

What are Associated Non-Technical Skills?

Associated Non-Technical Skills (ANTS) are mental, social and personal skills that support technical and management skills. They help staff do their work safely and efficiently.

These skills include:

- Situation Awareness (Factsheet 5)
- Decision Making (Factsheet 6)
- Leadership (Factsheet 7)
- Communication (Factsheet 8)
- Teamwork (Factsheet 9)

Teams and team work

Teams are made up of two or more people who work together to achieve a goal. For a team to work people must be willing to adapt, to understand one another and have a positive attitude. Team work succeeds through shared effort, clear aims and coordinated action. Each member has a special role to play in achieving the team's goal.

Breakdown in team work can cause serious incidents. Breakdowns can come from misunderstanding team roles, poor co-ordination, disagreements, conflicting objectives and communication problems.

Team performance

Teams have four basic functions:

- Supporting others
- Solving conflicts
- Exchanging information
- Co-ordinating activities

The following model shows how individual and organisational inputs, added to the dynamic interactions within the team, influence performance and outcomes.

Team performance is influenced by:

Individual inputs – individual contributions to the collective work, performance strategies and how well they match the task, knowledge and skills applied by each team member.

Leadership inputs – leadership style, knowledge and skills, personality (see Factsheet 7 Leadership).

Organisational work task and environmental inputs – design of the task, availability of information, resources, rewards, management style, culture, appropriate make-up of the team.

Team structure inputs - team size, actual roles and responsibilities, status of each team member, balance of personality types, unity of the team.



Effectiveness of teams

Team effectiveness depends on how the team interacts and how this influences overall performance.

For example: When changing a screen at a prep plant, an electrician is needed to isolate the machine, trades assistants are needed to get the equipment, the tradesman must remove and replace the screens and a supervisor oversees the process. The more effectively the team works together the more efficiently and safer the job is done.

Teamwork

The key components of team work are made up of the following elements.

Mutual performance monitoring and backup behaviour

Team members should watch each other's performance for errors, deficiencies or signs of overload, as well as maintaining their individual performance. In this way they can identify the need for backup behaviour within the team. Backup behaviour may involve providing feedback or coaching, helping a team member perform a task or reordering responsibilities and workloads to improve team performance.

Team leadership

The team leader's role may include establishing and maintaining team goals, making sure everyone understands team roles, dealing with constraints and resource issues.

Shared understanding and situation awareness

Team members must have a shared understanding of their goals, the responsibilities and tasks of each member and work together to achieve their goals.

Shared understanding helps team members anticipate each other's needs and the needs of the job, adapt to changing circumstances and better co-ordinate efforts to achieve team goals (see Factsheet 5 Situation Awareness).

For example: When putting in roof bolts, each team member is responsible for a different task that can have a direct impact on the safety of other team members. To work safely they must have a shared understanding of the environment, tasks and team goals.

Closed-loop communication

This involves three stages. A sender communicates a message. The message is accepted and then acknowledged by the receiver. Finally the sender checks with the receiver that the message was received. This process helps ensure information is accurately communicated among team members, and helps with team co-ordination and understanding (see Factsheet 8 Communication).

Mutual trust

Mutual trust is an important factor in fostering teamwork and team effectiveness

Managing conflict within teams

Conflict must be managed if interpersonal and inter-team relationships are to be maintained. Some conflict may be valuable, such as a team member voicing their concerns. Having clear roles and responsibilities, along with keeping emotions in check, can help manage team conflicts.

Conflict resolution skills may include fostering useful debate while preventing personal antagonisms, matching conflict management strategies to the source and nature of the conflict, using integrative (win-win) strategies rather than distributive (win-lose) strategies.

For example: Toolbox talks that give briefings on tasks to be performed by the team can reduce the potential for conflict.

Individual knowledge, skills and attitudes

Knowledge

Knowledge-based competencies involve an individual using their existing knowledge to predict and plan individual and team tasks and responsibilities.

Skill-based competencies

These refer to various behaviours such as coordination, communication, adaptation, assertiveness, and the decision making that an individual may contribute to facilitate teamwork.

Attitude-based competencies

These relate to various individual and team attitudes, such as morale, motivation, mutual trust and cohesion.

For example: An engineering graduate may have up-to-date knowledge, a tradesman is likely to have skill-based competencies and an experienced worker may provide attitude competencies, such as morale and motivation.

Team identity

This depends on whether team members see the team as an interdependent unit and whether it works in that way. Team identity must be real for all members, they must feel responsible for, and involved in, the team. There must also be genuine sharing – of resources, goals etc. Team identity will also be affected by interpersonal factors, like the tendency for people to get on or rub each other up the wrong way.

For example: Workers will identify with their shift team and moving workers frequently between different shift teams can reduce their team identity.

Team process

Necessary team processes include:

- Developing goals – team goals must be identified, communicated and understood by team members so they can direct team behaviour
- Maintaining focus – this relies on team planning, decision making and maintaining situation awareness within a suitable timeframe
- Assess the situation – developing a shared team understanding of the situation
- Clarifying expectations of the situation, team members and tasks
- Evaluation of the course of action
- Team monitoring of effective and ineffective teamwork behaviours that could undermine team goals
- Adjusting strategies to meet the situation or task
- Detecting gaps and inconsistencies in team information and situation awareness
- Time management – team members follow a sequence of tasks to achieve their goals.

Advantages of team work

Building teams and achieving effective team work has many advantages for organisations. These include:

- Providing stability and consistency when an organisation is undergoing change in its environment, strategy and structure
- Supporting quick and cost-effective development and delivery of products and services
- Enhancing organisational learning as team members share knowledge which is not lost to the group when one member leaves
- Saving time on tasks, by working together rather than alone
- Improving quality management and promoting innovation from cross fertilisation of ideas
- Effectively processing information in complex work environments in ways individuals cannot
- Promoting staff involvement.

For example: *If a team of workers does a safety assessment of an identified risk, they are likely to come up with more ideas than if one person did the assessment.*

Training in team work

Here are four suggested team training processes:

1. Cross-training – team members are trained in the tasks of other team members.
2. Team self-correction – team members review their work, identifying and correcting team errors while also identifying ways to improve future team performance.
3. Event-based training – a structured and systematic approach to specific teamwork skill or task training in which participants have the chance to practise and demonstrate their skills and meet learning objectives. Participants are given feedback on the measures relating to their skill performance.
4. Team facilitation training – relates to improving the team leader's skills for fostering and enhancing teamwork and team effectiveness.

For example: *Undertaking emergency training in teams will increase team effectiveness.*

References

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- Salas, E., Sims, D., & Klein, C. (2004). Cooperation at work. In C. Spielberger (Ed.), *Encyclopedia of applied psychology* (Vol. 1). Florida: Elsevier academic press.

Disclaimer

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