



### Introduction

Considerable evidence supports the need for learners to develop key personal and social capabilities, also known as 'soft skills', 'future skills' or '21st century skills'. Research shows that employers value these skills, and this will continue to be true, as these skills are the most resistant to automation as technology advances. Incorporating development of these skills into coursework and classroom instruction is often a challenge for instructors due to a lack of support on how to teach and assess these skills. There is also a perception that these skills must be taught separately when in fact they can be integrated into the existing curriculum. To support our content developers and the instructors who use our products, we have built Skill Development Frameworks around several key personal and social capabilities (including Self-Management).

The Self-Management: Skill Development Framework includes a research-based definition of the skill along with relevant sub-skills which are then broken down into detailed sets of ordered indicators that describe how Self-Management skills develop from basic to complex levels. We further validated the framework by running panels with external experts in the skill and Pearson content development experts.

In many cases, the indicators in the framework are flexible, in that they can be learned at a range of different ages with supports, scaffolds, and opportunities to learn and experience these skills. At the same time, there are normative developmental trajectories in the social, cognitive, and executive functioning capacities of children (particularly younger children). It is important to keep these developmental milestones in mind when determining which set of indicators is most appropriate for a given learner segment. The indicators can be adapted to support a variety of instructional activities. For example, they can serve as "look-fors" in a behavioral checklist or be used to populate a grading or observation rubric. Additionally, many indicators represent strategies that can be directly taught to learners.

Self-management, and its component sub-skills, are influenced by a host of motivational and other factors outside of the specific behaviors and behavioral strategies that make up these skills. For example, self-management is challenging, so learners may struggle to practice self-management if they have low motivation. Motivation is supported by learners placing greater value or importance on a task, and/or by learners having greater confidence (self-efficacy) or belief in their ability to successfully complete a task.



## **Glossary and Notes**

#### **Pre-Skill Foundations**

Represent the developmental considerations and milestones that must be met in order to practice the skill. These are particularly important for young learners (ages 3–7), or learners with learning disabilities or developmental delays.

### Mastery

Represents performance that would be typical of a highly effective adult, typically in a workplace setting.

### **Self-Management**

For the purposes of this framework, we define self-management as the ability to intentionally and strategically manage one's emotions, behavior, effort, and environment in the pursuit of goals.

# Planning

Setting realistic goals and planning how to complete activities ahead of time; estimating time needed to complete or reach goals according to plans.

### Pre-Skill Foundations

Learners must be able to hold multiple steps in their working memory or record these steps in order to develop or execute plans.

Learners need to pay attention to instructions in order to develop or execute plans.

Learners may need their "world knowledge" supported to develop plans.

Learners need to resist inappropriate responses and learn adaptive responses.











#### **Setting Goals**

With direct prompting and support, executes simple one- or two-step sequences of planned actions. With some support, sets basic and general goals (e.g., get a good grade; finish my chores this week). When given the opportunity, sets fairly focused goals; may have some characteristics of Specific, Measurable, Achievable, Realistic, and Timely (SMART) goals.

With some support, understands how achieving immediate goals contributes to the completion of longer-term goals.

With some support, sets a series of SMART goals to complete assigned projects.

Flexibly adapts goals as needed while completing assigned projects.

Develops a complex plan to coordinate the work of several teams or workstreams.

Through reflection, builds on past successes and challenges to develop future plans.

Takes into account personal strengths and weaknesses in specific domains when planning tasks.

Plans for multiple assignments/ projects at once by setting short-term goals and organizing what needs to be done.

### **Estimating Time and Effort**

With some support, estimates the timescale for tasks.

When given the opportunity, routinely sets timescale for completing individual tasks.

Accurately estimates how much time and effort complex tasks will take.

Uses domain-specific tools to support time estimation (e.g., Gantt charts, project management software).

During work, adjusts the time allocated to different tasks as needed.



# Planning

Setting realistic goals and planning how to complete activities ahead of time; estimating time needed to complete or reach goals according to plans.

Pre-Skill Foundations	• • • • • • • • • • • • • • • • • • •	● ● ○ ○ ○ Basic	● ● ● ○ ○ Intermediate	● ● ● ○ Advanced	● ● ● ● ● Mastery
Learners must be able to hold multiple steps in their working memory or record these steps in order to develop or execute plans.	Breaking Down Tasks				
		With some support, breaks large tasks into more manageable sub-tasks.		Breaks long-term goals into a series of short-term attainable goals with plans on how to accomplish each along the way.	
Learners need to pay attention to instructions in order to develop or execute					
plans.  Learners may need their "world knowledge" supported to develop plans.  Learners need to resist inappropriate responses and learn adaptive responses.	Prioritizing				
			With some support, identifies the relative importance or priority of different activities needed to complete a task.	When given the opportunity, routinely prioritizes the importance and/or order of operations required to complete different activities in a larger task.  When given the opportunity, routinely uses tools and strategies to anticipate and manage conflicting task demands.	
	Anticipating Challenges				
				With some support, anticipates what might go wrong in a project.	Uses tools (e.g., Gantt charts, timelines, budgets, project management software) and strategies to independently anticipate what might go wrong in a project and make plans to avoid it happening.  Anticipates the onset of new or unexpected circumstances that would derail plans and adjusts
					accordingly.

# Organization

### Pre-Skill Foundations

Learners need sufficient working memory in order to remember where items are in their physical environment.

Learners must sustain attention on the task for long enough to organize something in their physical environment.



With direct prompting and support, sets up work area to support easy access to one or two key resources to support completion of simple tasks.

With direct prompting and support, tidies up workspace or puts workspace in order.



With some support, maintains organization of several resources to support completion of moderately complex tasks (e.g., placing papers in the correct section of their notebook).

With some support, makes adjustments to the physical environment to make it easier to complete tasks.



With some support, maintains organization of several aspects of work environment and materials across both school and home to complete complex tasks.



Routinely maintains organization of most aspects of work environment and materials across school and home.

Consistently locates information or items from within their work environment if needed.

Anticipates situations where maintaining organization will be difficult.



Takes a proactive role in developing organizational tools and strategies.

During the learning/ working process, structures and makes adaptations to the environment so that it is most conducive to task/ goal attainment.

Proactively plans how to manage situations where maintaining organization will be difficult.



## Persistence

Applying appropriate levels of effort to tasks, in spite of obstacles or difficulty.

Pre-Skill **Foundations**  •0000 **Emerging** 

Advanced

Mastery

Learners need the basic ability to resist or postpone distractions.

Learners need to be able to sustain attention for a sufficient amount of time.

Basic

Intermediate

Persistence Behaviors

Routinely keeps working at difficult tasks until they are complete, even when lacking strong intrinsic motivation to complete them.

Routinely uses a variety of strategies (including help-seeking and mental reframing) to support persistence.

Routinely keeps working on tasks that take several weeks or months to complete.

Maintains effort working towards long-term goals over long periods of time (months or years), despite the presence of setbacks and obstacles.

Finds opportunities to take on extra challenges to develop and grow in multiple domains given varied levels of motivation and confidence.

support, keeps working at difficult tasks for brief periods of time.

With some

With some support, pays attention to work or learning activities for brief periods of time.

With some support, keeps working at difficult tasks for moderately extended periods of time (~1 to 2 hours), but may not complete them.

variety of strategies to enable persistence on a task or project over several days or weeks.

With some support, adopts a

With minimal encouragement, routinely keeps working at difficult but highly motivating tasks until they are complete.

#### **Anticipating Persistence Challenges**

With some support, identifies areas in assignments and tasks where persistence is difficult.

Routinely identifies and troubleshoots those areas where persistence is difficult.



#### Persistence Mindset

With some support, recognizes the connection between persistence and achievement.

Frames challenging situations in a variety of domains in a way that emphasizes the importance of putting sustained effort into the task.

## Self-Control

Effectively regulating behaviors and emotions, typically to support goal pursuit.

Pre-Skill **Foundations** 

Learners need to be

able to resist impulsive actions or reactions (e.g., blurting out an answer without raising their hand).

Learners need to be able to focus attention.



**Emerging** 





**Intermediate** 



Advanced



**Regulation of Behavior** 

On explicit request, identifies distractions.

On explicit request, briefly chooses to focus on getting work done over a more immediately gratifying alternative or distractor (e.g., playing on phone, talking to peers).

When explicitly prompted, uses strategies to focus on getting work done over more immediately gratifying alternatives or distractors.

With support, determines what sequence of behaviors are needed to achieve a goal (e.g., using a calculator and a piece of paper to solve a math problem).

Independently uses strategies to focus on getting work done over more immediately gratifying alternatives or distractors, but with limited effectiveness (e.g., incorrectly identifies distractions).

Identifies situations where it is easy to lose focus or procrastinate.

Independently uses effective and proactive strategies to focus on getting work done over more immediately gratifying alternatives or distractors (e.g., routinely diminishes or removes distractors).

Flexibly delays gratification from distractions in order to support work tasks over long periods of time, while proactively anticipating when it will be particularly difficult to maintain focus.

Manages a variety of behaviors to achieve goals during sustained effort.

### **Regulation of Emotions**

Demonstrates a knowledge of basic emotions.

With prompting, identifies and labels the emotion(s) being experienced (may be limited to a few basic emotions).

With prompting, identifies and labels a broad range of emotions.

With prompting, identifies the general level of intensity of a given emotional experience.

With prompting, identifies the impact emotions can have on behavior.

Uses emotional regulation strategies when explicitly prompted to use a particular strategy.

With prompting and support, shortens the period of emotional outbursts or emotional withdrawal.

Independently labels the type and intensity of emotions.

Independently considers the impact of emotions on behavior.

Recognizes that different emotions can be useful in different situations.

With prompting, identifies the causes of personal emotional experience(s).

Independently uses strategies to manage emotions, but these strategies may be reactive or less effective (e.g., suppressing emotions, rumination, negative coping).

Identifies and recognizes likely transitions between emotions (e.g., disappointed to angry; anxious to stressed to overwhelmed).

Anticipates the emotions that will probably be experienced during a future or unfamiliar situation.

Independently uses proactive and adaptive strategies to manage emotions (e.g., help-seeking, situation modification, distraction, mindfulness, positive reappraisal).

Independently monitors emotional reactions for their usefulness or reasonableness.

Thoughtfully considers when to employ emotion regulation strategies.

Evaluates the effectiveness of their own emotional management strategies.

Flexibly uses a variety of adaptive emotional management strategies that are tailored to the particular situation.



### **Attention to Detail**

Paying attention to accuracy and having careful and precise work habits; sustaining attention increasingly over time.

0000 0000 Pre-Skill **Foundations** Intermediate Advanced **Emerging** Basic **Maintaining Attention** Learners need to be able to resist impulsive actions or reactions With supportive With supportive tools and With supportive tools and Develops and applies methods flexibly to attend to task tools (e.g., guidance, demonstrates guidance, demonstrates to maintain attention to all details to instructions and tasks. attention to all details for checklists. attention to all details required ensure the successful completion of the successful completion of for the successful completion examples) complex tasks. Learners need to and guidance, simple tasks. of moderately complex tasks. maintain attention to demonstrates the task instructions Filters out unnecessary attention to some and task itself. information that does not details required support successful completion to achieve success of the task. in simple tasks. **Attention to Detail Strategies** With some support. With prompting and structure. Routinely reviews work to catch most errors. consistently reads reviews extended work to instructions before doing catch most errors. work. work. With some support (e.g., good examples), checks answers or reviews short work assignments to catch some errors. **Anticipating Attention Challenges** 

Makes attention to detail a habit and a consistent

task or assignment.

part of completing any

Mastery

Flexibly adjusts attention as needed to focus on the relevant details to ensure the successful completion of tasks in a variety of domains.

Reviews tasks from different perspectives to catch information that might be missed or draw attention to other relevant or important aspects of the

With some support, identifies likely and unlikely areas of error.

Independently identifies likely and unlikely areas of error.

# **Progress Monitoring**

Accurately tracking and assessing one's knowledge, skills, or progress; choosing appropriate strategies to evaluate and improve knowledge, skills, and progress.

Pre-Skill **Foundations** 

Learners need to be able to maintain attention during a task to monitor progress.

Learners need sufficient working memory capacity to remember their previous state of knowledge or progress.



**Emerging** 

Basic



Intermediate



**Advanced** 



Monitoring

With direct prompting and support, accurately estimates some aspects of knowledge and skills developed while completing a simple task (e.g., How confident are you that you gave the correct answer?)

With direct prompting and support, evaluates current position in relation to the task or content (e.g., What do you currently know about the topic?)

With direct prompting and support, identifies areas where growth is needed.

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With some support. accurately rates or describes changes in knowledge, skills, or progress over time.

With some support, selfassesses learning of new knowledge or skills, or progress on a task.

With some support, monitors the effectiveness of strategies used to complete a task (e.g., Am I following the time allocated in my study schedule? How well is re-reading my notes helping me remember the content?)

With some support, reflects on their completion of a task or learning activity (e.g., What went well and what didn't?)

Independently engages in regular self-reflection.

Regularly monitors progress towards goal attainment.

Accurately and independently monitors learning and progress.

Identifies and uses tools for monitoring progress while completing multiple tasks.

### **Adapting and Adjusting**

With direct prompting and support, identifies some different learning, studying, or work strategies to achieve progress and growth.

With some support, adjusts learning, studying, or work strategies based on independent self-assessments, or actively requests external assessments, of their knowledge, skills, or progress.

With some support, allocates greater study time to areas not learned well.

With some support, selects most appropriate content for re-reading or re-studying.

When given the opportunity, routinely alters learning or studying strategies based on independent self-assessment of knowledge, skills, or progress.

When given the opportunity, routinely allocates greater study time to areas not learned well.

When given the opportunity, routinely selects the most appropriate content for re-reading or re-studying.

Flexibly and willingly adapts learning, studying, or work strategies based on independent selfassessments of progress.

