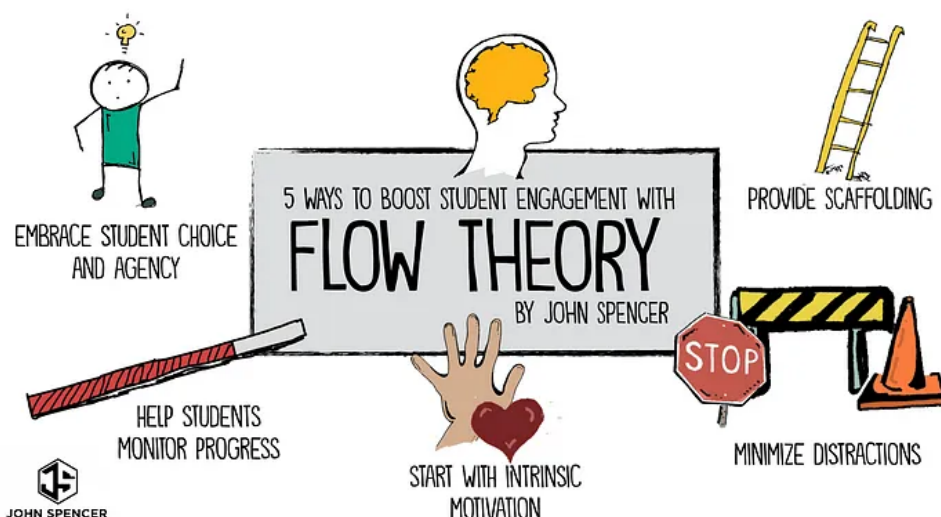


Five Ways to Boost Student Engagement with Flow Theory

If we want students to develop a maker mindset, we need to empower them to hit a state of creative flow. Flow Theory explains what happens when we hit that place of “optimal experience,” where you are fully engaged, present, and focused. The following blog post explores what it means to help students reach a state of flow. A word of caution here. Student engagement is a very personal, internal thing. It starts with the student. You cannot force your students to be engaged in their learning. They have to own it. In other words, the highest place of student engagement isn’t really engagement. It’s empowerment.

But you are the architect that can build the systems that make flow a reality in your classroom. If you’re interested in this, check out the free Flow Theory Blueprint and Toolbox at the bottom of this post.



A Lesson from Athletes, Artists, and Engineers

It was the first game of the 1992 NBA Championship series. The Trail Blazers were pulling ahead of the Bulls when Phil Jackson called a

timeout. Michael Jordan emerged from the timeout with a sense of intense concentration. In the next eighteen minutes, Jordan sunk six three-pointers. At one point, he looked to the sidelines and shrugged his shoulders, seemingly shocked by his own performance. He later described this experience as being “in the zone.”

Players in every sport describe a similar experience of being “in the zone,” where they tune out the crowd and the noise and the distractions and play at their top performance. But this sense of “being in the zone” isn’t limited to sports. Artists, authors, musicians, and engineers all experience this experience this same phenomenon. It’s a strange paradox where time seems to stand still and yet it seems over in an instant. It feels effortless even though it’s an extreme challenge. There’s a sense of relaxation but it’s also intense. You seem more present than ever but you can lose your sense of self.

Chances are you’ve seen this in the classroom. A student suddenly gets “in the zone” in the midst of a project. Time seems to simultaneously slow down and yet speed up all at once. There’s a sense of challenge and urgency but also a sense of relaxation. You can feel it intuitively. Student engagement has hit a new level.

There’s a term for this. It’s called being in a state of flow.

Unfortunately, I notice this happening more often outside of the classroom rather than in it. Kids often hit a state of flow on the basketball court or in theater or at a skate park. But if we want students to be fully empowered to own the creative process, we need to understand what it means for students to reach a state of flow in their creative work.

What is Flow Theory?

Although the idea of flow has existed for thousands of years, Flow Theory began in the 1970’s and 80’s when Hungarian psychologist Mihaly Csikszentmihalyi became fascinated by artists who were so

lost in their creative work that they would lose track of time and even ignore food, water, and sleep.

Through his research, he noticed a similar experience with scientists, athletes, and authors. It was a state of hyper-focus and complete engagement that he described as “optimal experience.”

Csikszentmihalyi, puts it this way in [*Flow: The Psychology of Optimal Experience*](#)

“The flow experience is when a person is completely involved in what he or she is doing, when the concentration is very high, when the person knows moment by moment what the next steps should be, like if you are playing tennis, you know where you want the ball to go, if you are playing a musical instrument you know what notes you want to play, every millisecond, almost. And you get feedback to what you’re doing. That is, if you’re playing music, you can hear whether what you are trying to do is coming out right or in tennis you see where the ball goes and so on. So there’s concentration, clear goals, feedback, there is the feeling that what you can do is more or less in balance with what needs to be done, that is, challenges and skills are pretty much in balance.”

I realize this might seem “out there,” but chances are you’ve seen in your classroom — even within a whole group. You’re doing a maker project and suddenly, the whole class seems locked into the same task. You’re doing silent reading and the twenty minutes become an hour and you lose track of time and space. Your students are [working on Scratch](#), putting together the blocks of code, and it seems to be as close to 100% engagement as possible. In these moments it feels like magic.

How Do We Make Flow Happen?

Note that researchers do not have one single working model for flow theory. However, the following are five factors identified by Csikszentmihalyi and Nakumara as vital for achieving a state of flow.

#1: It needs to be a task that you find intrinsically rewarding.

You probably aren't going to hit a state of flow while mowing the yard or cleaning a toilet. Well, unless that's your jam. In which case, have at it. But if you're going to remain intensely focused on a task, you have to start with something that fits your passions, interests, talents, or desires. It can be solitary or in a group. It could be competitive or non-competitive. It could be athletic or artistic. But it has to start with an internal drive.

#2: You need clear goals and a sense of progress.

There's a sense of intentionality to flow experiences. You know what you are doing and where you are going. So, the task typically starts out with a real clear picture of what you plan to accomplish. As you move through the task, there is a sense of progression.

This is why a sense of agency is so important. You need to feel that you have a command over what you are doing. In the moment, it can feel effortless. However, it's often an exceptionally challenging situation. You're often doubtful of success ahead of time. But this uncertainty is part of what makes the challenge fun. Csikszentmihalyi makes a subtle distinction between choosing tasks where you have complete control versus tasks where you are forced to exercise control. He describes it this way, "what people enjoy is not the sense of being *in control* but of *exercising control* in difficult situations."

#3: The task needs clear and immediate feedback.

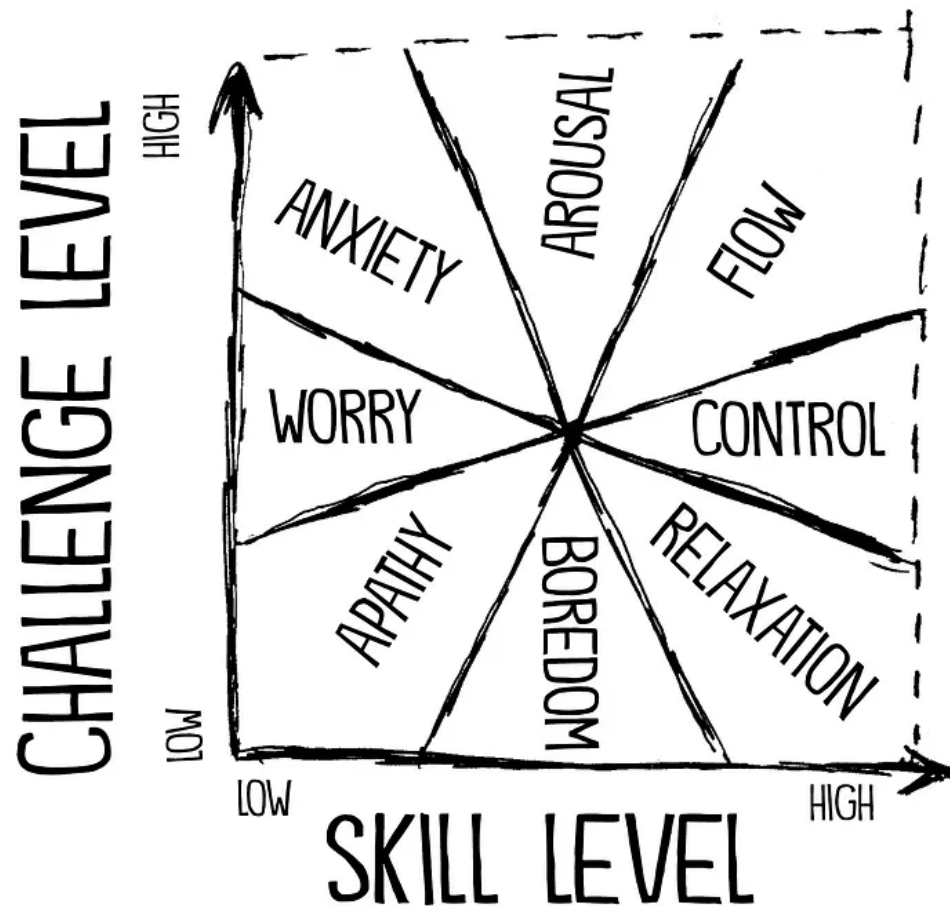
Flow theorists are quick to point out that the flow experience involves having a clear goal in one's mind and constant, immediate feedback.

In other words, it should be easy to figure out what's working and what's failing.

Note that you don't have to stop what you are doing to receive feedback. Unlike a classroom, where feedback often disrupts the learning process (especially with tasks), the idea here is that the feedback is immediate and that you modify and adjust what you are doing based on this instant feedback. When you're "in the zone," you often don't seem aware of the feedback. You're not stopping to analyze it. Your success almost seems mysterious. Perhaps this is why Michael Jordan, in the midst of his epic NBA Championship game against Portland (where he kept hitting three-pointers) shrugged his shoulders in confusion.

#4: The challenge must match the perceived skills.

This requires a sense of personal control or agency over the task. In 1987, Massimini, Csíkszentmihályi and Carli published the following 8-channel model of flow in [*Finding Flow: The Psychology of Student Engagement in Everyday Life*](#).



Note that if a task is too easy, you might experience apathy or boredom but if a task seems too hard, you'll be anxious.

#5: Flow requires intense focus on the present moment.

Often, in the state of flow, you experience hyper-focus. You seem intensely aware of what's around you. At the same time, you are capable of tuning things out entirely. At times, you don't even feel like you're concentrating at all. Things are just clicking and you hardly notice how intense your focus has become.

When someone is experiencing flow, they often have a sense of "losing themselves." As Csikszentmihalyi describes, "they often stop being aware of themselves as separate from the actions they are performing." At the same time, these moments when you have "lost yourself" are the very moments where you feel most alive.

This sounds great but it can be challenging to reach a state of flow in a school system with bells, tight schedules, curriculum maps, and testing?

Five Ways to Incorporate Flow Theory into the Classroom

So, for the last few years, I've been reading up on the theory of flow and consciously trying to create an environment where this happens in my classroom (formerly as a middle school teacher and now as a professor). I [wrote a book](#) on this topic. But I'm still learning. I'm still trying to figure this out. There isn't an instruction manual for this. On some level, flow experiences will always be serendipitous. But we can create an environment where flow experiences are more common. So, here are some of the ideas. I also have a set of Flow-related resources in the free Flow Theory Blueprint and Toolbox at the bottom of this post.

#1: Provide the right scaffolding

One of the key ideas in flow theory is that the challenge has to match a student's perceived ability level. Too often, kids give up because what they are doing is way too difficult and there is a sense that they will never learn it. Other times, students are bored and the excessive scaffolding becomes a hurdle they have to climb over.

Here's where it can help to have students self-select the scaffolding. Instead of providing all the scaffolding for each student, you can provide tutorials, sentence stems, and graphic organizers that any student has access to. It might take some time and guidance for students to get used to it but eventually, they can own the intervention process and they learn to determine what they know, what they don't know, and where to find additional support.

#2: Tap into Intrinsic Motivation

It's not surprising that students hit a state of flow when they are out on the ball field or in a theater or while playing an instrument. Not only do they feel competent (because of the right amount of scaffolding) but they also love what they are doing. I can get lost in writing a novel or making a sketch video. I will never get lost in the moment of fixing a sprinkler system or trying to put together furniture from Ikea.

This can be a challenge in the classroom, where the system is designed around extrinsic motivation. Everything from the tight curriculum map to the PBIS system to the traditional grading system seem to push compliance. In fact, as Phillip Schlechty pointed out, often what looks like engagement [is simply strategic compliance](#). Kids become adept at playing the game of school while they lose the drive to learn for the sake of learning.

However, we can use these limitations as [creative constraint](#). Yes, we have a curriculum map, but what are the ways we can get students excited about learning the standards? I remember doing a motivation audit of my unit plans when I taught 8th-grade social studies. Suddenly a boring economics unit became a chance to do simulations and challenges. I remember doing History Mysteries that tapped into a sense of wonder and curiosity. Other times, it was about [asking big questions](#) and tapping into existential big ideas through Socratic Seminars. Often, it meant tapping into creativity, as students created podcasts, blog posts, and documentaries.

But it also meant little things, like [infusing fun, goofiness, and humor](#) into the curriculum. We had goofy rituals and inside jokes and all of this helped create a culture of intrinsic motivation.

This was a hard paradigm shift. It was the idea that I had to create the conditions where students would want to learn rather than have to learn. Often, this meant shifting toward [student-centered projects](#). Which leads to the next big idea of student choice and agency.

#3: Embrace student choice and agency

When you reach a state of flow, you are not only intrinsically motivated, you also have a sense of control over what you are doing. This is why I love the idea of student-centered creative projects.

This might involve scrapping weekly tests and devoting that time to choice-centered [Genius Hour projects](#), where they get to choose the topics. It might involve letting students chase their own questions with the inquiry-based [Wonder Day or Wonder Week project](#). You could also allow students to own the creative process through a long-term [design thinking project](#). Or, if you are short on time, they could do a [maker challenge](#) or engage in rapid prototyping.

Ultimately, we want to [empower students](#) to own their learning. So, it goes beyond simply providing choices and into a place where students can ask the questions, own the assessment process, and self-select the scaffolding. It can help to ask the question, “What am I doing for students that they could be doing for themselves?”

#4: Minimize distractions

I often hear people say that creative classroom are filled with “controlled chaos.” There’s probably an element of truth to this. When students are making things, they will be moving around and talking and it might even get loud. However, this can also be distracting. It’s

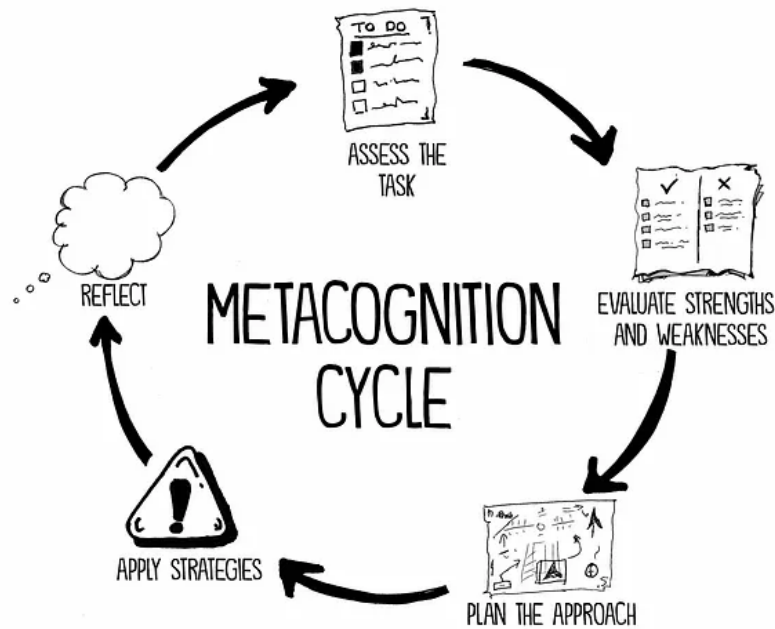
not a bad thing to reduce clutter or decrease noise and allow students to reach that state of hyper-focus.

It can also help to slow down. Here's where you provide longer learning opportunities with fewer interruptions. In my first few years of teaching, I thought student engagement required an action-packed classroom. I didn't realize that my frantic pace was actually getting in the way. Students never had the chance to focus in a leisurely, relaxed way. Since then, I've realized it's less about action and more about suspense. If there's a true challenge that feels meaningful to students, they are more likely to stay focused and get lost in what they are doing.

#5: Help Students with Metacognition

If you want students to determine goals and then monitor and adjust their approach, they need to engage in metacognition. Although there are many models for metacognition, most of them share some sort of variation on a cycle with the following components:

- Assess the task
- Evaluate your strengths and weaknesses
- Plan the approach
- Apply strategies (and monitor progress)
- Reflect on whether the approach is working — in order to adjust and assess again



As an educator, you can model metacognition by talking through the process of assessing the task and determining an approach. It can help to ask students to visualize what they will do in order to accomplish a task. This can be as complicated as a formal plan or as simple as a quick pair-share. You can also incorporate reflection into things like exit slips and self-reflection surveys. When working in collaborative groups, students can engage in metacognition through the [project planning process](#).

But this requires a shift in how we think about assessment. It means students will need to engage in frequent [peer feedback](#) and self-assessment. It might also mean pulling students aside for quick [one-on-one conferences](#).

Making It a Reality

There is no magic formula for reaching a state of flow. These flow experiences are rare in the classroom, partly because it requires total buy-in from students. We can't make students hit that state of hyperfocus or fall in love with the learning process. But we can create the conditions that make it possible for students to reach a state flow. And when they reach a place of creative flow, they are more likely to

fall in love with the creative process and continue with that maker mindset even when they leave your classroom.

You are the architect. You can design the structures that take student engagement to the next level, where they aren't simply engaged in the task but truly empowered to own their learning.

A Call to Action

If you are passionate about seeing students develop a creative mindset and you love those moments where they reach a state of flow, would you share your story in the comment section below? Would you also share any questions, tips, and ideas for anyone else?

You can also sign up at [the bottom of this post to get the Flow Theory Blueprint and Toolbox](#), with free resources you can use to help your students reach optimal engagement.

```
var _this = this;
window[this.callbackName] = function(response) {
  delete window[this.callbackName];
  document.body.removeChild(script);
  _this.onSubmitCallback(response);
};

var script = document.createElement('script');
script.src = this.formUrl('json');
document.body.appendChild(script);
},

formUrl: function(format) {
  var action = this.form.action;
  if (format === 'json') action += '.json';
  return action + '?callback=' + this.callbackName + '&' +
    serialize(this.form);
},
```

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  this.form.className += ' mimi_submitting';  
  this.submit.value = this.submit.getAttribute('data-submitting-text');  
  this.submit.disabled = true;  
  this.submit.className = 'disabled';  
},  
  
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  if (response.success) {  
    this.onSubmitSuccess(response.result);  
  } else {  
    top.location.href = this.formUrl('html');  
  }  
},  
  
onSubmitSuccess: function(result) {  
  if (result.has_redirect) {  
    top.location.href = result.redirect;  
  } else if (result.single_opt_in || !result.confirmation_html) {  
    this.disableForm();  
    this.updateSubmitButtonText(this.submit.getAttribute('data-thanks'));  
  } else {  
    this.showConfirmationText(result.confirmation_html);  
  }  
},  
  
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  var fields = this.form.querySelectorAll('.mimi_field');  
  
  for (var i = 0; i < fields.length; ++i) {  
    fields[i].style['display'] = 'none';  
  }  
  
  (this.form.querySelectorAll('fieldset')[0] || this.form).innerHTML =  
  html;  
},
```

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disableForm: function() {  
  var elements = this.form.elements;  
  for (var i = 0; i < elements.length; ++i) {  
    elements[i].disabled = true;  
  }  
},  
  
updateSubmitButtonText: function(text) {  
  this.submit.value = text;  
},  
  
revalidateOnChange: function() {  
  var fields = this.form.querySelectorAll(".mimi_field.required"),  
  _this = this;  
  
  for (var i = 0; i < fields.length; ++i) {  
    var inputs = fields[i].getElementsByTagName('input');  
    for (var j = 0; j < inputs.length; ++j) {  
      if (this.fieldType(fields[i]) === 'text_field') {  
        inputs[j].onkeyup = function() {  
          var input = this;  
          if (input.getAttribute('name') === 'signup[email]') {  
            if (_this.validEmail.test(input.value)) _this.validate();  
          } else {  
            if (input.value.length === 1) _this.validate();  
          }  
        }  
      } else {  
        inputs[j].onchange = function() { _this.validate() };  
      }  
    }  
  }  
});  
  
if (document.addEventListener) {  
  document.addEventListener("DOMContentLoaded", function() {
```

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new Mimi.Signups.EmbedValidation();
});
}
else {
window.attachEvent('onload', function() {
new Mimi.Signups.EmbedValidation();
});
}
})(this);
</script>
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