

# BREAKTHROUGHS AND BREAKDOWNS:

LEARN TO MANAGE THE HIGHS  
AND LOWS OF LEARNING A SNOWSPORT

By Karin Kirk and Ben Roberts

The journey through the learning process is a theme that unites all of us. You have the privilege of participating in this process with students and also through your own personal quests to improve. We all know the euphoria of having something click for the first time. Similarly, we collectively cringe when things seem to fall apart and we're paralyzed by problems. These are the two extremes of learning: breakthroughs and breakdowns.



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These terms help to clarify each end of the spectrum, however it's important to stress that neither breakdowns nor breakthroughs are required to improve. Most learning and growth takes place with gradual, small improvements that take us from shaky beginners to fluid experts – over the course of many years and lots and lots of focused practice.

You might hear an athlete reflect on a failure as a positive part of their overall development. While it's true that we can usually rebuild successfully after things go awry (see “If at First You Don't Succeed: Timely Advice for Bouncing Back from Setbacks,” Winter 2016), by no means are breakdowns required in order to improve. In fact, breakdowns can have long-term negative effects as they set people back and prevent them from performing at their usual level. As coaches, it's up to us to recognize when a breakdown might be imminent and work with our students to manage and prevent it. Should a breakdown occur, work to recover from the initial stress, and then try to unravel what went wrong and how to avoid it.

On the other end of the spectrum, who doesn't love the idea of a big breakthrough? While the idea of learning by huge leaps and bounds is appealing, it doesn't often work this way. Don't waste time waiting and wondering when a big breakthrough will take place. Instead, examine your overall skill development and see where you may be uneven.

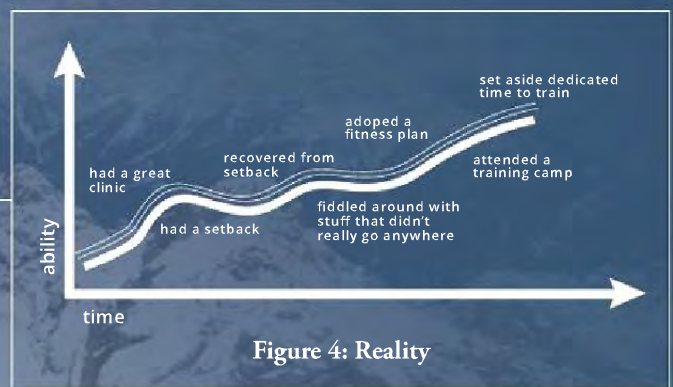
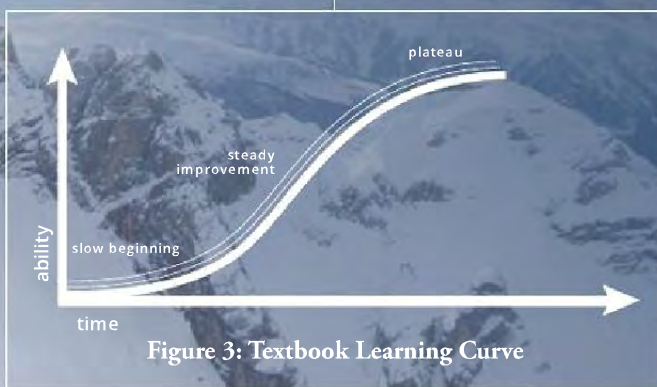
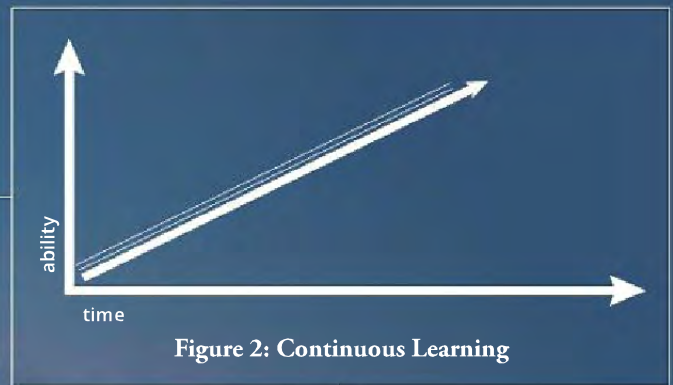
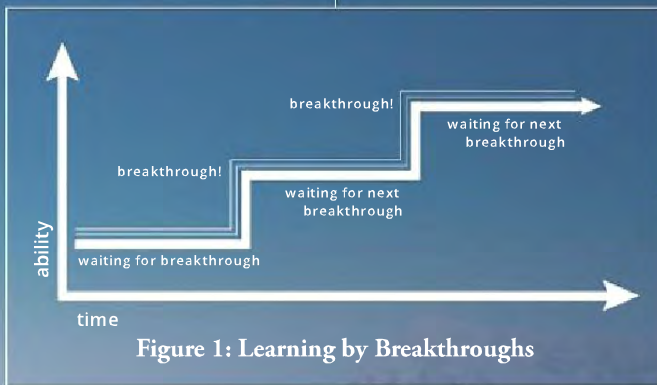
Take a look at some examples of how learning might take place. Figure 1 depicts a model where breakthroughs vault us through to the next level.

Or maybe improvement is just a steady upward progression where the longer we do something, the better we get (fig. 2). But it doesn't always feel like that, does it?

Figure 3 shows the typical model of learning that one sees in textbooks. But it tends to be more applicable to individual tasks than to one's overall career.

In reality, the path we most often take is a meandering one of steady improvement interrupted by occasional plateaus and setbacks. There are approaches that may not work out and times when a new focus, better fitness, or coaching can put us on a faster track. The path is uneven and at times can seem slow and illogical, but it only stops its upward trajectory when *we* let it stop.

As explored in more depth in the following articles, we can boil it down to this simple advice: For yourself and for your students, adopt an approach of gradual but continual improvement. While it's not as dramatic as catastrophic failure or a spectacular breakthrough, this is the time-tested way we get better (fig. 4).



# BREAKTHROUGHS: ARE YOU ON THE BRINK OF YOUR NEXT BIG LEAP?

By Karin Kirk

The idea of transforming our performance with a breakthrough is an alluring one. A sudden, seemingly magical elevation in our abilities that launches us to the next level – who doesn't want that? But before you get too excited about your imminent emergence as the next Angel Collinson or Sage Kotsenburg, be warned that breakthroughs are relatively rare. Gradual, continuous progress is the primary way that we learn and improve.

That said, breakthroughs are particularly interesting from the coaching point of view. A breakthrough is a rapid, permanent improvement in abilities. It might also be the first time you accomplish a particular feat, and it paves the way for future performance. Let's jump in and look more closely at how breakthroughs can occur.

## COMPONENTS OF YOUR ABILITIES

As you already know, our capabilities as skiers and riders are based on many different components. We need **skills**: the ability to edge, steer, and manage pressure. We need **physical abilities** such as strength, alignment, balance, flexibility, and endurance so that we can push, pull, slice, and twist our gear through a range of terrain and conditions. **Information** from multiple sources tells us what to do and why, and **cognitive abilities** help us understand what we are trying to do and when to apply different tactics. **Motivation** keeps us plugging away at our goals, even when it's below zero and everyone else is lounging fireside. We need an **emotional state** that puts us in the sweet spot. Too much anxiety prevents us from pushing our game, while a fearless attitude might not allow slowing

## BY THE END OF THE YEAR, MATT HAD RE-TAKEN THE PREP CLINIC TO RAVE REVIEWS AND EARNED THE SNOWSPORTS SCHOOL'S AWARD FOR THE MOST IMPROVED RIDER.

down long enough to refine our movements. Lastly we need the **time, space, and environment** in which to practice and perform.

That's a long list, isn't it? No wonder it takes a long time to get better – a lot of factors have to work together in order to create improvement. But not every aspect of the equation develops at the same pace. Everyone's progress is uneven; there are always some parts that lag behind the rest. If just one or two elements are left behind, but the others are strong, the stage is set for a breakthrough. When the occasion arises for that last piece to click into place, a new, higher level of performance can be achieved rapidly. This is only possible when all the other pieces are already capable of functioning at a higher level and, therefore, ready to support the improvement.

## EXAMPLES OF REAL-LIFE BREAKTHROUGHS

Take the case of Becky, who had skied with me for several years. Her stance and movement patterns were perfectly balanced, but she was a cautious skier. While many skiers need to pause at the end of the turn to regroup and re-balance before the next turn, Becky



Building well-rounded skills and practicing fundamental movements sets the stage for long-term progress and performance.

maintained her balance yet paused anyway, skiing past opportune places to initiate her next turn and bleeding the energy out of her run.

Watching her, it was clear there was no physical reason for the lack of spark – it was an emotional response. She didn't feel *quite* ready to commit to that next turn, so she opted to wait.

After chipping away at this issue during the course of several group lessons, I seized an opportunity to ski one-on-one with her and coach her mental game. We used the word "pounce" to describe the move to the next turn, and I hoped to engender a feeling of deliberate energy going into it. I skied behind her, yelling, "Pounce!" at the end of every turn. Sure enough, the new tactic produced a

dramatic change. Becky was supported by strong skills that allowed a quicker, more dynamic transition through her turns. Within one run she was skiing better, and by the end of the afternoon she was a reinvented skier. "I never thought I'd ski like this!" she exclaimed breathlessly at the bottom of a bump-filled bowl. Her mental game had caught up to her physical abilities and allowed a breakthrough.

In another example, Matt had been teaching snowboarding at a small ski area for a few seasons, then moved to a larger one with a comprehensive training program. He was athletic as they come but had spent several years riding in a vacuum. When he took his Level II prep clinic, he was devastated by the feedback. "Apparently I don't know how to ride at all," he said afterward, visibly shaken by the experience.

Understandably, it took Matt a while to warm up to the idea of attending clinics again, and he was sensitive about fitting a certain mold with his riding. But once that feeling faded, he started to make dramatic improvements. Each week I'd watch him fly by under the lift and I noticed huge gains. Some people didn't even recognize him, as he was improving so quickly. Suddenly he was at every clinic offered, eagerly seeking more feedback.

By the end of the year, Matt had re-taken the prep clinic to rave reviews and earned the snowsports school's award for the most improved rider. Matt had been experiencing an information deficit. He had the athletic ability and the motivation, but he lacked the specific knowledge about how to improve his technique. Once the ideas jelled in his head, he made rapid progress.

### WHEN A BREAKTHROUGH IS POSSIBLE...

These two examples show how breakthroughs can happen when there are specific things missing from someone's overall development. As instructors, we can examine the recipe each person brings to the table and see if one aspect is in need of particular development, and if so, if a breakthrough might be possible.

Of course, this is true for us as well. It merits some self-examination to see if certain elements of our own development might be holding up the whole package.

### ... AND WHEN IT PROBABLY ISN'T

I'll share one more anecdote with you. I was driving home from a multi-day training event with Andrew, a fellow instructor, and we were debriefing about the event. Andrew works at a neighboring ski area, and we skied together only once a year.

He always appeared inquisitive and engaged in the learning process, but his skill development had stagnated. During the clinic Andrew had struggled with the off-groomed skiing, and he was down in the dumps about it. "I need to work on my bump skiing," he mused. I nodded in agreement. "There's just one thing missing," he continued, "I feel like I just need that secret ingredient that you guys all have. Once I get that, everything will click."

I reflected on his appraisal. The clinician had given Andrew several tips, but nothing was going to elevate his game quickly. There were multiple reasons why Andrew couldn't ski ungroomed terrain as fluidly as he'd hoped. His stance, pressure management, timing, and tactical choices were all slightly off. There wasn't just one magical ingredient preventing success; rather, he needed to refine several of his fundamentals. Hoping for a breakthrough might impede his ability to buckle down and keep chipping away at it.

This is an important lesson. A survey of the research about athletic



Pinnacle moments in our progress can be the result of a big breakthrough, but it can also happen by chipping away at a long-term goal.

performance reveals very little about breakthroughs, while the emphasis is on long-term, incremental improvements. That's because, for the most part, we improve gradually, as a result of consistent yet small improvements that we keep making over the course of our careers. People who have achieved a high level in their sport typically credit long pathways and hard work. There is no way to shortcut that.

### MAPPING THE ROAD TO IMPROVEMENT

With an understanding of the difference between breakthroughs and gradual improvements, you can keep both pathways in mind. Be on the alert for opportunities for rapid gains and experiment with pushing yourself or your students if you feel that a breakthrough could be imminent. Understanding how this element fits into the learning process can help you make the long journey of continual improvement both more successful and more fun.

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## BREAKDOWNS:

### WHAT'S HAPPENING - AND WHAT IT MEANS - WHEN A STUDENT HAS A BAD TIME

By Ben Roberts

The boy was rolling on the snow, tears streaming down his face. One foot was strapped into his binding, but every time he stood upright, his board slid out from under him. The instructor and supervisor looked on helplessly; his mother and grandfather were asking him what was wrong, and his father and grandmother were nearby, looking very concerned. Through his sobs the boy kept saying that he just wanted to ride, and so he continued his struggle to stand up.

What happened? Why was this boy having such a terrible meltdown? One experienced instructor and two supervisors had already tried to help this young man - what was I going to do?

### WHAT IS A BREAKDOWN?

A breakdown is a situation where there is a sudden and dramatic decrease in a person's ability to learn or perform at a level of skill they already possess. Physical, cognitive, and emotional factors contribute to the loss of performance, with one of these three factors playing a dominant role in any given breakdown.

Breakdowns are most common when working with new ideas or a movement that has not yet been mastered. Our learning at this stage is fragile and impermanent, and the process of learning tends to consume us physically, cognitively, and emotionally. During these vulnerable stages, overload can trigger a breakdown.

### PHYSICAL BREAKDOWNS

**Nutrition, hydration, strength, endurance, cold, and pain** are elements that may be present in a physical breakdown. Very often it can be easy to turn a bad situation around with a snack, some

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water, an equipment adjustment, or a few minutes of rest. However, this need may become evident only when there isn't an opportunity to address it. Physical breakdowns can also occur when a person has been operating at a high level of exertion and reaches a point of failure.

**Tactics to prevent and address physical breakdowns:** Staying hydrated and consuming a small helping of complex carbohydrates every two hours while skiing or riding will help keep everything running smoothly for yourself and your students. When a breakdown strikes, put your energy into solving it; this is no time for "I told you so." While it can be difficult to cut a day on the hill short, some physical breakdowns are best addressed by calling it a day, resting, and coming back the next day for a fresh start.

## COGNITIVE AND SKILL BREAKDOWNS

When someone is in the process of learning a new skill, there is a period when performing the task requires conscious effort. This is a vulnerable period, as the student works to perform a task that has not yet become ingrained. Breakdowns frequently occur when emotional or cognitive pressure are experienced by a learner who is in this phase of learning, or who has ownership of the skills but lacks experience or understanding in applying them to the situation at hand.

Cognitive pressures include **confusion** about the task being performed, trying to **monitor** one's performance, or following **complex instructions** to perform a task. Emotional pressures include **anxiety, worry, frustration, pressure to perform, and social pressures**. The more advanced the person's ownership of the skill, the less susceptible they are to a breakdown brought on by these pressures. The earlier phase of learning a skill can be a fragile environment for the learner and is an important time to carefully monitor and adjust the lesson content, pace, and tone to ensure continued success as they practice and gain ownership of the skill.

## THE MOST DIFFICULT DECISION TO MAKE IN THESE SITUATIONS IS WHETHER TO CONTINUE AND FIGHT THROUGH THE EMOTION OR TO LEAVE THE SITUATION.

**Tactics to prevent or address cognitive and skill breakdowns:** Removing or minimizing the source of emotional or cognitive pressure can help quickly turn things around. Ask yourself and the student what has changed in the period leading up to the breakdown and then seek to address that change.

Is the learner confused about something? Is there a simpler way to achieve the same outcome? Has your instruction required a great deal of thought by the student? Has something happened to put pressure on them or bring out negative emotions? Other useful tactics include building unstructured practice time into the session or suggesting a fun run "just to clear our heads."

## EMOTIONAL BREAKDOWNS

These breakdowns include situations where a student is frozen with fear midway down a run, or when a student angrily continues attempting the same maneuver in the park with each unsuccessful attempt growing more frustrating than the last. **Anxiety, frustration, anger, and fear** are common in these scenarios.

The most difficult decision to make in these situations is whether to continue and fight through the emotion or to leave the situation. Generally speaking, if a person has passed a point of no return, it is better to exit the situation; if they are still able to trust your judgment



Skiing and riding is supposed to be about having a blast, not a breakdown. Help students work through challenges that might otherwise seem insurmountable.

and are willing to try what you ask, it may be worth continuing.

**Tactics to prevent or address emotional breakdowns:** No matter what you believe about the validity of an emotion's source, the fact that the person is experiencing the emotion makes it real. Ensure that your explanation of why a person doesn't need to be afraid doesn't question whether or not the person should be experiencing that fear. "I can see that you're afraid; that's a healthy reaction when people are on this part of the mountain for the first time. Let's discuss why this run is safer than it seems." Another tactic is to simply be present with the person: "I'm here with you; let's take a moment to collect ourselves and then work together to figure this out."

## THE ROLE OF TIME

For all breakdowns, it is important to consider the role of time. When a student begins to break down, take a moment and consider how long the person may have been experiencing the

underlying physical, cognitive, or emotional cause. Has this person seemed nervous, hungry, or confused all day? Or is this a recent development?

When the source of the breakdown is a recent occurrence, quickly addressing the problem often makes it possible to rapidly regain the previous level of performance. In situations where the person has been experiencing the cause of the breakdown for a longer period of time, addressing the problem may not be enough for an immediate improvement. Time will need to pass before that person's level of performance can return to normal.

## CONCLUSION

Back to the sobbing young snowboarder. What could I do for him?

I introduced myself and asked everyone to take two steps back and give us some space. I told the boy, "It looks like there's something going on here. Take a minute to catch your breath and then let's figure out what's going on." Scanning his gear, I noticed that the size adjustment on his binding strap had slid open. I adjusted it from the "XL" to the "M" position and told him that when he felt ready he should stand up and see if he could slide. He stood up, wiped the tears from his face, gave a push and executed a beautiful straight run to heelside fan turn.



ISTOCK PHOTO

Frustration can lead to breakdowns, so monitor the situation and adjust the lesson content, pace, and tone to promote success.

The expressions of relief on his face and the faces of his family were incredible. He quickly rejoined the lesson and had a great morning learning to link turns, followed by an afternoon exploring the mountain with his father. Later on I learned that his father had just returned home from a long deployment in Afghanistan. It was extremely important to the boy and his family that they have a good day on the mountain. I'm glad they did. 32°

## TACTICS THAT CREATE OR ACCELERATE BREAKDOWNS

As sure as there are ways to head off most breakdowns if caught early enough, here are some examples of surefire ways to push your students to the edge – if not over it.

*Argue with the student:*

“Your boots are fine; your feet can’t hurt that bad.”

“Stop saying that you can’t ski this; you were just on this run an hour ago!”

*Talk about the situation to another person as if the student weren’t present:*

“Your husband/wife/child is a little emotional this morning.”

Get in the student’s bubble and ask lots of questions:

“How are you feeling right now?” “Where do you want to go?” “Is this run too hard?” “Do you want to take a break?” “Does this happen to you a lot?”

For more insights from Karin Kirk and Ben Roberts on breakthroughs and breakdowns in snowsports instruction, check out the Snow Pros Podcast, at <https://soundcloud.com/snowprospodcast>.

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**Cheers.**

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