

Creating the Cooperative Learning Connection

Glenda H. Cook
617 Handley Acres Drive
Goldsboro, NC 27534

lucialass@yahoo.com

Home Phone: (919) 734-0843

Cooperative Learning and the Block Schedule

Focus and Review: 10-15 minutes

Inside-Outside Circle
Mix-Freeze-Group
Mix-Pair-Discuss
Send a Problem
Mix and Match/Snowball
Pairs Check
Pairs Compare
Line ups
Find Someone Who... with win a 100
Round Table
Team Interview

Anticipatory Set: 5-10 minutes

Corners
Similarity Groups
Inside-Outside Circle
Mix-Pair-Discuss
Value Lines
Find Someone Who
Team Interview

Teacher Presentation/Lecture/Questioning: 30-40 minutes

Throughout and after teacher presentation the following structures may be used to check for understanding:

Numbered Heads Together
Team-Pair-Solo
Send a Problem
Line ups
Pairs Compare
Stir the Class
Inside – Outside Circle
Mix – Pair – Discuss
Find Someone Who...

Guided Practice: 10 minutes

Team – Pair – Solo
Round Table
Line ups
Same Different
Mix – Freeze – Group
Stir the Class
Mix and Match
Find Someone Who... with win a 100
Team Interview
Numbered Heads Together
Send a Problem

Independent Practice/Classwork check/Reteach 10 minutes

Numbered Heads Together
Line ups
Mix and Match/Snowball
Round Robin
Rally Robin
Simultaneous Round Robin/Round Table

Closure: 5-10 minutes

Corners
Team statement
Line ups/Value line
Similarity Statement

Quiet Signal

1. Teacher raises hand.
2. Students raise hands, stop talking and stop doing.
3. Students signal others to be quiet.
4. Teacher speaks to class only when everyone is quiet.

Corners

1. Teacher announces corners.
2. Give 3 – 5 seconds for wait time.
3. Students write choice.
4. Students move to corner of choice.
5. Students pair and discuss choice.
6. Teacher calls on selected pairs in each corner to share.

*To give equal time to each student, have students pick an A and a B and give A 30 seconds to talk and then give B 30 seconds to talk.

LINE UPS

1. Teacher announces line/topic.
2. Teacher walks the line, giving start and stop points
3. Students line up, using cards where appropriate.
4. Teacher/students check line for errors.
5. If cards are used, take them up while students are in correct order in line.

MIX – FREEZE - GROUP

MIX: Students move around the room while not talking.

FREEZE: Students stop. Teacher asks a question that has a number answer or key is on a board or overhead.

A = 1 B = 2 C = 3 D = 4 E = 5

GROUP: Students move together for answer. Leftover students use arms, stuffed animals...

MIX – PAIR - DISCUSS

MIX: Students move around the room; no talking.

PAIR: Students pair.

DISCUSS: Teacher asks a question and students take turns answering the question (A/B)

For variety, students can have question cards but this takes away some content control from teacher.

MIX and MATCH

1. Students have pieces of paper with questions/answers, words/definitions, pictures/word...
2. Students walk around the room trading cards.
3. Teacher calls stop, and then students find their match and move to the sides of the room.
4. When all matches are made, you may repeat the process several times.
5. When finished, take up cards in pairs.

Find Someone Who...

1. The teacher passes out sheets with problems or questions.
2. The students follow the directions listed below:
 1. You ask for answers from classmates.
 2. You write the answer you are given on your sheet.
 3. The other person signs or initials your answer.
 4. You can only get one answer from a person.
 5. When you have all questions answered, return to your seat and check answers with others around you.

To win a 100 for a quiz grade, the class has to get all questions correct when individuals are called on by the teacher. If one student misses an answer, then the class does not get the 100.

The class can check answers anyway it chooses or you can tell them to have one student call out the answers on his paper and others can agree or disagree.

Find Someone Who...

Directions: You ask for answers.
 You write answers.
 The other person signs answer.
 You must go to different people.
 Return to your seat when you are finished.

Find someone who...

1. Knows which pronoun is correct in the following sentence:
This is between you and (I, me). Initials_____
2. has traveled outside the US in the last 5 years.
Name_____ Place_____ Initials_____
3. has worked in education for over 10 years.
Name_____ How long?_____ Initials_____
4. eats in the school cafeteria at least twice a month.
Name_____ Initials_____
5. has retired and is still working in education.
Name_____ Initials_____
6. will sing at least part of a Broadway song for you.
Name_____ Song_____ Initials_____
7. eats junk food for breakfast.
Name_____ Food_____ Initials_____

WINNING A 100

After completing a Find Someone Who activity, have students do the following:

Check answers with other students in the class. They can call them out, roam around the room and check answers or just check with friends.

Give them a time limit to check with others. Then the teacher calls on different students for each question and if he/she hears all correct answers, the class members all win a 100 for a quiz grade.

Team Formation

1. List students in class from highest to lowest.
2. Divide list into four equal parts with any remainders in the middle. (for example, 6 highs, 6 lows, 7 medium-highs, 7 medium-lows)
3. Write names of individual students on post it notes. Use 4 different colors, one for each of the four levels.
4. Divide students into teams, pulling one student from each group (H, MH, ML, L).
5. If you have one student left over, make a team of five.2 students left over, take one from a team of 4 and make 2 teams of 3. ...3 students left over, make a team of 3 (NEVER LET THOSE THREE BE THE TEAM).
6. Check for racial and gender balance, ESL situations and potential problems.
7. Do not have the following situation, if possible: 1 girl, 3 boys or 1 boy, 3 girls.
8. Change teams every 4-6 weeks
9. Don't break a "perfect pair."
10. Be flexible (make a frequent absentee the 5th member of team).
11. Be sure to do team and classbuilding structures.

WHAT TO DO WITH.....

"I don't want to be on a team."

"We don't want him/her."

DO NOT GIVE GROUP GRADES. COOPERATIVE LEARNING IS LEARNING TOGETHER. EACH STUDENT EARNS HIS/HER OWN GRADES.

NUMBERED HEADS TOGETHER

1. Students number off in teams each day.
2. Teacher poses a content question.
3. Students huddle together and make sure everyone on team knows the answer and then they sit down.
4. Teacher calls on a number and those students respond.
Responses may be oral, on board, a demonstration.....

Say "Make sure everyone knows" not "Who can tell me?"

Of all the animals in the animal kingdom, which one (aside from man) is the smartest?

There are several ways of measuring the intelligence of animals. In one test a scientist sets three identical cans on a table. While the animal watches, he puts food under one of the cans. Then he leads the animal away. Some time later, he brings it back to see if it remembers which can has the food. No sniffing is allowed; the animal must go directly to the correct can or it fails.

This is called a delayed-response test. The idea is to find out how long an animal's memory can retain information. The scientists would try showing the cans to the animal one hour later, or two hours later, or even a full day later. They discovered that chimpanzees and elephants have the best memory, and are able to remember the correct can for at least twenty hours. No other animal is close. Dogs came next, but they only remembered for nine hours.

To settle the matter, the scientists devised a gigantic maze and ran the chimps and elephants through it. The maze was very complicated, with many blind alleys and dead ends. It took the chimps ten minutes to find their way out. The elephants needed a half hour. Even allowing for the elephants' slower rate of speed, the test indicates that chimpanzees are the smartest animals.

From this and other tests, the scientists drew the following conclusion: an animal's intelligence depends on the size of its brain in proportion to the size of its body. The elephant's brain weighs ten pounds. But this is only 1/600th of its 6,000 pound body. A chimp's brain weighs about one pound, or 1/120th of its total body weight. So in proportion to its body size, the chimp has four times as much brain as the elephant – more brain for less body. The chimp is the champ!

TEAM – PAIR - SOLO

TEAM: After instruction, teacher assigns one or more problems for the team to solve.
(Numbered heads may be used for this portion.)

PAIR: Students pair off in team and solve one or more problems with a partner and then check answers with team.

SOLO: Students work alone to solve problems and then check with team.

THIS IS A SKILL BASED STRUCTURE. Do several problems at each level. Do not use this structure for concept based information.

Roundtable

1. Allow one sheet of paper and one pen or pencil per team.
2. Students pass the paper, taking turns answering.
3. Call time and check answers.

For individual accountability, have each student use a different color of pen or pencil and sign name in same color.

You can also have students check the previous answer before they answer the next question.

Keep answers short.

Focus on These Seven Marketing Principles to Attract More Business and Close More Sales

© 2005 Joel Sussman, president Optimal Marketing Communications

- 1) **Gain Customer Confidence:** Customer indecisiveness, skepticism, indifference, or confusion are among the top sales killers in the business world. It's up to you to project an image of experience, quality, dependability, excellent customer service, and/or value to your prospective customers in order to win their confidence. If you haven't clearly communicated the advantages and solid reasons for them to do business with you, then they'll be hesitant to commit and the sale will go to your competitor.
- 2) **Penetrate awareness** of your target audience by using some form of integrated marketing. In other words, the more ways the public hears about you, the better your chances are for achieving brand recognition, credibility, and greater market share. Effective marketing is partly the result of exposing your target group to your name and your selling points (unique selling proposition) as often as possible (frequency), in as many ways as possible, and as cost-effectively as possible.
- 3) **Enthusiasm**, in both print and in person, is contagious (and I'm talking about using multiple exclamation points after sentences!!! That's just plain tacky.) If you deeply believe in your products, services, your company, and yourself, then your prospects will pick up on that passionate attitude and feel confident and optimistic about doing business with you.
- 4) **Purchasing is an emotional decision:** Instill in your prospects good feelings about your company, your business relationship with them, and how you can improve their lives or solve their problem. Accomplishing that is at least as important in the sales process as focusing attention on product features and benefits.
- 5) **Dispel Distrust:** Gain customer confidence and overcome potential feelings of distrust by offering written guarantees of satisfaction, customer testimonials, references, and by joining respected and well-known professional organizations, such as the Better Business Bureau, Chambers of Commerce, and industry associations.
- 6) **Impose Deadline:** Counteract one of the biggest obstacles to closing a sale known to mankind: procrastination. To overcome natural human tendency to deliberate, postpone, and delay, it's often necessary to inject a sense of urgency into your ads, sales presentations, and marketing messages. Whether supplies are limited or prices are going up at the end of the month, some prospects need to have a deadline or an incentive to motivate them to take action now.
- 7) **Create a Marketing Plan** to identify and capitalize on your strengths and opportunities. Your strategic plan should also take into account factors such as your weaknesses (and possible remedies), external threats (competition, economic factors, etc.), your marketing mix strategy (products/services, promotional goals, pricing strategy, and distribution decisions), media strategy, sales and expense budgets, and target market analysis (know your customers).

Recommended Resources: [Palo Alto Software](#) provides 70 sample marketing plans and gives you the tools and support you need to create a professional, effective marketing plan.

<http://www.marketingsurvivalkit.com/>

PAIRS COMPARE

1. Teacher presents a problem to which students can generate a list of ideas.
2. In pairs, students record their ideas passing one sheet of paper back and forth.
3. When the pairs have come up with a list of ideas, they compare their lists with another pair on their team or another pair in the class.
4. As a team the challenge is for the team to come up with ideas that neither pair generated. This may be done through discussion or by having team rallytable as they pass the two lists back and forth.
5. Class then discusses the best ideas from each team.

Similarity Groups

1. Teacher announces topic.
2. Students write their response.
3. Students group with those who have similar answers.
4. Students pair and discuss answers in new groups.

Stir the Class

1. Students stand in groups of four around the classroom.
2. The teacher presents a problem or question and students huddle to determine an answer and then unhuddle when they have the answer.
3. One student from each group rotates to another group.
4. New groups huddle and new member shares answer.

Inside/Outside Circle

1. Students form two concentric circles, with students in the inside facing out and students on the outside facing in toward a partner.
2. Students on the inside share with a partner.
3. Reverse roles.
4. Rotate circle.

Fast Company

Good to Great

Start with 1,435 good companies. Examine their performance over 40 years. Find the 11 companies that became great. Now, here's how you can do it too.

From: [Issue 51](#) | October 2001 | Page 90 **By:** Jim Collins **Illustrations by:** Greg Clarke

[Web-Exclusive Interview](#): Good Questions, Great Answers

I want to give you a lobotomy about change. I want you to forget everything you've ever learned about what it takes to create great results. I want you to realize that nearly all operating prescriptions for creating large-scale corporate change are nothing but myths.

The Myth of the Change Program: This approach comes with the launch event, the tag line, and the cascading activities.

The Myth of the Burning Platform: This one says that change starts only when there's a crisis that persuades "unmotivated" employees to accept the need for change.

The Myth of Stock Options: Stock options, high salaries, and bonuses are incentives that grease the wheels of change.

The Myth of Fear-Driven Change: The fear of being left behind, the fear of watching others win, the fear of presiding over monumental failure -- all are drivers of change, we're told.

The Myth of Acquisitions: You can buy your way to growth, so it figures that you can buy your way to greatness.

The Myth of Technology-Driven Change: The breakthrough that you're looking for can be achieved by using technology to leapfrog the competition.

The Myth of Revolution: Big change has to be wrenching, extreme, painful -- one big, discontinuous, shattering break.

Wrong. Wrong. Wrong. Wrong. Wrong. Wrong. Totally wrong.

Here are the facts of life about these and other change myths. Companies that make the change from good to great have no name for their transformation -- and absolutely no program. They neither rant nor rave about a crisis -- and they don't manufacture one where none exists. They don't "motivate" people -- their people are self-motivated. There's no evidence of a connection between money and change mastery. And fear doesn't drive change -- but it does perpetuate mediocrity. Nor can acquisitions provide a stimulus for greatness: Two mediocrities never make one great company. Technology is certainly important -- but it comes into play only after change has already begun. And as for the final myth, dramatic results do not come from dramatic process -- not if you want them to last, anyway. A serious revolution, one that feels like a

revolution to those going through it, is highly unlikely to bring about a sustainable leap from being good to being great.

These myths became clear as my research team and I completed a five-year project to determine what it takes to change a good company into a great one. We systematically scoured a list of 1,435 established companies to find every extraordinary case that made a leap from no-better-than-average results to great results. How great? After the leap, a company had to generate cumulative stock returns that exceeded the general stock market by at least three times over 15 years -- and it had to be a leap independent of its industry. In fact, the 11 good-to-great companies that we found averaged returns 6.9 times greater than the market's -- more than twice the performance rate of General Electric under the legendary Jack Welch.

The surprising good-to-great list included such unheralded companies as Abbott Laboratories (3.98 times the market), Fannie Mae (7.56 times the market), Kimberly-Clark Corp. (3.42 times the market), Nucor Corp. (5.16 times the market), and Wells Fargo (3.99 times the market). One such surprise, the Kroger Co. -- a grocery chain -- bumped along as a totally average performer for 80 years and then somehow broke free of its mediocrity to beat the stock market by 4.16 times over the next 15 years. And it didn't stop there. From 1973 to 1998, Kroger outperformed the market by 10 times.

In each of these dramatic, remarkable, good-to-great corporate transformations, we found the same thing: There was no miracle moment. Instead, a down-to-earth, pragmatic, committed-to-excellence process -- a framework -- kept each company, its leaders, and its people on track for the long haul. In each case, it was the triumph of the Flywheel Effect over the Doom Loop, the victory of steadfast discipline over the quick fix. And the real kicker: The comparison companies in our study -- firms with virtually identical opportunities during the pivotal years -- did buy into the change myths described above -- and failed to make the leap from good to great.

How Change Doesn't Happen

Picture an egg. Day after day, it sits there. No one pays attention to it. No one notices it. Certainly no one takes a picture of it or puts it on the cover of a celebrity-focused business magazine. Then one day, the shell cracks and out jumps a chicken.

All of a sudden, the major magazines and newspapers jump on the story: "Stunning Turnaround at Egg!" and "The Chick Who Led the Breakthrough at Egg!" From the outside, the story always reads like an overnight sensation -- as if the egg had suddenly and radically altered itself into a chicken.

Now picture the egg from the chicken's point of view.

While the outside world was ignoring this seemingly dormant egg, the chicken within was evolving, growing, developing -- changing. From the chicken's point of view, the moment of breakthrough, of cracking the egg, was simply one more step in a long chain of steps that had led up to that moment. Granted, it was a big step -- but it was hardly the radical transformation that it looked like from the outside.

It's a silly analogy -- but then our conventional way of looking at change is no less silly. Everyone looks for the "miracle moment" when "change happens." But ask the good-to-great

executives when change happened. They cannot pinpoint a single key event that exemplified their successful transition.

Take Walgreens. For more than 40 years, Walgreens was no more than an average company, tracking the general market. Then in 1975 (out of the blue!) Walgreens began to climb. And climb. And climb. It just kept climbing. From December 31, 1975 to January 1, 2000, one dollar invested in Walgreens beat one dollar invested in Intel by nearly 2 times, General Electric by nearly 5 times, and Coca-Cola by nearly 8 times. It beat the general stock market by more than 15 times.

I asked a key Walgreens executive to pinpoint when the good-to-great transformation happened. His answer: "Sometime between 1971 and 1980." (Well, that certainly narrows it down!)

Walgreens's experience is the norm for good-to-great performers. Leaders at Abbott said, "It wasn't a blinding flash or sudden revelation from above." From Kimberly-Clark: "These things don't happen overnight. They grow." From Wells Fargo: "It wasn't a single switch that was thrown at one time."

We keep looking for change in the wrong places, asking the wrong questions, and making the wrong assumptions. There's even a tendency to blame Wall Street for the "instant results" approach to change. But the companies that made the jump from good to great did so using Wall Street's own tough metric of success: a sustained leap in their stock-market performance. Wall Street turns out to be just another myth -- an excuse for not doing what really works. The data doesn't lie.

How Change Does Happen

Now picture a huge, heavy flywheel. It's a massive, metal disk mounted horizontally on an axle. It's about 100 feet in diameter, 10 feet thick, and it weighs about 25 tons. That flywheel is your company. Your job is to get that flywheel to move as fast as possible, because momentum -- mass times velocity -- is what will generate superior economic results over time.

Right now, the flywheel is at a standstill. To get it moving, you make a tremendous effort. You push with all of your might, and finally, you get the flywheel to inch forward. After two or three days of sustained effort, you get the flywheel to complete one entire turn. You keep pushing, and the flywheel begins to move a bit faster. It takes a lot of work, but at last the flywheel makes a second rotation. You keep pushing steadily. It makes three turns, four turns, five, six. With each turn, it moves faster, and then -- at some point, you can't say exactly when -- you break through. The momentum of the heavy wheel kicks in your favor. It spins faster and faster, with its own weight propelling it. You aren't pushing any harder, but the flywheel is accelerating, its momentum building, its speed increasing.

This is the Flywheel Effect. It's what it feels like when you're inside a company that makes the transition from good to great. Take Kroger, for example. How do you get a company with more than 50,000 people to embrace a new strategy that will eventually change every aspect of every grocery store? You don't. At least not with one big change program.

Instead, you put your shoulder to the flywheel. That's what Jim Herring, the leader who initiated the transformation of Kroger, told us. He stayed away from change programs and motivational

stunts. He and his team began turning the flywheel gradually, consistently -- building tangible evidence that their plans made sense and would deliver results.

"We presented what we were doing in such a way that people saw our accomplishments," Herring says. "We tried to bring our plans to successful conclusions step by step, so that the mass of people would gain confidence from the successes, not just the words."

Think about it for one minute. Why do most overhyped change programs ultimately fail? Because they lack accountability, they fail to achieve credibility, and they have no authenticity. It's the opposite of the Flywheel Effect; it's the Doom Loop.

Companies that fall into the Doom Loop genuinely want to effect change -- but they lack the quiet discipline that produces the Flywheel Effect. Instead, they launch change programs with huge fanfare, hoping to "enlist the troops." They start down one path, only to change direction. After years of lurching back and forth, these companies discover that they've failed to build any sustained momentum. Instead of turning the flywheel, they've fallen into a Doom Loop: Disappointing results lead to reaction without understanding, which leads to a new direction -- a new leader, a new program -- which leads to no momentum, which leads to disappointing results. It's a steady, downward spiral. Those who have experienced a Doom Loop know how it drains the spirit right out of a company.

Consider the Warner-Lambert Co. -- the company that we compared directly with Gillette -- in the early 1980s. In 1979, Warner-Lambert told *Business Week* that it aimed to be a leading consumer-products company. One year later, it did an abrupt about-face and turned its sights on health care. In 1981, the company reversed course again and returned to diversification and consumer goods. Then in 1987, Warner-Lambert made another U-turn, away from consumer goods, and announced that it wanted to compete with Merck. Then in the early 1990s, the company responded to government announcements of pending health-care reform and reembraced diversification and consumer brands.

Between 1979 and 1998, Warner-Lambert underwent three major restructurings -- one per CEO. Each new CEO arrived with his own program; each CEO halted the momentum of his predecessor. With each turn of the Doom Loop, the company spiraled further downward, until it was swallowed by Pfizer in 2000.

In contrast, why does the Flywheel Effect work? Because more than anything else, real people in real companies want to be part of a winning team. They want to contribute to producing real results. They want to feel the excitement and the satisfaction of being part of something that just flat-out works. When people begin to feel the magic of momentum -- when they begin to see tangible results and can feel the flywheel start to build speed -- that's when they line up, throw their shoulders to the wheel, and push.

And that's how change really happens.

Disciplined People: "Who" Before "What"

You are a bus driver. The bus, your company, is at a standstill, and it's your job to get it going. You have to decide where you're going, how you're going to get there, and who's going with you.

Most people assume that great bus drivers (read: business leaders) immediately start the journey by announcing to the people on the bus where they're going -- by setting a new direction or by articulating a fresh corporate vision.

In fact, leaders of companies that go from good to great start not with "where" but with "who." They start by getting the right people on the bus, the wrong people off the bus, and the right people in the right seats. And they stick with that discipline -- first the people, then the direction - - no matter how dire the circumstances. Take David Maxwell's bus ride. When he became CEO of Fannie Mae in 1981, the company was losing \$1 million every business day, with \$56 billion worth of mortgage loans under water. The board desperately wanted to know what Maxwell was going to do to rescue the company.

Maxwell responded to the "what" question the same way that all good-to-great leaders do: He told them, That's the wrong first question. To decide where to drive the bus before you have the right people on the bus, and the wrong people off the bus, is absolutely the wrong approach.

Maxwell told his management team that there would only be seats on the bus for A-level people who were willing to put out A-plus effort. He interviewed every member of the team. He told them all the same thing: It was going to be a tough ride, a very demanding trip. If they didn't want to go, fine; just say so. Now's the time to get off the bus, he said. No questions asked, no recriminations. In all, 14 of 26 executives got off the bus. They were replaced by some of the best, smartest, and hardest-working executives in the world of finance.

With the right people on the bus, in the right seats, Maxwell then turned his full attention to the "what" question. He and his team took Fannie Mae from losing \$1 million a day at the start of his tenure to earning \$4 million a day at the end. Even after Maxwell left in 1991, his great team continued to drive the flywheel -- turn upon turn -- and Fannie Mae generated cumulative stock returns nearly eight times better than the general market from 1984 to 1999.

When it comes to getting started, good-to-great leaders understand three simple truths. First, if you begin with "who," you can more easily adapt to a fast-changing world. If people get on your bus because of where they think it's going, you'll be in trouble when you get 10 miles down the road and discover that you need to change direction because the world has changed. But if people board the bus principally because of all the other great people on the bus, you'll be much faster and smarter in responding to changing conditions. Second, if you have the right people on your bus, you don't need to worry about motivating them. The right people are self-motivated: Nothing beats being a part of a team that is expected to produce great results. And third, if you have the wrong people on the bus, nothing else matters. You may be headed in the right direction, but you still won't achieve greatness. Great vision with mediocre people still produces mediocre results.

Disciplined Thought: Fox or Hedgehog?

Picture two animals: a fox and a hedgehog. Which are you? An ancient Greek parable distinguishes between foxes, which know many small things, and hedgehogs, which know one big thing. All good-to-great leaders, it turns out, are hedgehogs. They know how to simplify a complex world into a single, organizing idea -- the kind of basic principle that unifies, organizes, and guides all decisions. That's not to say hedgehogs are simplistic. Like great thinkers, who take

complexities and boil them down into simple, yet profound, ideas (Adam Smith and the invisible hand, Darwin and evolution), leaders of good-to-great companies develop a Hedgehog Concept that is simple but that reflects penetrating insight and deep understanding.

What does it take to come up with a Hedgehog Concept for your company? Start by confronting the brutal facts. One good-to-great CEO began by asking, "Why have we sucked for 100 years?" That's brutal -- and it's precisely the type of disciplined question necessary to ignite a transformation. The management climate during a leap from good to great is like a searing scientific debate -- with smart, tough-minded people examining hard facts and debating what those facts mean. The point isn't to win the debate, but rather to come up with the best answers -- and, ultimately, to lock onto a Hedgehog Concept that works.

You'll know that you're getting closer to your Hedgehog Concept when you align three intersecting circles that represent three pivotal questions: What can we be the best in the world at? (And equally important -- what can we not be the best at?) What is the economic denominator that best drives our economic engine (profit or cash flow per "x")? And what are our core people deeply passionate about? Answer those three questions honestly, facing the brutal facts without blinking, and you'll begin to see your Hedgehog Concept emerge.

For example, before Wells Fargo understood its Hedgehog Concept, its leaders had tried to make it a global bank: It operated like a mini-Citicorp -- and a mediocre one at that.

Then the Wells Fargo team asked itself, "What can we potentially do better than any other company?" The brutal fact was that Wells Fargo would never be the best global bank in the world -- and so the leadership team pulled the plug on the vast majority of the bank's international operations. When the team asked that question about the bank's economic engine, Wells Fargo's leaders confronted a second brutal fact: In a deregulated world, commercial banking would be a commodity. The essential economic driver would no longer be profit per loan, but profit per employee. The bank switched its operations to become a pioneering leader in electronic banking and to open utilitarian branches run by small crews of superb people. Profit per employee skyrocketed. Finally, when it came to passion, members of the Wells Fargo team all agreed: The mindless waste and self-awarded perks of traditional banking culture were revolting. They proudly saw themselves as stoic Spartans in an industry that had been dominated by the wasteful, elitist culture of banking. The Wells Fargo team eventually translated the three circles into a simple, crystalline Hedgehog Concept: Run a bank like a business, with a focus on the western United States, and consistently increase profit per employee. "Run it like a business" and "run it like you own it" became mantras; simplicity and focus made all the difference. With fanatical adherence to that simple idea, Wells Fargo made the leap from good results to superior results.

In the journey from good to great, defining your Hedgehog Concept is an essential element. But insight and understanding don't happen overnight -- or after one off-site. On average, it took four years for the good-to-great companies to crystallize their Hedgehog Concepts. It was an inherently iterative process -- consisting of piercing questions, vigorous debate, resolute action, and autopsies without blame -- a cycle repeated over and over by the right people, infused with the brutal facts, and guided by the three circles. This is the chicken inside the egg.

Disciplined Action: The "Stop Doing" List

Take a look at your desk. If you're like most hard-charging leaders, you've got a well-articulated to-do list. Now take another look: Where's your stop-doing list? We've all been told that leaders make things happen -- and that's true: Pushing that flywheel takes a lot of concerted effort. But it's also true that good-to-great leaders distinguish themselves by their unyielding discipline to stop doing anything and everything that doesn't fit tightly within their Hedgehog Concept.

When Darwin Smith and his management team crystallized the Hedgehog Concept for Kimberly-Clark, they faced a dilemma. On one hand, they understood that the best path to greatness lay in the consumer business, where the company had demonstrated a best-in-the-world capability in its building of the Kleenex brand. On the other hand, the vast majority of Kimberly-Clark's revenue lay in traditional coated-paper mills, turning out paper for magazines and writing pads -- which had been the core business of the company for 100 years. Even the company's namesake town -- Kimberly, Wisconsin -- was built around a Kimberly-Clark paper mill.

Yet the brutal truth remained: The consumer business was the one arena that best met the three-circle test. If Kimberly-Clark remained principally a paper-mill business, it would retain a secure position as a good company. But its only shot at becoming a great company was to become the best paper-based consumer company -- if it could take on such companies as Procter & Gamble and Scott Paper Co. and beat them. That meant it would have to "stop doing" paper mills.

So, in what one director called "the gutsiest decision I've ever seen a CEO make," Darwin Smith sold the mills. He even sold the mill in Kimberly, Wisconsin. Then he threw all the money into a war chest for an epic battle with Procter & Gamble and Scott Paper. Wall Street analysts derided the move, and the business press called it stupid. But Smith did not waver.

Twenty-five years later, Kimberly-Clark emerged from the fray as the number-one paper-based consumer-products company in the world, beating P&G in six of eight categories and owning its former archrival Scott Paper outright. For the shareholder, Kimberly-Clark under Darwin Smith beat the market by four times, easily outperforming such great companies as Coca-Cola, General Electric, Hewlett-Packard, and 3M.

In deciding what not to do, Smith gave the flywheel a gigantic push -- but it was only one push. After selling the mills, Kimberly-Clark's full transformation required thousands of additional pushes, big and small, accumulated one after another. It took years to gain enough momentum for the press to herald Kimberly-Clark's shift from good to great. One magazine wrote, "When ... Kimberly-Clark decided to go head to head against P&G ... this magazine predicted disaster. What a dumb idea. As it turns out, it wasn't a dumb idea. It was a smart idea." The amount of time between the two articles: 21 years.

Now It Begins

Our study of what it takes to turn good into great required 5 years -- and 10.5 person-years -- and amounted to our own flywheel effort. Looking back on our research, what's most striking to me about our findings is the absence of a magic moment in any of the good-to-great companies -- or in our own journey to understanding. The real path to greatness, it turns out, requires simplicity

and diligence. It requires clarity, not instant illumination. It demands each of us to focus on what is vital -- and to eliminate all of the extraneous distractions.

After five years of research, I'm absolutely convinced that if we just focus our attention on the right things -- and stop doing the senseless things that consume so much time and energy -- we can create a powerful Flywheel Effect without increasing the number of hours we work.

I'm also convinced that the good-to-great findings apply broadly -- not just to CEOs, but also to you and me in whatever work we're engaged in, including the work of our own lives. For many people, the first question that occurs is, "But how do I persuade my CEO to get it?" My answer: Don't worry about that. Focus instead on results -- on subverting mediocrity by creating a Flywheel Effect within your own span of responsibility. So long as we can choose the people we want to put on our own minibus, each of us can create a pocket of greatness. Each of us can take our own area of work and influence and can concentrate on moving it from good to great. It doesn't really matter whether all the CEOs get it. It only matters that you and I do. Now, it's time to get to work.

Jim Collins (jimcollins@aol.com) wrote the essay "Built to Flip" in the March 2000 issue of *Fast Company*. His new book, *Good to Great: Why Some Companies Make the Leap ... And Others Don't*, will be available in October.

Sidebar: Separating the Good From the Great

Can a good company become a great company? How? It took Jim Collins and his team of researchers 5 years to come up with the answers: 11 companies made the leap from good to great and then sustained those results for at least 15 years. How great was great? The good-to-great companies averaged cumulative stock returns 6.9 times the general market in the 15 years after their transition points. The actual screening-and-selection process was a rigorous one. The criteria were:

1. The company had to show a pattern of good performance, punctuated by a transition point, after which it shifted to great performance. "Great performance" was defined as a cumulative total stock return of at least three times the general market for the period from the transition point through 15 years.
2. The transition from good to great had to be company specific, not an industrywide event.
3. The company had to be an established and ongoing enterprise -- not a startup. It had to have been in business for at least 25 years prior to its transition, and it had to have been publicly traded with stock-return data available for at least 10 years prior to its transition.
4. The transition point had to occur before 1985 to give the team enough data to assess the sustainability of the transition.
5. Whatever the year of transition, the company had to be a significant, ongoing, stand-alone company.
6. At the time of its selection, the company still had to show an upward trend.

The study began with a field of 1,435 companies and emerged with a list of 11 good-to-great companies: Abbott Laboratories, Circuit City, Fannie Mae, Gillette Co., Kimberly-Clark Corp., the Kroger Co., Nucor Corp., Philip Morris Cos. Inc., Pitney Bowes Inc., Walgreens, and Wells Fargo.

The next step in the study was to isolate what it took to make the change. At this point, each of the 11 good-to-great companies was paired with a comparison company -- a company with similar attributes that could have made the transition, but didn't.

Then the research began. Collins and his team reviewed books, articles, case studies, and annual reports covering each company; examined financial analyses for each company, totaling 980 combined years of data; conducted 84 interviews with senior managers and board members of the companies; scrutinized the personal and professional records of 56 CEOs; analyzed compensation plans for the companies; and reviewed layoffs, corporate ownership, "media hype," and the role of technology for the companies. The findings are contained in *Good to Great: Why Some Companies Make the Leap ... And Others Don't* (HarperBusiness, 2001).

Sidebar: Great Answers to Good Questions

Fast Company: The CEOs who took their companies from good to great were largely anonymous. Is that an accident?

Jim Collins: There is a direct relationship between the absence of celebrity and the presence of good-to-great results. Why? First, when you have a celebrity, the company turns into "the one genius with 1,000 helpers." It creates a sense that the whole thing is really about the CEO. At a deeper level, we found that for leaders to make something great, their ambition has to be for the greatness of the work and the company, rather than for themselves. That doesn't mean that they don't have an ego. It means that at each decision point -- at each of the critical junctures when Choice A would favor their ego and Choice B would favor the company and the work -- time and again the good-to-great leaders pick Choice B. Celebrity CEOs, at those same decision points, are more likely to favor self and ego over company and work.

FC: Like the anonymous CEOs, most of the good-to-great companies are unheralded. What does that tell us?

JC: The truth is, few people are working on the most glamorous things in the world. Most of them are doing real work -- which means that most of the time they're doing a heck of a lot of drudgery with only a few moments of excitement. The real work of the economy gets done by people who make cars, who sell real estate, and who run grocery stores or banks. One of the great findings of this study is that you can be in a great company and be doing it in steel, in drug stores, or in grocery stores. No one has the right to whine about their company, their industry, or the kind of business that they're in -- ever again.

FC: Let's say that I'm not running a company. How do the good-to-great lessons apply to me?

JC: The basic message is this: Build your own flywheel. You can do it. You can start to build momentum in something for which you've got responsibility. You can build a great department.

You can build a great church community. You can take every one of these ideas and apply them to your own work or your own life.

FC: What does your research suggest about the best way to respond to the current economic slowdown?

JC: If I were running a company today, I would have one priority above all others: to acquire as many of the best people as I could. I'd put off everything else to fill my bus. Because things are going to come back. My flywheel is going to start to turn. And the single biggest constraint on the success of my organization is the ability to get and to hang on to enough of the right people.

[Web-Exclusive Interview: Good Questions, Great Answers](#)

Copyright © 2004 Gruner + Jahr USA Publishing. All rights reserved.
Fast Company, 375 Lexington Avenue., New York , NY 10017

<http://pf.fastcompany.com/magazine/51/goodtogreat.html>

In our day of the automobile and paved highway few people ever encounter quicksand. Yet quicksand is still common in many parts of the country. It may be more dangerous for being less familiar.

Quicksand is usually found along the shores and in the beds of rivers. It is simply sand saturated with water from beneath, as from a spring. The water flowing into the sand separates the grains. The suspended grains give rather easily, and a heavy object placed on the surface is likely to sink. How fast it sinks depends on its weight and surface area.

How does one detect quicksand? It cannot be done by the eye alone, since sand which looks firm may suddenly collapse and trap anyone who ventures out on it. The only way to be sure is to test the sand before walking on it. If the pole sinks more than six inches, the sand is probably quicksand.

A traveler who stumbles into quicksand will soon sink to the depth of his knees. If he stands still or struggles wildly, he will sink even further. He should at once lie on his back and stretch out his arms. Contrary to popular notion, quicksand does not suck objects down, and will support more weight than water alone. While the trapped person "floats" on the surface of the sand, rescuers should build a platform with boards or branches. Then they can pull him out slowly.

If the trapped person is alone, he can rescue himself. When he is in the floating position, he should begin rolling toward solid ground. Rolling is the only way of getting free. It should be done with frequent rests, so that the trapped person does not tire himself. When he reaches solid ground, he should swing his legs to safety, and quickly scramble out of the quicksand.

1. What is?	2. Where/ When is?	3. Which is?	4. Who is?	5. What is?	6. How is?
7. What did?	8. Where/ When did?	9. Which did?	10. Who did?	11. Why did?	12. How did?
13. What can?	14. Where/ When can?	15. Which can?	16. Who can?	17. Why can?	18. How can?
19. What would?	20. Where/ When would?	21. Which would?	22. Who would?	23. Who would?	24. How would?
25. What will?	26. Where/ When will?	27. Which will?	28. Who will?	29. Why will?	30. How will?
31. What might?	32. Where/ When might?	33. Which might?	34. Who might?	35. Why might?	36. How might?

Pairs Check

1. Two students partner together and sit side by side.
2. Students select an "A" and a "B" student.
3. Teacher presents a skills problem.
4. Student A solves the problem by talking out the solution while Student B watches, coaches or praises the correct answer.
5. Then Student B solves the next problem out loud while A watches, coaches or praises the answer.
6. This may be done for a series of problems or a worksheet.

If the paired students cannot solve the problem together, they may consult with another pair nearby. If the four cannot figure out the answer, all four hands go up to ask the teacher for help.

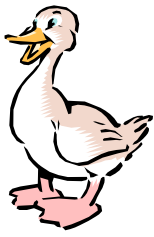
MILEAGE CHART

A mileage distance chart shows the distances between any two points (usually cities). To find the distance from one point (Boston) to another point (St. Louis), find Boston in the left column. Move along the Boston line until you reach the column headed St. Louis. 1239 is the number of miles between Boston and St. Louis. Use the chart to find the mileages for the distances below.

What is the distance	From:	TO:	?
	Akron	Houston	
	Miami	Seattle	
	Denver	Cheyenne	
	Boston	Los Angeles	
	Duluth	New Orleans	
	Norfolk	Toledo	
	Topeka	Dallas	
	Denver	Chicago	

	Atlanta	Cheyenne	Chicago	Dallas	Detroit	Houston	Los Angeles	Memphis	New Orleans	New York	Portland	St. Louis	Seattle	Toledo
Akron	678	1334	364	1180	190	1283	2371	717	1043	487	2492	529	2416	133
Austin	936	991	1133	196	1351	162	1384	633	521	1767	2101	839	2173	1279
Boston	1074	1942	994	1821	699	1856	3042	1350	1544	216	3100	1239	3024	741
Denver	1411	102	1013	784	1318	1026	1157	1048	1287	1866	1285	860	1357	1264
Duluth	1174	948	480	1102	717	1344	2053	969	1359	1322	1765	675	1689	720
Jackson	402	1278	753	403	924	429	1816	210	181	1225	2468	502	2540	867
Miami	667	2137	1374	1309	1381	1221	2733	1026	879	1336	3344	1226	3403	1324
Norfolk	577	1795	836	1415	703	1433	2780	927	1068	323	3008	946	2986	646
Topeka	868	597	567	517	838	738	1532	522	902	1272	1801	317	1872	756

Mileage Chart



How Fast

A. _____ B. _____
 NAME NAME

Directions: Follow the directions to figure out how fast some animals can travel. Write your answer on the _____.

On Land

Miles Per Hour

- | | | | |
|------------|-------|---|---|
| Snake | _____ | 2 | |
| Man | _____ | | (ten times faster than the snake) |
| Elephant | _____ | | (five mph faster than man) |
| Cheetah | _____ | | (two times as fast as elephant, plus man's speed) |
| Ostrich | _____ | | (twice as fast as man) |
| Jackrabbit | _____ | | (five mph faster than ostrich) |
| Greyhound | _____ | | (same speed as ostrich) |

In the Air

- | | | | |
|-------------|-------|---|--|
| Housefly | _____ | 5 | |
| Bat | _____ | | (three times as fast as housefly) |
| Bluejay | _____ | | (five times faster than housefly) |
| Dragonfly | _____ | | (ten times faster than housefly) |
| Hummingbird | _____ | | (ten mph faster than the dragonfly) |
| Owl | _____ | | (subtract speed of bluejay from hummingbird) |



In the Water

- | | | | |
|------------|-------|---|------------------------------------|
| Goldfish | _____ | 4 | |
| Man | _____ | | (one mph faster than goldfish) |
| Barracuda | _____ | | (six times faster than man) |
| Sea Turtle | _____ | | (ten mph slower than barracuda) |
| Whale | _____ | | (four times faster than man) |
| Dolphin | _____ | | (add speeds of man and sea turtle) |

Who Am I?

1. Teacher generates names or labels.
2. Teacher calls one member to front and places name/label on student's back.
3. Student then gets names/labels for teammates and puts them on team members' backs.

Directions for students: (model this)

You may ask 3 yes or no questions to the same person. You may then answer yes or no for that person.

Then you must go to different people. Once you guess who you are, put name on front and give hints to others.

Think-Pair-Share

1. Teacher poses question or problem.
2. Give think time.
3. Students pair.
4. Pairs share with class.

This is the safest structure for class control.

Research Reveals.....

Higher achievement
Increased retention
Greater use of higher level thinking
Increased perspective taking
Greater intrinsic motivation
Improved ethnic relations
Better attitudes toward school
Better attitudes toward teachers
Higher self-esteem
Improved social skills
More on-task behavior

*61 Cooperative
Learning Activities
for
Computer Classrooms*

Rachel Anderson and Keith Humphrey

J. Weston
WALCH
Publisher
Portland, Maine

User's Guide

To
Walch Reproducible Books

As part of our general effort to provide educational materials which are as practical and economical as possible, we have designated this publication a "reproducible book."

Here is the basic Walch policy: We grant to individual purchasers of this book the right to make sufficient copies of reproducible pages for use by all students of a single teacher. This permission is limited to a single teacher, and does not apply to entire schools or school systems, so institutions purchasing the book should pass the permission on to a single teacher. Copying of the book or its parts for resale is prohibited.

Any questions regarding this policy or requests to purchase further reproduction rights should be addressed to:

Permissions Editor
J. Weston Walch, Publisher
321 Valley Street • P.O. Box 658
Portland, Maine 04104-0658

1 2 3 4 5 6 7 8 9 10

ISBN 0-8251-2838-2

Copyright © 1996
J. Weston Walch, Publisher
P.O. Box 658 • Portland, Maine 04104-0658
Printed in the United States of America

Add interest and challenge to your middle school computer classes with these cooperative-learning activities – designed to work on any computer.

By Rachel Anderson and Keith Humphrey

With these interactive projects, you can easily build skills in word processing, databases, spreadsheets, draw and paint programs, desktop publishing, programming, CD-ROM, telecommunications, and multimedia presentations.

The context-based activities provide motivating learning experiences and easily measurable ways to assess students' proficiency. Each activity leads to the creation of a product, such as a story, presentation, or comic strip.

Every assignment includes a reproducible student page with directions, background information, an example, and step-by-step guidance. You also get detailed lesson plans that include objectives, needed materials, clearly outlined procedures, evaluation criteria, and tips for class management.

SAMPLE ACTIVITIES

Word Processing

- Shared Silly Nonsense Stories
- Future House
- The Thesaurus Twist

Database

- Movie Critics
- Student-Generated Encyclopedia
- Television Violence Data Analysis

Spreadsheets

- Student Stockbrokers
- Brownie Entrepreneurs

Drawing and Painting

- Cubism
- Technology Collage

Desktop Publishing

- Ads for Sea Monkeys
- Political Reporters

CD-ROM & Educational Software

- CD-ROM Scavenger Hunt
- Follow an Explorer

Programming

- The Top-of-the-Line Computer
- A Computer Slide Show

Telecommunications

- Global Keyboard Pals

Multimedia Presentation Software

- Multimedia Time Capsule
- Group Travel Agency

Contents

<i>To The Teacher</i>	<i>ix</i>
Chapter 1. Word Processor	1
1. Shared Silly Nonsense Stories <i>Objectives:</i> To play a writing game in which word processing skills are utilized. To create a story through the use of small-group interaction.	2
2. Magazine Media <i>Objectives:</i> To collect and share useful information about computer technology.	4
3. Jokes, Jokes and More Jokes <i>Objectives:</i> To enter information (in this case, jokes) into individual documents and later merge the data from all of the documents into one word processing file.	6
4. Interview of a Lifetime <i>Objectives:</i> To conduct an interview, using the group process. To utilize word processing skills by taking notes throughout the interview and writing an essay about the interviewer.	8
5. A Book for Cooks <i>Objectives:</i> To create a cookbook using word processing software. To create a cookbook using small group interaction.	10
6. The Search for the Perfect School <i>Objectives:</i> To write a classified ad as a group. To utilize word processing software.	12
7. Dear Student Advisor <i>Objectives:</i> To use word processing software to write and answer letters. To use small-group problem-solving skills.	14
8. Future House <i>Objectives:</i> To use word processing tools, including style sheets. To work on an essay in a small-group setting.	16
9. The Thesaurus Twist <i>Objectives:</i> To change a story by using the thesaurus. To work with the thesaurus in a small-group setting.	18
10. Right, Wrong, or Weird <i>Objectives:</i> To use a word processor's thesaurus in a game-playing setting. To use small-group cooperation to write an essay.	20

Chapter 2. Database	22
11. Movie Critics	23
<i>Objectives:</i> To expose students to basic uses of a database. To use a database to collect data about movies. To use cooperative learning in data collection and data analysis.	
12. Student-Generated Encyclopedia	26
<i>Objectives:</i> To use a database to collect information for a student-generated encyclopedia. To use research tools. To use cooperative learning as a way to collect and organize data.	
13. Ask and Analyze: Part I-The Survey	29
<i>Objectives:</i> To create a database to store information from a group's student survey. To conduct a survey through the use of small-group and large-group cooperative learning.	
14. Ask and Analyze: Part II-Survey Analysis	31
<i>Objectives:</i> To analyze the student survey through the use of queries. To analyze the student survey through the use of small-group and large-group discussions.	
15. Television Violence: Part I-Data Collection	33
<i>Objectives:</i> To learn about TV violence through the use of group data collecting and analysis. To learn about the usefulness of a database.	
16. Television Violence: Part II-Data Analysis	36
<i>Objectives:</i> To analyze data produced by a database. To generate reports sorted by specific fields. To work together in a group setting to draw conclusions about the data collected.	
Chapter 3. Spreadsheet	38
17. Student Stockbrokers	39
<i>Objectives:</i> To use the imaginary buying and tracking of stock to familiarize students with the functions of a spreadsheet. To use small-group cooperative decision-making skills.	
18. Squeezing Money Out of a Lemon-Part I: The Spreadsheet	42
<i>Objectives:</i> To use a spreadsheet to determine the possible profitability of an imaginary lemonade stand. To use small-group cooperative learning decision-making skills.	
19. Squeezing Money Out of a Lemon Part II- The Charts	45
<i>Objectives:</i> To create bar and pie charts through the use of a spreadsheet Program. To use small-group interaction to create charts.	
20. Brownie Entrepreneurs	47
<i>Objectives:</i> To have the students create their own spreadsheet using a brownie-selling scenario. To use small-group interaction to answer questions about the created spreadsheet.	

Abstract Random Teachers

Adult Style Traits	Teacher Style Traits
Relate best to the abstract world of emotions, feelings, spirituality	Emphasize development of positive student self-concepts; aim for personal understanding of students
Prefer order that is nonlinear; harmonious, not traditionally structured	Develop content through cultural, artistic, aesthetic, and literary media; encourage self-expression, creativity, and imagination
Use an emotional base	Rely on personalized understanding of self, students, and content
Require personalized experiences; positive relationships; caring attention and support	Emphasize high morale, cooperative learning; give praise and approval freely
Think in ways that are interpretative, perceptive, imaginative, beyond logic, psychic	Value the creative, imaginative and humorous in student products even without basic skills; work best with themes rather than specific facts
Strive for an understanding of human nature, especially emotions, communication, meeting needs of others	Build curriculum around needs of students; want cooperative interaction and sharing among students; help students learn how to cope with difficulties; and are child advocates
Prepare to share emotions and responses with significant others; work many projects at once; change	Participate enthusiastically in school and classroom life; enjoy change and respond with spontaneity; rarely teach the same thing in the same way, but look for variety; encourage students to learn from one another
Operate on inner signal system; with broad guidelines; for trust and loyalty	Thrive under student responsiveness; develop the curriculum as needed; rarely detail plans ahead of time
Expect to use holistic approaches; pursue goals in their own way	Want to develop sensitive, interpersonally effective people
Prefer aesthetically pleasing and informal environments; friendly and equity-based relationships with others in a collaborative manner; prefer their own timeline	Create an unstructured classroom, including plants, furniture, artwork, comfortable spots to retreat; have person to person conferences with students; want to follow their own schedule, not an administrator's version

Abstract Sequential Teachers

Adult Style Traits	Teacher Style Traits
Relate best to the world of ideas	Emphasize ideas, concepts, and theories
Prefer order that is sequential, structured, logical	Consider the relationship of the whole to its parts; analyze and evaluate each topic thoroughly
Use intellect to learn	Rely almost exclusively on logical reasoning
Require exact, well-researched information; documentation; content area expertise	Use facts to develop, prove, or disprove theories; teach through lectures, extensive reading, and required term papers; want students to develop a bank of knowledge
Think in ways that are intellectual, analytical, and evaluative	Want students to be curious about great thinkers, ideas, and debates, to be motivated by the question “why?” and to appreciate the role of critic
Strive for conceptualization, knowledge, scope and sequence	Like students to devote interest; energy, and time to difficult assignments for intellectual rewards; value content expertise
Prepare to create a theoretical model; validate ideas-analyze and evaluate research data; develop, extend, and refine ideas	Organize problem solving around evaluation of ideas; provide students with critical reviews of subject; expect students to devote themselves to subject matter learning and ask thought-provoking questions
Operate in a logical manner; in collegial relationship; according to traditional laws, principles, and rules	Have consistent and reliable rules and procedures; expect respect for the professional role; do not involve emotions in teaching; prepare lessons with specific content
Expect to gather existing knowledge; analyze new knowledge; achieve content expertise	Emphasize subject matter and resources; want to challenge students intellectually; develop research and study skills; expect perfection
Prefer quiet, intellectual environments; large blocks of time; traditional roles of academe	Like libraries, traditional classrooms; need time to think through ideas, organize materials, and plan approach before beginning work; like long-term projects; enjoy the professor-student relationship of intellectual discussion

Concrete Random Teachers

Adult Style Traits	Teacher Style Traits
Relate best to the concrete world of experience	Emphasize reality as a baseline; require students to investigate and experiment with options in the real world
Prefer order that is non-linear, multifaceted, directed by broad guidelines	Work with “umbrella” ideas; have no standard structure, format, or set of rules that are givens; take role of facilitator and guide
Use experiential bases to learn	Create and make many, unusual, and varied activities, in and out of the classroom, through which students experience content
Require problems; open-ended solutions; competition	Challenge students to move beyond given knowledge and traditional learning to discover new ideas and products for themselves
Think in ways that are intuitive; divergent; inquisitive	Value students with insight and divergent thinking; channel student energies into an active search for the possibilities
Strive for independence; creativity; alternatives	Want students to think for themselves and make sound judgments; value and foster original and creative expression as well as products; work often with brainstorming
Prepare to produce original creations and solutions; achieve goals by providing options; assume a leadership role	Model creativity by continually providing new resources, products, and activities for students; work for self-responsibility and leadership behavior from students
Operate as a risk taker; experimentally	Encourage students to explore multiple types of interests, pursue own interests, and try many types of approaches before evaluating
Expect to instigate beneficial change; search for possibilities	Provide opportunities for students to develop fluency, flexibility, and originality; interested in futuristic speculation and development of the future; are guides for discovery learning
Prefer busy environment; many types of people; role of mentor, guide, seer	Like to try many types of things with students; encourage students to value, work with and learn from many kinds of people

Concrete Sequential Teachers

Adult Style Traits	Teacher Style Traits
Relate best to the concrete, physical, hands-on world	Emphasize practical learning; use physical materials; utilize field trips and firsthand learning experiences
Prefer order that is sequential, structured, step-by-step	Provide structured assignments with clear directions; work from the parts to create the whole
Use five senses to learn	Use hands-on learning experiences
Require specific, clear-cut data; exact directions; specific and correct answers; detail	Value specific, detailed work, finished on time; provide problems that have a correct solution; develop skills through worksheets and practice
Think in ways that are methodical, ordered, and predictable	Want practical learning; like concise and to-the-point formats; build physical products
Strive for perfection; precision; and organization	Demand perfection; want realistic products; address individualized needs of students
Prepare to create in a technological or mechanical sense; achieve a purposeful objective through practical approaches; create a tangible product	Foster creativity by developing prototypes and replicas; are action oriented; expect to cover content; develop learning centers and structured opportunities for hands-on involvement with learning materials
Operate in a tried and true pattern; within a hierarchical structure according to conventionally correct procedures	Rely on traditional procedures and patterns; expect class to be teacher directed; plan, organize, prepare, and follow lessons and activities
Expect to provide a detailed answer or product; take things at face value; be rewarded for efforts	Are task oriented; work with small instruction-based groups for skill development; value practical knowledge; reward with grades
Prefer quiet, controlled physical environments; efficient use of time	Run on orderly classroom; finish work on time; do not look for change

Abstract Random

Major Intolerances:

- Dogmatic and strictly logical systems of thought
- Cold, noncaring, nonspiritual and unemotional people
- Conservative and restrictive environments
- Being forced to justify his feelings
- Being required to quantify his qualitative experiences
- Being continually told to be realistic

Negative Characteristics:

- Chronic tardiness to meetings and the failure to meet deadlines
- Anchoring in ego-centered “me-first” attitude and thereby disregarding the rights and needs of others
- “flightiness” inaccuracy, and inattention to task and detail which earn him the title of “off the wall flake”
- extreme moodiness due to the inability to balance his experiencing of the extremes of emotions
- excessive worrying and self-doubt
- jealously and over-dependency on others
- strong passions and extravagance, and inflated self-image

Dress:

- Love bright colors and clothing
- Love to wear bright stripes, plaids, and paisleys (sometimes at the same time)
- Dresses to please himself and the mood he is in
- Dark colors and surroundings tend to depress him
- Environment must be pleasing to the eye

Parenting:

- An AR parent can be the classic Peter Pan.
- They are totally immersed in the children’s activities and will often take part in the games and parties.
- Can be “soft” when it comes to deadlines and bottom lines.
- The child’s strongest supporter and admirer.

Concrete Random

Major Intolerances:

- People who are unwilling to change or consider options
- Fence straddlers who continually seek hard data and/or guarantees that the CR’s ideas will work
- Procedures which must be followed without exceptions
- Being asked to prove that the faculty of intuition exists
- Fuzzy headed mystics whose approach to life destroys the credibility of insights and premonitions

Negative Characteristics:

- Bandwagoning and jumping from idea to idea without proper grounding
- Ruthless use of any means to the chosen end
- Abandonment of an idea or evolving project before it is fully completed
- Forgetting promises or agreements due to an out of sight, out of mind attitude
- Disinterest in practical ramifications of an idea which is to be implemented
- Irritation at other individuals who cannot make his intuitive leaps
- The willingness to sacrifice himself and others in order to fulfill a mission
- Jumping to too quick and rapid conclusions

Partying:

- Outgoing, friendly, aggressive, and loves to mix and socialize
- Maneuvers around the room
- Joins in on conversation momentarily and then move off to another
- Can be the life of the party and can liven up a party going south

Parenting:

- Not strict disciplinarians
- Allow children to do their own thing
- Encourage children to experience life, learn by trial and error
- Give children guidelines, options, and alternatives
- Prefer to be a friend or pal rather than dogmatic parent

Abstract Sequential

Major Intolerances:

- ❑ Hazy or sentimental thinking which leads to loose or inaccurate conclusions
- ❑ Ideas and claims which do not meet his rational test of logic or approved test of validity
- ❑ Metaphors and emotional stimulants in sounds and gestures
- ❑ Boisterous activity and excessive rules and regulations

Negative Characteristics:

- ❑ Discrediting and devaluing other viewpoints by calling them mystical, plodding, off the wall, irrational and unsubstantiated
- ❑ Getting lost in their ideas and building castles in the air
- ❑ Believing their thoughts to be reality and failing to test them in the concrete world
- ❑ Absentmindedness
- ❑ Argumentative, excessively skeptical, and harshly critical
- ❑ Coldness and isolation
- ❑ Taking a person's idea and reducing it to something trite or mundane in order to make it sound quite common
- ❑ The use of polysyllabic words to inflate their ego, to confuse others, and to put people in their place

Dress:

- ❑ Not strongly concerned with matters of dress
- ❑ Dress codes are for other people not them
- ❑ Think nothing of wearing stripes with plaids, mismatched or clashing colors
- ❑ Clothes are something to be worn on the body

Parenting:

- ❑ Set high standards and goals for their child
- ❑ Emphasis is placed on social and academic achievement
- ❑ Expose their children to every opportunity for growth and development
- ❑ Children must recognize their duties and responsibilities within the family and uphold the reputation of the family
- ❑ Not overly demonstrative of affection toward their child

Concrete Sequential

Major Intolerances:

- ❑ Physical and environmental conditions which are not conventionally correct
- ❑ Individuals who are flagrant violators of norms
- ❑ Broken promises and surprises
- ❑ People who procrastinate
- ❑ Discussions which appear to be academic rather than down to earth
- ❑ Individuals who are too emotional in their decision making

Negative Characteristics:

- ❑ Inflexibility and rigidity
- ❑ Excessive criticism and skepticism even though they themselves dislike being criticized
- ❑ Viewing people as objects to be controlled and owned
- ❑ Addiction to routine and order
- ❑ Susceptibility to autocratic and dogmatic belief systems
- ❑ Entrenched materialism coupled with unwillingness to give credence to an invisible world
- ❑ Lack of sympathy and compassion
- ❑ An unforgiving, grudge-holding temperament accompanied by an explosive anger
- ❑ A self-righteous attitude

Dress:

- ❑ Choose wardrobe with particular care
- ❑ Drawn to three piece business suits and monochromatic outfits
- ❑ Fussy about neatness

Parenting:

- ❑ Loving, but true disciplinarian
- ❑ Homework is serious business
- ❑ Household duties are delegated with a roster and time schedule
- ❑ No public displays of affection within 500 feet of the house

Concrete Random		Concrete Sequential	
Natural Abilities: <ul style="list-style-type: none"> * Experimenting to find answers * Creating change * Independence * Curiosity * Creating unusual approaches 	Learn Best: <ul style="list-style-type: none"> * Are self-directed * Use trial and error approaches * Produce real, yet imaginative products * Are competitive * Use open-ended activities 	Natural Abilities: <ul style="list-style-type: none"> * Working step-by-step * Planning, organizing * Following directions * Creating practical products * Getting the facts 	Learn Best: <ul style="list-style-type: none"> * Have an orderly environment * Face predictable situations * Can trust others to follow through * Can apply ideas in a practical way * Are given approval for specific work
May have trouble: <ul style="list-style-type: none"> * Pacing, meeting time limitations * Choosing one answer * Keeping detailed notes * Following a lecture with no chance for interaction * Having few options or choices 	Expand Style: <ul style="list-style-type: none"> * Learn to prioritize * Bring projects to fruition * Delegate responsibility * Accept others' ideas as they are * Not make promises they can't keep 	May have trouble: <ul style="list-style-type: none"> * Choosing from many options * Acting without specific rules * Understanding feelings * Answering "what-if" questions * Dealing with opposing views 	Expand Style: <ul style="list-style-type: none"> * Express their own feelings * Not react to first impressions * Get explanations of others' views * Work with an organized divergent thinker * Set reasonable limits on expectations
Abstract Random		Abstract Sequential	
Natural Abilities: <ul style="list-style-type: none"> * Having the ability to reflect * Being flexible * Being sensitive * Having an imagination and using it to create * A preference for being part of a group 	Learn Best: <ul style="list-style-type: none"> * Can work and share with others * Have assignments requiring interpretation * Balance work with play * Have a noncompetitive atmosphere * Can communicate with others 	Natural Abilities: <ul style="list-style-type: none"> * Debating points of view * Gathering information, analyzing ideas * Being a patient learner * Judging value or importance * Finding answers 	Learn Best: <ul style="list-style-type: none"> * Have access to references and experts * Follow traditional procedures * Can work alone * Are respected for intellectual ability * Rely on lecture notes and do library research
May have trouble: <ul style="list-style-type: none"> * Giving exact answers * Memorizing * Working within time limits * Organizing parts * Focusing on one thing at a time 	Expand Style: <ul style="list-style-type: none"> * React less emotionally to time limits * Look before they leap * Attend to important details * Stick with a decision and follow through * Include objective data in making decisions 	May Have Trouble: <ul style="list-style-type: none"> * Working in groups effectively * Writing creatively * Being criticized * Facing the unpredictable * Convincing others diplomatically 	Expand Style: <ul style="list-style-type: none"> * See the humorous side of life * Accept imperfection * Place grades in perspective * Explore personal feelings * Consider alternatives, choices

Learning Styles Test for Teachers
Pat Wyman, M.A. The Center for New Discoveries in Learning

To find out the learning style or styles you prefer, respond to the following statements. Check the statements you agree with.

1. I prefer to hear a book on tape rather than reading it.
2. When I put something together, I always read the directions first.
3. I prefer reading to hearing a lecture.
4. When I am alone, I usually have music playing or hum or sing.
5. I like playing sports more than reading books.
6. I can always tell directions like north and south no matter where I am.
7. I love to write letters or in a journal.
8. When I talk, I like to say things like, "I hear ya, that sounds good or that rings a bell."
9. My room, desk, car, or house is usually disorganized.
10. I love working with my hands and building or making things.
11. I know most of the words to the songs I listen to.
12. When others are talking, I usually am creating images in my mind of what they are saying.
13. I like sports and think I am a pretty good athlete.
14. It's easy to talk for long periods of time on the phone with my friends.
15. Without music, life isn't fun.
16. I am very comfortable in social groups and can usually strike up a conversation with most anyone.
17. When looking at objects on paper, I can easily tell whether they are the same no matter which way they are turned.
18. I usually say things like, "I feel, I need to get a handle on it, or get a grip."
19. When I recall an experience, I mostly see a picture of it in my mind.
20. When I recall an experience, I mostly hear the sounds and talk to myself about it.
21. When I recall an experience, I mostly remember how I felt about it.
22. I like music more than art.
23. I often doodle when I am on the phone or in a meeting.
24. I prefer to act things out rather than write a report on them.
25. I like reading stories more than listening to stories.
26. I usually speak slowly.
27. I like talking better than working.
28. My handwriting is not usually neat.
29. I generally use my finger to point when I read.
30. I can multiply and add quickly in my head.
31. I like spelling and think I am a good speller.
32. I get very distracted if someone talks to me when the TV is on.
33. I like to write down instructions that people give me.
34. I can easily remember what people say.
35. I learn best by doing.
36. It is hard for me to sit still for very long.

Visual Questions: 2, 3, 6, 7, 12, 17, 19, 23, 25, 30, 31, 33

Auditory Questions: 1, 4, 8, 11, 14, 15, 16, 20, 22, 27, 32, 34

Kinesthetic Questions: 5, 9, 10, 13, 18, 21, 24, 26, 28, 29, 35, 36

I am a

type of person. This is
because I like to:

MI Theory and Bloom's Taxonomy

Ecology Unit: Local environment – trees in your neighborhood

<i>Intelligence</i>	Bloom's Six Levels of Educational Objectives					
	Knowledge	Comprehension	Application	Analysis	Synthesis	<i>Evaluation</i>
<i>Linguistic</i>	Memorize names of tree	Explain how trees receive nutrients	Given description of tree diseases, suggest cause of disease	List parts of tree	Explain how a tree functions in relation to the ecosystem	Rate different methods of controlling tree growth
Logical-Mathematical	Remember number of points on specific tree's leaves	Convert English to metric in calculating height of tree	Given height of smaller tree, estimate height of larger tree	Analyze materials found in sap residue	Given weather, soil, and other information, chart projected growth of a tree	Rate different kinds of tree nutrients based on data
Spatial	Remember basic configurations of specific trees	Look at diagrams of trees and tell what stage of growth they are in	Use geometric principles to determine height of tree	Draw cellular structure of tree root	Create a landscaping plan using trees as central features	Evaluate practicality of different landscaping plants
Bodily-kinesthetic	Identify tree by the feel of the bark	Given array of tree fruits, identify seeds	Given type of local tree, find an ideal location for planting it	Create different parts of tree from clay	Gather all materials needed for planting a tree	Evaluate the quality of different kinds of fruit
Musical	Remember songs that deal with trees	Explain how old tree songs came into being	Change the lyrics of an old tree song to reflect current issues	Classify songs by issue and historical period	Create your own tree song based on information in this unit	Rate the songs from best to worst and give reasons for your choices
Interpersonal	Record responses to the question "what is your favorite tree?"	Determine the most popular tree in class by interviewing others	Use survey results to pick location for field trip to orchard	Classify kids into groups according to favorite tree	Arrange field trip to orchard by contacting necessary people	Rank three methods to ask others about tree preference
Intrapersonal	Remember a time you climbed a tree	Share the primary feeling you had while up in the tree	Develop "tree climbing rules" based upon your experience	Divide up your experience into "beginning," "middle," and "end"	Plan a tree-climbing expedition based on your past experiences	Explain what you liked "best" and "least" about your experience

MULTIPLE INTELLIGENCES (Howard Gardner)

The theory of Multiple Intelligences Source: Frames of Mind, Gardner, 1983.

According to Gardner's theory of multiple intelligences, each individual possesses eight relatively autonomous mental abilities or "intelligences."

Linguistic intelligence allows individuals to communicate and make sense through language.

Logical-mathematical intelligence enables individuals to use and appreciate abstract relations.

Musical intelligence allows people to create, communicate, and understand meanings made out of sound.

Spatial intelligence makes it possible for people to perceive visual or spatial information, to transform this information, and to recreate visual images from memory.

Bodily-Kinesthetic intelligence allows individuals to use all or part of one's body to create products or solve problems.

Intrapersonal intelligence helps individuals to distinguish among their own feelings, to build accurate mental models of themselves, and to draw on these models to make decisions about their lives.

Interpersonal intelligence enables individuals to recognize and make distinctions among others' feelings and intentions.

Naturalist intelligence allows people to distinguish among, classify, and use features of the environment.

Multiple Intelligences "Stretcher" Source unknown

Concept/Topic/Book:

Intelligence	What I'm already doing:	New ideas for this activity using this intelligence:
<i>Verbal/Linguistic</i>		
Logical/Mathematical		
Spatial		
Bodily Kinesthetic		
Naturalist		
Musical		
Interpersonal		
Intrapersonal		