

How Building Executive Function Increases Academic Rigor

When planning to increase academic rigor, you can look to building certain aspects of executive function as the means to make it happen in your classroom. This tool can help you make the connections between executive function and rigor.

Executive Function		Experiences to Build Academic Rigor
Organization	<p>Working Memory:</p> <ul style="list-style-type: none"> • Storing and manipulating visual and verbal information • Identifying same and different • Remembering details • Following multiple steps • Holding on to information while considering other information • Identifying cause-and-effect relationships • Categorizing information 	<ul style="list-style-type: none"> • Applying and following multi-step directions • Tracking strengths and weaknesses • Effectively using resources • Being able to compare and contrast in order to draw conclusions • Synthesizing learned information
	<p>Cognitive Flexibility:</p> <ul style="list-style-type: none"> • Shifting focus from one event to another • Changing perspective • Seeing multiple sides to a situation • Being open to others' points of view • Being creative • Catching and correcting errors • Thinking about multiple concepts simultaneously 	<ul style="list-style-type: none"> • Engaging in collaborative discussion • Self-assessing work • Reflecting on own work • Seeking feedback • Applying feedback to improve work
	<p>Planning:</p> <ul style="list-style-type: none"> • Setting goals • Managing time • Working toward a goal • Organizing actions and thoughts • Considering future consequences in light of current action 	<ul style="list-style-type: none"> • Reflecting and reevaluating goals • Managing time on task • Re-assessing ability to manage time • Developing a purposeful plan • Planning while anticipating outcomes and challenges

Executive Function		Experiences to Build Academic Rigor
Organization, continued	Reasoning: <ul style="list-style-type: none"> • Making hypotheses, deductions, and inferences • Applying former approaches to new situations 	<ul style="list-style-type: none"> • Transferring knowledge • Using new information to alter plans
	Problem Solving: <ul style="list-style-type: none"> • Defining a problem • Analyzing • Creating mental images • Generating possible solutions • Anticipating • Predicting outcomes • Evaluating 	<ul style="list-style-type: none"> • Developing a problem-solving process • Practicing the problem-solving process • Reflecting on the problem-solving process • Reexamining the problem-solving process used • Generating ideas and solutions through divergent thinking
Self-Regulation	Inhibitory Control: <ul style="list-style-type: none"> • Attending to a person or activity • Focusing • Concentrating • Thinking before acting • Initiating a task • Persisting in a task • Maintaining social appropriateness 	<ul style="list-style-type: none"> • Completing a task efficiently • Self-monitoring behavior • Thinking actions through and anticipating obstacles • Building stamina
	Self-Awareness: <ul style="list-style-type: none"> • Self-assessing • Overcoming temptation • Monitoring performance • Reflecting on goals • Managing conflicting thoughts 	<ul style="list-style-type: none"> • Delaying gratification • Building ability to reflect • Developing and applying a positive internal script