

Air Traffic Control

A metaphor for executive function



The story you're telling:

A key developmental task of the early years is to develop executive function, a set of mental skills that work like air traffic control at a busy airport.



Strategic way to redirect thinking away from patterns such as:

Fatalism; Family Bubble; Black Box;
Naturalism: Kids Just Grow Up; Early
Learning Goals: Morals, Manners,
Basic Academics;
Willpower/Self-Makingness



Concepts and ideas included in this frame element:

- **The overall functioning of an airport has a lot to do with an effective control tower:** The skills of executive function are essential to healthy development and cognitive functioning. The strength of these skills is predictive of a host of outcomes, including academic and career performance.
- **An air traffic control system manages the arrivals and departures of dozens of planes on multiple runways:** Similarly, the set of skills and abilities called executive function refers to the cognitive skills we use to manage multiple demands competing for our attention.
- **Air traffic control has to consider the planes landing, planes taking off, planes in the air, the weather, and more:** One of the key skills associated with strong executive function is coordinating multiple types and streams of information in order to arrive at an effective course of action.
- **The plane about to crash is more important than the one that's a few minutes behind schedule:** One of the key skills associated with executive function is the ability to prioritize tasks/goals/information.

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Concepts and ideas included in this frame element:

- **In a control tower, distractions can be dangerous:** The ability to focus attention on the prioritized task, and manage potential distractions, is an important skill of executive function.
- **Airport traffic conditions change often – it's important to be able to reprioritize and readjust attention:** One element of executive function is cognitive flexibility, which involves the ability to shift attention from one task or information stream to another, and to shift back to the original focus if needed.
- **Skills and systems for air traffic control require practice to learn:** In children, executive function develops through practice, particularly through age-appropriate experiences in which the skills are used and applied. Effective curricula and training programs exist to strengthen mental airspace control.