (object) (qualifier) (end result)**?"

Example: In what ways might I **package** (action) **my product** (object) **more attractively** (qualifier) so **people will buy more of it** (end result)?

7. Make It Engaging

If the problem looks too dull for you, invest the time adding vigor to it while *still keeping it genuine*. Make it enticing. Your brain will thank (and reward) you later.

One thing is to 'increase profits' (sounds difficult), another one is 'wow your customers' (sounds creative and exciting). One thing is 'to create a personal development effort'; another completely different is to 'empower to live fully'.

8. Reverse the Problem

One trick that usually helps when you're stuck with a problem is turning it on its head. If you want to win, find out what would make you lose. Then, all you need to do is reverse your answers. '

9. Gather Facts

Investigate causes and circumstances of the problem. Probe details about it — such as its origins and causes. Especially if you have a problem that's too vague, investigating facts is usually more productive than trying to solve it right away. Ask yourself questions about the problem. What is not known about it? Can you draw a diagram of the problem? What are the problem boundaries? Be curious. Ask questions and gather facts. It is said that a well-defined problem is halfway to being solved.

10. Problem-Solve Your Problem Statement

Getting the right perspective of a problem is, well, a problem in itself.

Of course, how much effort you invest in **defining the problem** in contrast to how much effort you invest in **solving your actual problem** is a hard balance to achieve, though one which is attainable with practice.

We must be aware of how important problem defining is and correct our tendency to spend too little time on it.

In fact, when you start paying more attention to how you define your problems, you'll probably find that it is usually much harder than solving them. *But you'll also find that the payoff is well worth the effort.*

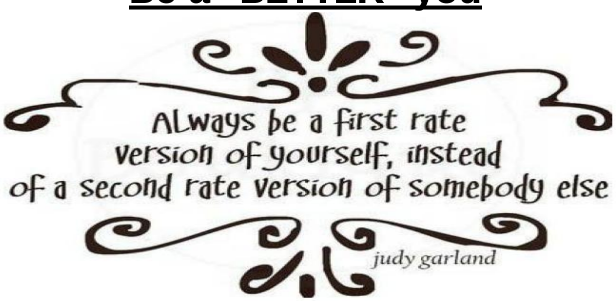
The Power of Subconscious Mind

The human mind has two parts: the conscious and the subconscious? An excellent analogy would be an iceberg, where the conscious mind is the tiny bit that sticks out of the water, and the subconscious mind is the majority part of the iceberg hidden underneath the surface.

Subconscious Mind Facts

- The Subconscious Mind only thinks in the present
- The Subconscious Mind does not know what is real and what is imagined
- The Subconscious Mind only learns by repetition… over and over again
- The Subconscious Mind thinks in infinite or absolute terms, not in finite or partial terms.

Be a "BETTER" you



Personality development is the term which in present times is considered an important aspect and plays a very important role in the path of success. Personality is the thought, feeling and behaviour of a person, which is inbuilt but flexible. Building up of one's personality is called personality development. The three main aspects of personality – feeling, thought and behaviour, is a part of our identity and the first impression on another person depends on the perfect handling of these three points.

We can follow few points which can help build our personality to create better first and lasting impressions:

1.Self-Analysis – The first towards personality development is self analysis. We are the best judge of ourselves but the problem lies in the fact that we deny our faults or weaknesses. Learn to accept your faults and try to improve them, even if it requires taking someone's help. The process of self-analysis is quite enlightening and brings even those aspects to light, which you would have ignored. The best way is to ask someone close to you or your mentor to evaluate you, give you an unbiased opinion whilst pointing the areas which needs improvement. No one is perfect but this process will help you in identifying and overcoming your grey areas.

2.Self-Respect – If you don't respect yourself, nobody will. Respect all your decisions and stick to them, no matter what comes along. Be protective to your self-respect and don't let anybody trample over it.

3.Honesty – No matter where you are in the world, honesty will always take you places. Being conscientious or honest is one of the important steps to personality development. Honesty gains you respect and also give you the strength to hold your head high.

4.Respecting Others – The most important rule in life is to remember that others around you are not inferior to you in any way. Showing respect to others, no matter which status the person belongs to, speaks volumes about your nature and respecting others compels them to feel the same for you.

5.Controlling your Emotions – Control over emotions such as anger as it is very important for your personality development. Don't let your emotions take charge of your actions or your decisions.

6.Being An Individual – *"Be a first rate version of yourself, not a second rate version of someone else – Judy Garland".* Be proud of your achievements and don't let anyone's success tarnish your happiness, which will in turn ruin your personality.

These are some of the important steps towards building a good personality. But personality development is not about making it difficult for people to reach you. A pleasant personality is one which makes it easy for people to approach you but makes it difficult for them to take advantage of you!

Remember no matter how intelligent you are, if you don't create the right impression at the right time at the right place, nothing will work for you and it is through developing your personality that you can achieve great heights of success, both personally and professionally. The idea is to realize and accept our shortcomings and improve upon them, rather than being rigid and fixed in our ideas and behaviour, which will ultimately lead to one's downfall!

The Dew Drop

As the sun rose, a dew drop became aware of its surroundings. There it sat on a leaf, catching the sunlight and throwing it back out. Proud of its simple beauty, it was very content. Around it were other dew drops, some on the same leaf and some on other leaves round about. The dew drop was sure that it was the best, the most special dew drop of them all.

Ah, it was good to be a dew drop. The wind rose and the plant began to shake, tipping the leaf. Terror gripped the dew drop as gravity pulled it towards the edge of the leaf, towards the unknown. Why? Why was this happening? Things were comfortable. Things were safe. Why did they have to change? Why? Why? The dew drop reached the edge of the leaf. It was terrified, certain that it would be smashed into a thousand pieces below, sure that this was the end. The day had only just begun and the end had come so quickly. It seemed so unfair. It seemed so meaningless. It tried desperately to do whatever it could to cling to the leaf, but it was no use.

Finally, it let go, surrendering to the pull of gravity. Down, down it fell. Below there seemed to be a mirror. A reflection of itself seemed to be coming up to meet the dew drop. Closer and closer they came together until finally..And then the fear transformed into deep joy as the tiny dew drop merged with the vastness that was the pond. Now the dew drop was no more, but it was not destroyed. It had become one with the whole. *(Moral: It is better to be a part of a team and do great things then be insecure of sharing knowledge with others in fear of losing one's edge, as there is greatness in sharing and humility in being a part of the larger solution then trying to take away the limelight).*

Natural Gas *Explained*

How Was Natural Gas Formed?

The main ingredient in natural gas is methane, a gas (or compound) composed of one carbon atom and four hydrogen atoms. Millions of years ago, the remains of plants and animals (diatoms) decayed and built up in thick layers. This decayed matter from plants and animals is called organic material — it was once alive. Over time, the sand and silt changed to rock, covered the organic material, and trapped it beneath the rock. Pressure and heat changed some of this organic material into coal, some into oil (petroleum) and some into natural gas—tiny bubbles of odorless gas.

How Do We Get Natural Gas?

The search for natural gas begins with geologists, who study the structure and processes of the Earth. They locate the types of rock that are likely to contain gas and oil deposits.

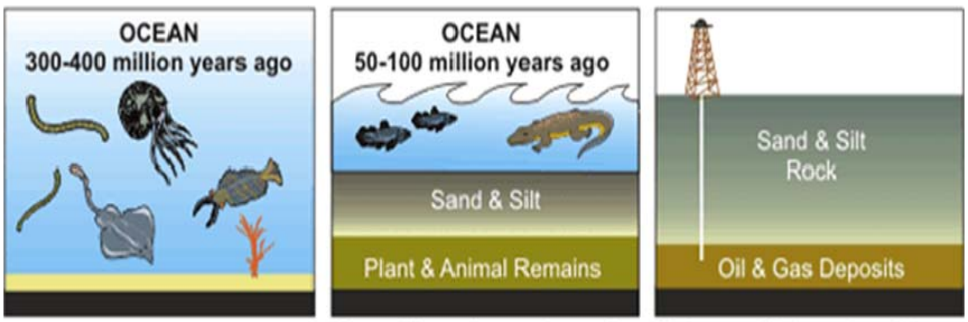
Today, geologists' tools include seismic surveys that are used to find the right places to drill wells. Seismic surveys use echoes from a vibration source at the Earth's surface (usually a vibrating pad under a truck built for this purpose) to collect information about the rocks beneath. Sometimes it is necessary to use small amounts of dynamite to provide the vibration that is needed.

Scientists and engineers explore a chosen area by studying rock samples from the earth and taking measurements. If the site seems promising, drilling begins. Some of these areas are on land but many are offshore, deep in the ocean. Once the gas is found, it flows up through the well to the surface of the ground and into large pipelines.

Some of the gases that are produced along with methane, such as butane and propane (also known as "by-products"), are separated and cleaned at a gas processing plant. The by-products, once removed, are used in a number of ways. For example, propane can be used for cooking on gas grills.

Natural gas withdrawn from a well may contain liquid hydrocarbons and nonhydrocarbon gases. This is called "wet" natural gas. The natural gas is separated from these components near the site of the well or at a natural gas processing plant. The gas is then considered "dry" and ready to be distributed to consumers.

PETROLEUM & NATURAL GAS FORMATION



Tiny sea plants and animals died and were buried on the ocean floor. Over time, they were covered by layers of silt and sand.

Over millions of years, the remains were buried deeper and deeper. The enormous heat and pressure turned them into oil and gas.

Today, we drill down through layers of sand, silt, and rock to reach the rock formations that contain oil and gas deposits.

What is LNG?

Liquefied natural gas, or LNG, is natural gas that has been super cooled to minus 260 degrees Fahrenheit (minus 162 degrees Celsius). At that temperature, natural gas condenses into a liquid. When in liquid form, natural gas takes up to 600 times less space than in its gaseous state, which makes it feasible to transport over long distances. In the form of LNG, natural gas can be shipped from the parts of the world where it is abundant to where it is in demand. LNG is an energy source that has much lower air emissions than other fossil fuels, such as oil or coal.

LNG is odorless, colorless, non-corrosive and non-toxic. Its weight is less than one-half that of water.

Natural gas is the world's cleanest burning fossil fuel and it has emerged as the environmentally preferred fuel of choice.

LNG Characteristics

Liquid: LNG is a clear, colorless liquid that forms when natural gas is cooled to -260^0 F. The change to a liquid reduces the volume of natural gas by a ratio of 600 to 1, which means one LNG tanker can transport enough LNG to equal 600 tanker ships carrying natural gas.

Environmentally Friendly: Operations are clean and compatible with environmental protection.

Safe: not stored under pressure and does not explode.

Non-toxic: LNG is non-toxic in an unlikely event of a spill in water or an land.

Plentiful: LNG can help ensure safe and reliable supplies of natural gas.

Trainings held in August - September, 2010

Training Title	Training Date	Venue	Trainer Name	Internal / External
Development Course for Staff	Aug 30 to Sep 03	GTI	Mr. Sohail Abbasi Mr. Rizwan Ali	HR Essentials
Development Course for Executives	Aug 30 to Sep 03	GTI	Mr. Sardar Shah	HR Essentials
Meter Readers Training - Data Study Form	Aug 11	GTI	S. Kamran Yousuf Mr. Tausif Anwar	SSGC -Billing
Welding Techniques for Distribution Staff	Aug 02 to Aug 13	GTI	Mr. Riaz Akhtar Awan	SSGC
Welding Techniques for Distribution Staff	Aug 02 to Aug 13	R.O Hyderabad	Mr. Riaz Akhtar Awan	SSGC
Welding Techniques for Distribution Staff	Aug 16 to Aug 31	GTI	Mr. Riaz Akhtar Awan	SSGC
Welding Techniques for Distribution Staff	Aug 16 to Aug 31	R.O Hyderabad	Mr. Riaz Akhtar Awan	SSGC
EVC Training - Meter Reading Inspectors	Aug 17 & 19	GTI	Mr. Abdul Jabbar Mr. Omer Sharif Mr. Muhammad Safdar	SSGC
Development Course for Staff	Aug 30 to Sep 03	GTI	Mr. Sohail Abbasi Mr. Rizwan Ali	HR Essentials
Welding Techniques for Distribution Staff	Sep 6 to Sep 17	GTI	Mr. Riaz Akhtar Awan	SSGC
Welding Techniques for Distribution Staff	Sep 6 to Sep 17	R.O Hyderabad	Mr. Riaz Akhtar Awan	SSGC
Enhancement of Analytical Skills (for ZMs Billing Department)	Sep 22	GTI	Syed Tariq Munawar	Billing—SSGC
Procedures & Techniques for Gas Fittings	Sep 22 to Sep 24	GTI	Mr. Arshad Ghazali Mr. Raees Ahmed	GTI –SSGC
Welding Techniques for Distribution Staff	Sep 20 to Sep 3	GTI	Mr. Riaz Akhtar Awan	SSGC
Welding Techniques for Distribution Staff	Sep 20 to Sep 30	R.O Hyderabad	Mr. Riaz Akhtar Awan	SSGC

Trainings conducted by SMEs and External Trainers

Training Title: Refresher Course for Meter Readers

Subject Matter Expert: Mr. Tauseef Anwar, Assistant Billing Department-Head Office

Audience: Meter Readers/ Supervisors/ Inspectors

Course outline: Gas Measurement, Types of Gas Meters, Meter Reading Codes, Dolphin 7200, How to get start with HHC, D-Case Entry and Lock Options, HHC Troubleshooting

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Training Title: Development Courses for Executives & Staff

Trainers:
Mr. Sardar Shah
Mr. Sohail Abbasi
Mr. Rizwan Ali
(HR Essentials)

Course outline

- An Introduction to SSGC
- BPEP (Business Principles, Ethics and policies)
- Safety Behavior
- Introduction to Computers
- Personal Grooming
- Understanding Management
- Communication Skills
- Team building
- Time Management
- Overview of Natural Gas Industry
- SSGC's core functions (Transmission and Distribution)
- Presentation on UFG

Training Title : Welding Techniques for Distribution Staff

Subject Matter Expert : Mr. Riaz Akhtar Awan

Audience : HR Approved Welders / Senior Welders

Course outline:

Arc Welding

About Welding Plants and Current Controls

Welding Procedures

Safety Precautions

Welding Electrodes and Functions

Usage of Polarity

Defects of Weld Joints, Causes and Remedies

This in-house publication is aimed at promoting a learning culture within Sui Southern Gas Company.

For your suggestion/ comment please write to HR at majid.malik@ ssgc.com.pk