

FLOW SYSTEM

PARTICIPANT WORKBOOK

Team Science

Workbook: Developing Cognitions



getflowtrained.com/playbook/developing-cognitions/

Developing Cognitions

Cognition includes the conscious and unconscious processes by which knowledge is accumulated. Developing cognitions at the individual level involves development of knowledge, skills, problem-solving techniques, and dispositions.

Knowledge structures are categorized into four types of knowledge:



- Procedural
- Declarative
- Conceptual
- Conditional

Team members must develop a shared understanding of their goals.

Team members need to know who is working on what task or subtask, who has what skill or knowledge, what contacts each team member has external to the group, what resources are available to each member, and what experiences each member has.

Transactive memory system (TMS) is the ability of team members to encode, store, and retrieve knowledge during team activities.

In the following exercise, you will guide your team through the following questions to help develop shared cognitions among team members. These questions are designed to be discussed with all team members present. The main goal is to leave this activity with all team members having the same understanding of the team's goals, vision, tasks, and roles.

DEVELOPING SHARED COGNITIONS

| DISCUSSION QUESTION | FOCUS AREAS |
|----------------------|-------------------------------------|
| Where are we headed? | Vision Purpose Goals |
| What's important? | Priorities |
| Who should? | Roles |
| How to? | Tasks Norms Interdependencies |
| Why to? | Rationale |
| Who knows? | Expertise |
| What if? | Contingencies If-then |
| What's up? | Situation Cues |

(Tannenbaum & Salas, 2021, p. 135)

Connect the Three Helixes:

Flow can only be achieved when the three helixes are interconnected. To identify how this could occur, the next exercise requires the reader to identify examples of different methods from each of the other two helixes (complexity thinking, distributed leadership) that will support developing cognitions. Knowledge of all three helixes will be required to make these connections.

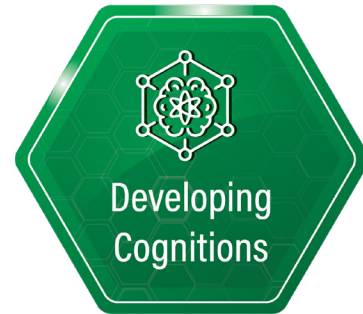
COMPLEXITY THINKING



DISTRIBUTED LEADERSHIP



TEAM SCIENCE



CONNECT THE HELIXES

| | |
|--|--|
| Select a scenario or problem that would benefit from developing cognitions. | |
| Identify three methods from complexity thinking that could work with developing cognitions. Give a brief description about how they complement one another. | |
| CT Method 1: | |
| CT Method 2: | |
| CT Method 3: | |
| Identify three methods from the distributed leadership helix that could work with or support developing cognitions. Give a brief description about how they complement one another. | |
| DL Method 1: | |
| DL Method 2: | |
| DL Method 3: | |
| Provide a description explaining which methods from each of the three helixes (with developing cognition being the TS method) work best for the scenario/problem identified earlier. | |