



Metacognitive Skills

Pushing the Limits of One's Knowledge and Skills

Secondary



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PUSHING THE LIMITS OF ONE'S KNOWLEDGE AND SKILLS

Pushing the limits of one's knowledge and skills is a skill that helps students set goals and engage in tasks that are personally challenging. When using this skill, students will strive to learn more and accomplish more.

Introduce the skill of pushing the limits of one's knowledge and skills using the video lesson or an introduction of your own design that covers the same content. The text of the recording is below:

Video script -- Have you ever decided to take on a task that made you reach just beyond what you thought you could do, or pushed you out of your comfort zone? Maybe it meant trying a new computer program, learning a more advanced art technique, volunteering to lead a group project for the first time, or trying out for a new club or sport you weren't sure you'd make. Challenging yourself in these ways is at the heart of pushing the limits of your knowledge and skills. When you take risks and set higher standards for yourself, you truly grow and see what you're capable of achieving. As you do this, you may feel uncertain or challenged, and you might think, "I'm not sure I can do this, but I'll try," or "What new information or skill do I need to reach my goal?" These thoughts are a normal part of the process.

Some people find it helpful to post or write down phrases that motivate them to step outside their comfort zone. Phrases like, "You'll never know your limits unless you test them." or "If it scares you a little, it's probably worth doing." can help you remember that growth happens when you try something challenging.

Here is a strategy that can help guide your thinking as you push the limits of your knowledge and skills:

1. Ask yourself if this is a situation where it would be useful to push the limits of your knowledge and skills.
2. If yes, set a goal for what you will do to push the limits of your knowledge and skills.



3. Keep asking yourself, “How well am I doing at pushing the limits of my knowledge and skills?”
4. When you are done, ask yourself how well you succeeded at pushing the limits of your knowledge and skills and what you learned from the experience.

Here’s an example of someone using this strategy:

Trevor’s class is starting a group research project, and his group needs to choose a leader. Trevor is normally uncomfortable in leadership roles because he’s not used to speaking up or taking the lead in front of his peers. Familiar tasks feel easier for him, and he worries about giving directions and making decisions for others. Trevor recognizes this and asks himself, “Is this a chance for me to push my limits? He decides that it is. He volunteers to be the group leader and takes responsibility for organizing the group’s tasks. He also sets a goal to speak up during discussions and keep the group on schedule, making sure deadlines are met.

As the project continues, Trevor wonders how well he is doing pushing his limits. He asks, “Am I actually speaking up, or am I slipping back into what feels easy?” He decides that he has been staying quiet, as he usually does, so he makes a point of sharing his ideas first, asking others for their input, and clarifying what the group should work on next. He also shares a checklist of deadlines to help the group stay on schedule. When the project ends, he reflects on how well he pushed his limits and what he learned about himself. Trevor is proud that he took on this leadership role and adjusted his actions to achieve his goal of speaking up and keeping the group on track.

Pushing the limits of one’s knowledge and skills is useful outside of school, too. For example, Leila is an artist who usually sticks to simple line drawings. She decides to stretch herself by learning a more advanced shading technique for an art contest. Throughout the process, she keeps checking in with herself. She makes sure she isn’t sliding back into her usual style and reflects on what she learned once the piece is done.

Whether you’re in school or not, when you push the limits of your knowledge and skills, you make a conscious choice to stretch your abilities. Using this strategy can help you



recognize a challenge, choose to stretch yourself, stay aware of your effort, and learn from the experience.



Once students have been introduced to the skill of pushing the limits of their knowledge and skills, emphasize the following points with them:

- Pushing the limits of your knowledge and skills means choosing to stretch beyond what feels comfortable or familiar in order to grow. Discuss with students using prompts like, “What does it mean to do something that is just beyond what feels easy for you?”
- This skill is especially useful in situations where growth requires taking a risk, such as trying a new role, learning a harder technique, or taking on a challenge you are unsure you can handle. Discuss with students using prompts like, “What kinds of situations make you feel unsure but also curious about what you might be able to do?”
- Pushing your limits often involves feeling uncertain, challenged, or slightly uncomfortable, and recognizing these feelings as normal parts of growth. Discuss with students using prompts like, “What thoughts or feelings usually show up when you try something new or difficult?”
- An important part of this skill is recognizing moments when it would be useful to intentionally stretch yourself rather than stay with what feels easy. Discuss with students using prompts like, “How can you tell when a situation might be an opportunity to push your limits?”
- Pushing your limits requires setting a personal goal that clearly describes how you will stretch your knowledge or skills. Discuss with students using prompts like, “What is one specific way you could challenge yourself in this situation?”
- Staying aware of your effort during the task helps you notice whether you are truly stretching yourself or slipping back into familiar habits. Discuss with students using prompts like, “How can you tell if you are really pushing yourself or just doing what you usually do?”
- Self-checking during the process supports adjustment and persistence when a challenge feels difficult. Discuss with students using prompts like, “What could you change if you realize you are not stretching yourself as much as you planned?”
- Reflection after the task helps you evaluate how well you pushed your limits and what you learned from the experience. Discuss with students using prompts like, “When the task is finished, how can you decide whether you actually stretched your skills?”



- Reflecting on growth helps you recognize progress even if the task felt hard or uncomfortable. Discuss with students using prompts like, “What might you learn about yourself from trying something challenging, even if it didn’t go perfectly?” or “How might choosing to stretch yourself now affect the kinds of challenges you take on in the future?”



LEVELS OF COMPETENCE

There are specific levels of competence for this skill against which students can be evaluated (see **Table 1**). It is important to note that the levels of competence are articulated as a scale that can be used to make judgments about students' status and growth. That scale has score values that range from 0.0 to 4.0. At the 0.0 level, the student cannot demonstrate any part of the skill even with help. At the 1.0 level, the student can perform some of the foundational aspects of the skill with help but not independently. At the 2.0 level, the student can independently demonstrate the foundational aspects of the skill but not the behaviors described at the 3.0 level. The 3.0 level on the scale represents proficiency in the skill. When students can independently demonstrate these behaviors, they have reached the desired status for the skill. At the 4.0 level, the student demonstrates everything at the 3.0 level AND goes above and beyond expectations by adding useful adaptations to the skill. Finally, the scale describes half-point scores that indicate partial progress toward the next level of the scale.

Periodically evaluate students' status relative to these levels of competence using the assessment activities in **Table 4**.

It is also important to note that **Table 2** and **Table 3** contain versions of the scale that can be used by students to rate themselves. These scales are both stated in an "I CAN" format. Periodically, students evaluate themselves relative to the levels of competence using the Full-point or the Half-point self-evaluation scales.



Table 1: Levels of Competence

4.0	The student can articulate specific situations (in school and outside of school) in which they should push the limits of their knowledge and skills, set goals to do so, and evaluate progress.
3.5	In addition to score 3.0 performance, partial success at score 4.0 content.
3.0	The student will recognize when they are and are not pushing the limits of their knowledge and skills and respond by executing a complex strategy involving self-analysis.
2.5	No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content.
2.0	<p>The student will recognize or recall vocabulary associated with self-analysis as it relates to pushing the limits of one’s knowledge and skills (for example, <i>goals, growth, knowledge/skill acquisition, reflection, risk</i>) and perform basic processes such as:</p> <ul style="list-style-type: none"> ● Describe a complex strategy involving self-analysis for pushing the limits of one’s knowledge and skills (articulated by the class or the teacher in the form of a standard operating procedure [SOP]: <ul style="list-style-type: none"> ● Ask yourself if this is a situation where it would be useful to push the limits of your knowledge and skills. ● If yes, set a goal for what you will do to push the limits of your knowledge and skills. ● Keep asking yourself, “How well am I doing at pushing the limits of my knowledge and skills?” ● When you are done, ask yourself how well you succeeded at pushing the limits of your knowledge and skills and what you learned from the experience. ● Understand what an individual might think and feel while pushing the limits of their knowledge and skills (for example, feeling challenged or uncertain; thinking, “I’m not sure if I can do this, but I’ll try.” or “What new information do I need to achieve my goal?”
1.5	Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content.



1.0	With help, partial success at score 2.0 content and score 3.0 content.
0.5	With help, partial success at score 2.0 content but not at score 3.0 content.
0.0	Even with help, the student demonstrates no success.



Table 2: I CAN Student Assessment Form (Half-point scale)

4.0	I can articulate specific situations (in school and outside of school) in which I should push the limits of my knowledge and skills, set goals to do so, and evaluate progress.
3.5	In addition to score 3.0, I can do some of what is required at the score 4.0 level.
3.0	I can recognize when I am and am not pushing the limits of my knowledge and skills and respond by executing a complex strategy involving self-analysis.
2.5	In addition to score 2.0, I can do some of what is required at the score 3.0 level.
2.0	<p>I can recognize or recall vocabulary associated with self-analysis as it relates to pushing the limits of my knowledge and skills (for example, <i>goals, growth, knowledge/skill acquisition, reflection, risk</i>) and perform basic processes such as:</p> <ul style="list-style-type: none"> ● Describe a complex strategy involving self-analysis for pushing the limits of my knowledge and skills (articulated by the class or the teacher in the form of a standard operating procedure [SOP], for example: <ul style="list-style-type: none"> ○ Ask yourself if this is a situation where it would be useful to push the limits of your knowledge and skills. ○ If yes, set a goal for what you will do to push the limits of your knowledge and skills. ○ Keep asking yourself, “How well am I doing at pushing the limits of my knowledge and skills?” ○ When you are done, ask yourself how well you succeeded at pushing the limits of your knowledge and skills and what you learned from the experience. ● Understand what I might think and feel while pushing the limits of my knowledge and skills (for example, feeling challenged or uncertain; thinking, “I’m not sure if I can do this, but I’ll try.” or “What new information or skill do I need to achieve my goal?”
1.5	On my own, I can do some of the things at score 2.0 level.
1.0	With help, I can do some of the things at score 2.0 level and 3.0 level.



Table 3: I CAN Student Assessment Form (Full-point scale)

4.0	I can articulate specific situations (in school and outside of school) in which I should push the limits of my knowledge and skills, set goals to do so, and evaluate progress.
3.0	I can recognize when I am and am not pushing the limits of my knowledge and skills and respond by executing a complex strategy involving self-analysis.
2.0	<p>I can recognize or recall vocabulary associated with self-analysis as it relates to pushing the limits of my knowledge and skills (for example, <i>goals, growth, knowledge/skill acquisition, reflection, risk</i>) and perform basic processes such as:</p> <ul style="list-style-type: none"> ● Describe a complex strategy involving self-analysis for pushing the limits of my knowledge and skills (articulated by the class or the teacher in the form of a standard operating procedure [SOP] for example: <ul style="list-style-type: none"> ○ Ask yourself if this is a situation where it would be useful to push the limits of your knowledge and skills. ○ If yes, set a goal for what you will do to push the limits of your knowledge and skills. ○ Keep asking yourself, “How well am I doing at pushing the limits of my knowledge and skills?” ○ When you are done, ask yourself how well you succeeded at pushing the limits of your knowledge and skills and what you learned from the experience. ● Understand what I might think and feel while pushing the limits of my knowledge and skills (for example, feeling challenged or uncertain; thinking, “I’m not sure if I can do this, but I’ll try.” or “What new information or skills do I need to achieve my goal?”
1.0	With help, I can do some of the things at score 2.0 level and score 3.0 level.
0.0	Even with help, I cannot do any of the score levels.



Table 4: Assessment Activities

4.0	<p>Ask students to document specific situations in and out of school when they've used the skill of pushing the limits of one's knowledge and skills. They should be able to describe the goals they set for themselves, what they did, and how well they performed.</p>
3.0	<p>Have students document a time they used the skill of pushing the limits of one's knowledge and skills. They should be able to provide a detailed description of the event and a critique of their own behavior.</p>
2.0	<p>Ask students to explain the following terms: <i>goals, growth, knowledge/skill acquisition, reflection, risk</i>. Their answers should be generally accurate but not necessarily detailed or complete.</p> <p>Ask students to describe a basic process that has been provided to them for staying focused when answers and solutions are not immediately apparent. Their descriptions should include explicit steps such as:</p> <ul style="list-style-type: none">○ Ask yourself if this is a situation where it would be useful to push the limits of your knowledge and skills.○ If yes, set a goal for what you will do to push the limits of your knowledge and skills.○ Keep asking yourself, "How well am I doing at pushing the limits of my knowledge and skills?"○ When you are done, ask yourself how well you succeeded at pushing the limits of your knowledge and skills and what you learned from the experience. <p>Ask students to describe some of the self-talk and thinking that should occur when someone is pushing the limits of their knowledge and skills. Their answers should include things like they are thinking, "I'm not sure if I can do this, but I'll try," or "What new information or skills do I need to achieve my goal?"</p>

