



A tradition of Safety, Strength and Service.

BEHAVIORAL SAFETY

**Analyzing perception of safety,
acceptance of BOS principles and
tailored programs to anchor safe
behavior in different cultural and
societal environments**

Nadia Engler

XVII SAFEX Congress

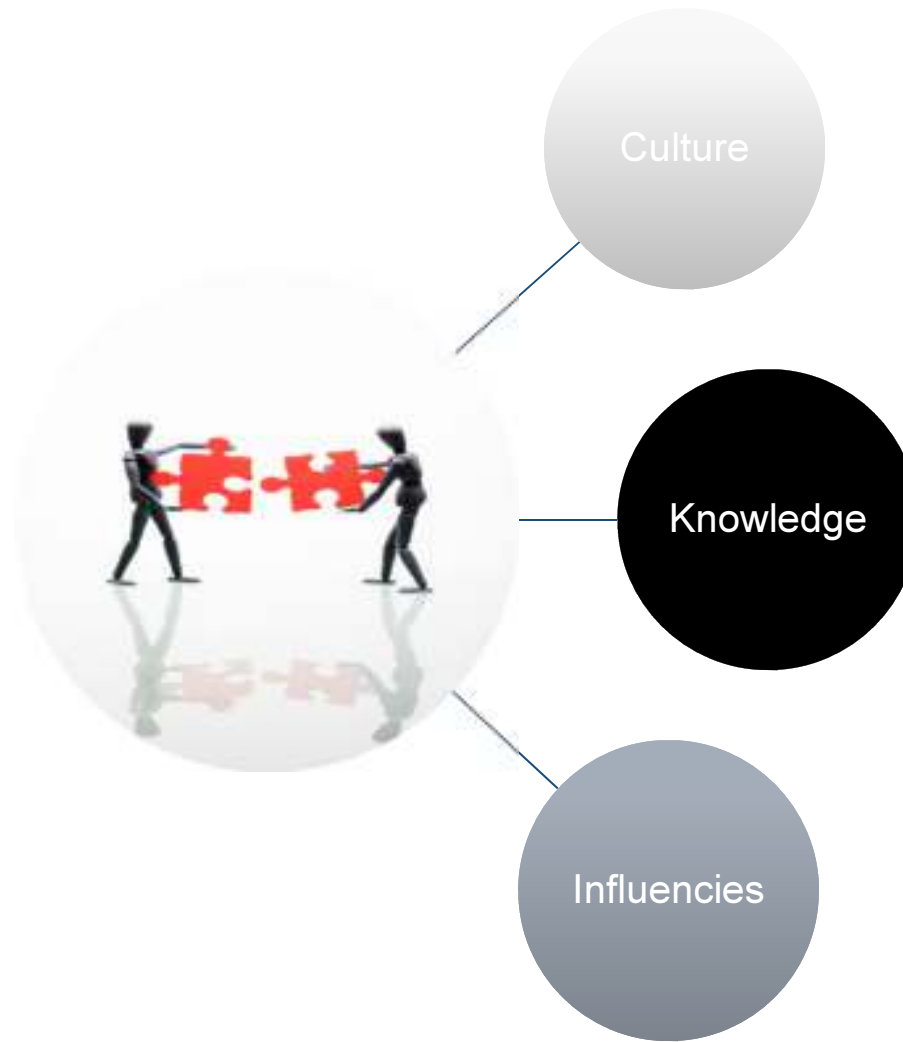
Istanbul, May 23rd – 28th



WHY PEOPLE BEHAVE UNSAFE



WHY PEOPLE BEHAVE UNSAFE



Analysis of Cultural Dimensions for Latin American Countries

(after Geert Hofstede)

- ✓ These ideas are based on large research projects on national cultural differences.
- ✓ The results of this analysis are grouped in so called **‘Cultural Dimensions’**.
- ✓ Countries are categorized after these Cultural Dimensions and can be compared for similarities or differences.
- ✓ This approach can only provide a country’s average and that individual groups or regions inside a country may deviate.
- ✓ **‘Individualism’** and **‘Uncertainty Avoidance’** are looked at in more detail



Analysis of Cultural Dimensions for Latin American Countries

(after Geert Hofstede)

- ✓ Latin American countries have a low level of individualism (individualism = everyone expected to look after him/herself)
- ✓ People from birth on are integrated into strong, cohesive in-groups, often extended families
- ✓ Everyone takes responsibilities for fellow members of their group
- ✓ Population is predominately Catholic
- ✓ There is a believe in an absolute 'Right Way'



Analysis of Cultural Dimensions for Latin American Countries

(after Geert Hofstede)

- ✓ Uncertainty avoidance factor (to describe the society's tolerance for uncertainty and ambiguity) is high. A high number means that a society is not tolerant to uncertainties
- ✓ People feel uncomfortable in unstructured situations
- ✓ Try to minimize possibility of uncertain situations by strict laws and rules, safety and security measures
- ✓ Goal of population is to control everything in order to eliminate or avoid the unexpected or unknown
- ✓ As a result of this, society does not readily accept change and is very risk adverse



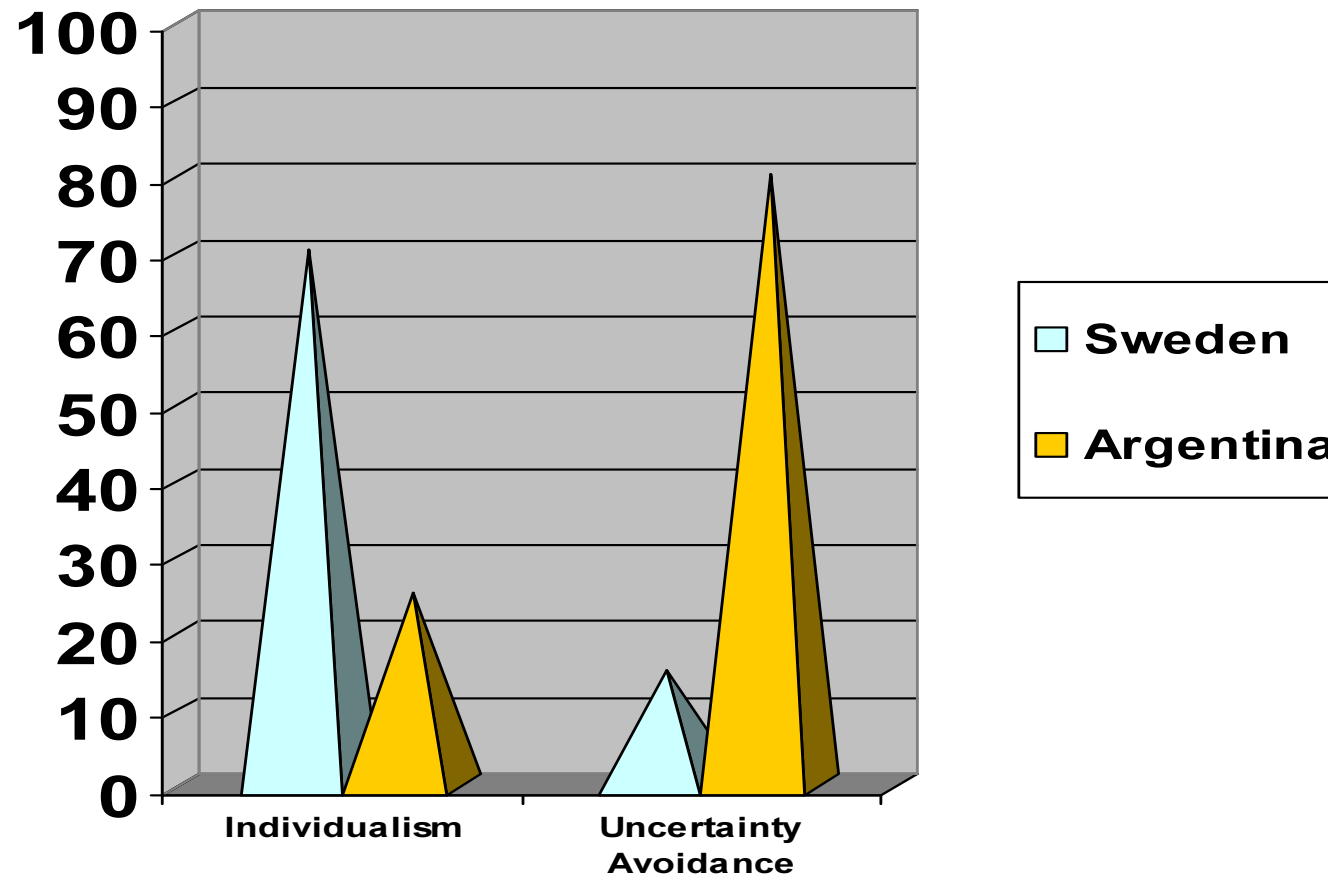
Analysis of Cultural Dimensions for European

(after Geert Hofstede)

- ✓ European Countries on the other hand show a higher grade of individualism, i.e. people stress on personal achievements and individual rights and tend to have more loose relationships.
- ✓ Societies are less relying on a strong network of rules and regulations. Uncertainty is less perceived as a hazard and limits will more likely be overrun.
- ✓ A comparison between Argentina and Sweden is presented on the next slide.



Cultural Dimension Measures Europe vs. Latin America



Analysis of Cultural Dimensions for Latin American Countries



Approach to introduce a positive safety culture has to be tailored to the attitude and made to be part of it:
“There can only be one Right way and we have it!”



Organizational Factors That Contribute To Unsafe Behavior

- ✓ Looking for escape routes in the safety procedures because people want to finish their tasks quickly
- ✓ Team leaders and managers who don't believe in safety
- ✓ Mistaken beliefs
- ✓ Failure to call attention to apply safer techniques that can extend the time for a task to more than usual
- ✓ Don't want to invest in safety
- ✓ Lack of knowledge
- ✓ Supervisors and line managers not acting as a paradigm
- ✓ Lack of recognition of good safety performance
- ✓ Way safety is procured not accepted due to cultural issues



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Latin-American culture Impact in Safe Behavior

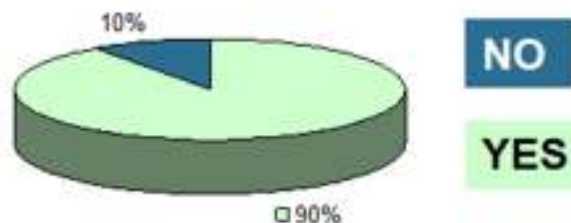


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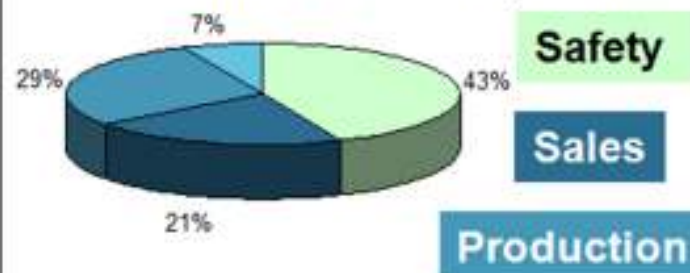
Survey results on how operators perceive safety issues

Data from Austin Powder Argentina

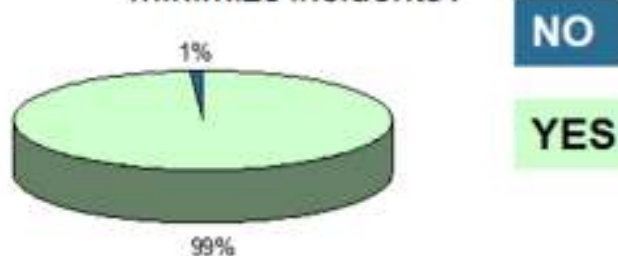
Is Safety important to the company?



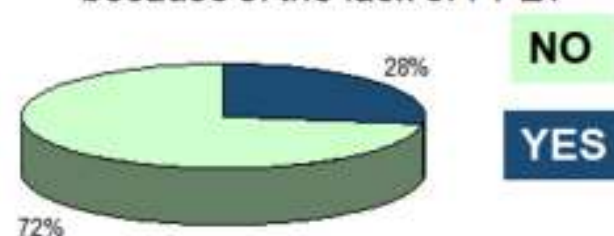
Which issue is most important?



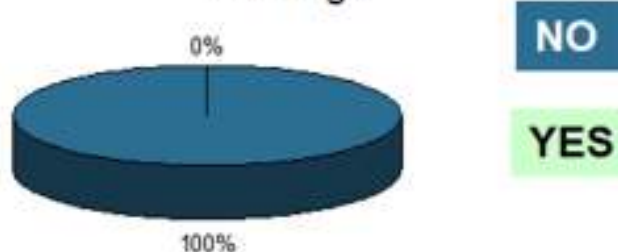
The use of PPE is important to minimize incidents?



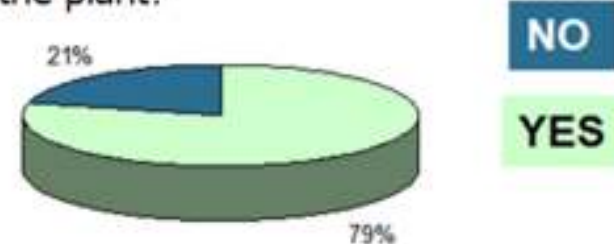
Have you ever suffered any incident because of the lack of PPE?



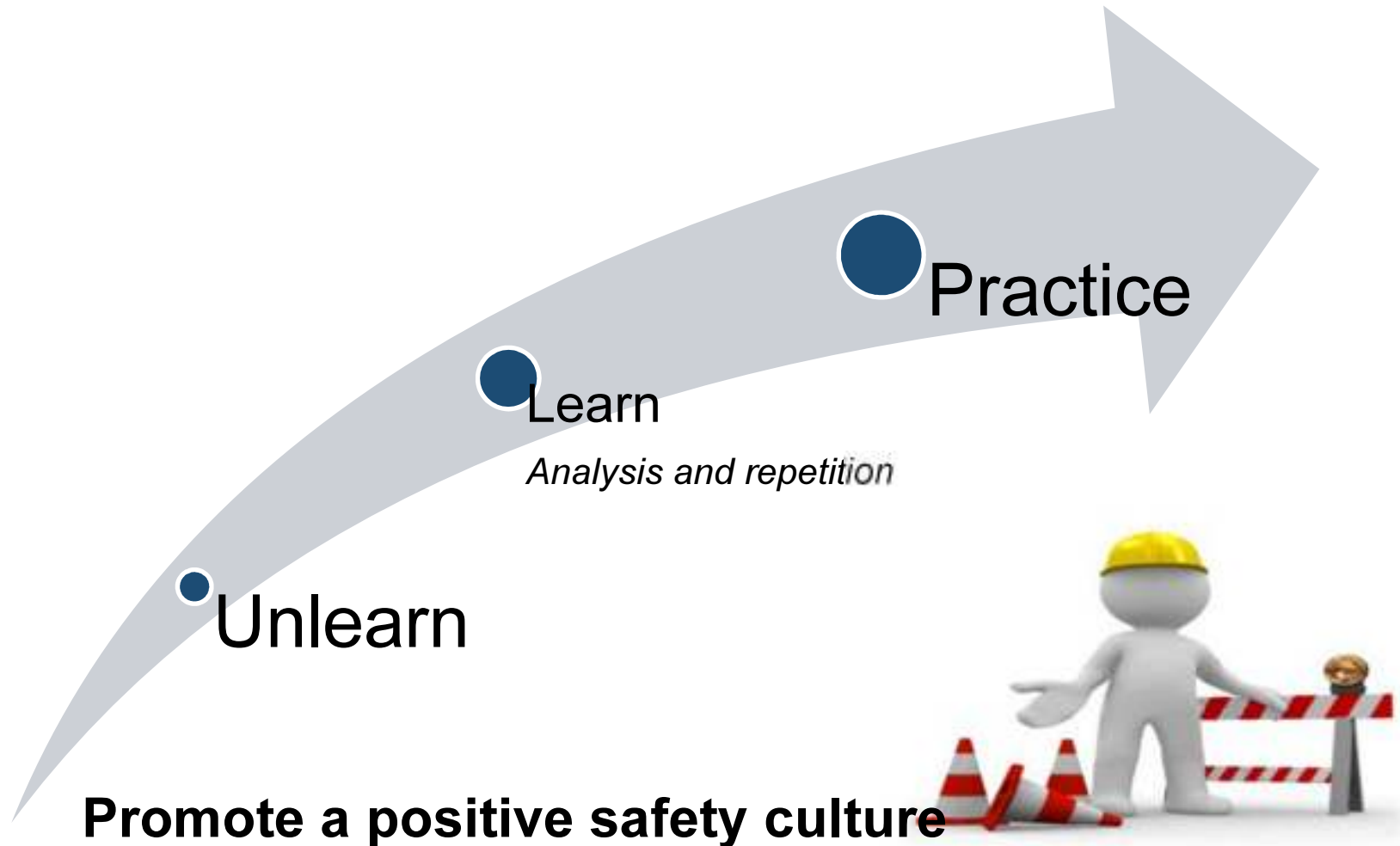
Have you ever assisted to any training?



Do you understand the procedures in the plant?



What Can We Do?



Practical Tools

- ✓ Work together, in group as part of a team
- ✓ Establish safety goals
- ✓ Have operators acting as trainers (toolbox talks)
- ✓ Know the workers and listen to their safety concerns
- ✓ Discover new and practical ways to teach safety
- ✓ Be a role model
- ✓ Give positive reinforcement
- ✓ Give public congratulation to operators who practice safe behavior
- ✓ Give support to supervisors to improve safe behavior in their areas
- ✓ Be safe at home with the family
- ✓ Tailor and develop tools that take care of cultural issues



License to Operate (LTO)

- ✓ Integrated approach to safety management system that extends beyond plant inspections and audits
- ✓ Compliance with BOS basics
- ✓ Training course for plant personnel on BOS principles
- ✓ Plant inspections with personnel to demonstrate how BOS is implemented and identify specific hazards (and how it is dealt with) in their daily working environment
- ✓ Goal is to make consequences of safe/unsafe behavior more visual and understandable
- ✓ Written test to demonstrate competency
- ✓ LTO Certificate (typically 12 months) to operate the plant will only be issued if also competency is proven
- ✓ Staff and supervisors become aware that a plant will only be approved for operation if the 'basis behaves safely'



Carrying safety outside the company

Leaflets at home for the family



Carrying safety outside the company Leaflets at home for the family

TAKING CARE OF OUR EYES



Most eye accidents can be avoided by using glasses, goggles and screens adequate for each type of task. These items have eye protection as primary function, i.e. to protect our eyes against harmful impacts, air particles, dust and sparks, among others.

THE EARS

The human ear has no defense mechanism to block and protect itself from noise. They cannot be closed like the eyes are closed. The harmful effects of noise may cause functional disorders, which are the result of errors or accidents that could have been avoided.



FOOT PROTECTION AT WORK

After the hands, feet are the body part that most injuries suffered while working. These, usually immobilize the injured for quite long periods of time. Even minor injuries can cause pain and require immobilization for healing. The feet are particularly vulnerable to bruising, if they are not adequately protected using safety shoes.



THE HANDS

Daily work causes a great impact in your hands. In addition to the worn out and torn by the use of tools and handling heavy equipment, sharp or rough, hands are exposed to weather, chemicals, dirt, solvents, fuels and grease, among others.

Gloves are the best elements of protection to take care of the hands. Provide better protection when handling materials and allow for greater holding power. Also protect against sharp objects, thorns and cutting tools. Gloves should fit properly. Those which are too large can interfere with work or get caught in the machinery, causing an incident that could have been avoided.



“ Your hands are finely designed tool, with incredible strength and skill. They are your most valuable tools. Protect them and cherish them. ”



Training Participation Certificate

Elaborate design has high value for individuals



Stretching exercises at start of shift to refresh occupational health issues



Benefits of carrying safety 'outside the fence' and group experience

- ✓ Carrying safety into families triggers back coupling towards the individual
- ✓ Social 'Pressure' towards safety from family and team
- ✓ Company acts different from others and takes care of the breadwinner
- ✓ Company rules become accepted as part of the 'Right Way'
- ✓ Individual and group become 'owner' of new role model
- ✓ Improvement of safety in private life
- ✓ Raise of threshold level to perceive unsafe action



Some other Examples



Bonding activities



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Some other Examples

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INTERNATIONAL

JOB STRESS

what is it?

- Es la respuesta automática y natural de nuestro cuerpo ante las situaciones que nos resultan amenazadoras y desafiantes.
- Desequilibrio percibido entre las demandas profesionales y la capacidad de la persona de llevarlas a cabo.
- Este proceso inicialmente puede ayudar en la actividad del individuo. Sin embargo, cuando este proceso de activación es muy intenso o dura mucho tiempo, los recursos se agotan y llega el cansancio, así como la pérdida de rendimiento.



Health Effects

- Cuando el estrés es crónico puede propiciar la aparición de situaciones y enfermedades como: gastritis, ansiedad, accidentes, frustración, insomnio, migraña, depresión, agresividad, disfunción laboral, infarto al miocardio, hipertensión, entre otros.

Handling

- Respiración diafragmática: momentos de respiración larga inhalación y exhalación
- Ejercicio físico
- Consumo de agua
- Meditación
- Organización en el trabajo
- Alimentación saludable
- Escritura emocional auto reflexiva: escribir o hablar de manera continua sobre situaciones propias de la vida diaria, sobre las que necesite reflexionar




Safety Tips



Regional Bulletins tailored to specific operations


AUSTIN POWDER
 INTERNATIONAL
AUSTIN POWDER PANAMA

Alerta de Seguridad

Un incidente ocurrió en una planta de fabricación de explosivos, cuando una reacción exotérmica ocurrió y tuvo lugar dentro de una bolsa que contenía desechos de nitrato de amonio. La reacción se controló usando agua. Se entiende que desechos de nitrato de sodio en polvo y desechos nitrato de amonio se mezclaron de forma inadvertida.

Recomendaciones

Recordemos, no mezclar desechos o materiales incompatibles entre sí.

BOLETÍN DE SEGURIDAD, SALUD Y AMBIENTE

Estos meses pasados empezamos nuevos proyectos lo que ha significado mayor movimiento, más trabajo, siendo esto algo positivo para todos nosotros como equipo Austin.

Pero el hecho de tener más trabajo no significa disminuir los niveles alcanzados de mejoramiento en materia de seguridad y salud ocupacional. La limpieza y manejo de desechos, la organización del trabajo, la evaluación de los riesgos antes de ir al área de trabajo, el uso y cuidado de nuestros equipos de protección, el cumplimiento de las normas de nuestra industria (no fumar, ni generar chispas, revisión de los vehículos pre-viaje y mensual, realizar la conexión, carga y taceo adecuado, manejo adecuado de explosivos, polvorinas limpias, distancias apropiadas de los explosivos de las paredes, mantener al mínimo la cantidad de personas durante la carga y conexión de barrenos, control de artículos sueltos, y otros) deben ser parte de nuestra forma de vivir y deben ser realizadas siempre (no importando la cantidad de trabajo), ya que como dice nuestro slogan **La seguridad es nuestra prioridad.**

No olvidemos que somos el **Equipo Austin** no un grupo, un equipo, trabajemos unidos cumpliendo nuestros valores "**Seguridad, Fortaleza y Servicio**". Gracias por todo el esfuerzo que hacen diariamente. No paremos, sigamos adelante, buscando siempre el mejoramiento continuo en todos los niveles.



Próximos temas de Entrenamiento

- Procedimiento Operativo de los camiones de Bombeo
- Características de los explosivos
- Procedimientos de Emergencias
- Riesgos Químicos (MSDS)
- Manejo de Desechos



PROYECTO HIDROELECTRICO-CHAND 1



PROYECTO - ISLA TABOQUILLA



ACP-PAC3



Entrenamiento de Combate de Incendios - Administrativos

Piensa Seguro-Actúa Seguro. Nuestros Valores: Seguridad, Fortaleza y Servicio



Boletín Trimestral SHES
Edición N° 5



To conclude...

The safety culture changes from country to country, but more important, from organization to organization, and it's necessary:

- **Understand the culture**
- **Know the operators personalities**
- **Determinate specific goals**
- **Give clear rules and information**
- **Motivate**
- **Keep improving**

Safety should always be the FIRST PRIORITY, needs to be understood for everyone, so we can have a real change in the behavior



“The best thing about the future is that it comes only one day at a time.”

Abraham Lincoln (1809-1865)

