



Note-Taking Guide

Social Development Strategy Review

Growth Mindset

Best Possible Selves

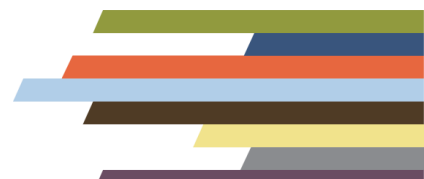
Cooperative Learning

Final Reflections

3.

2.

1.



Possible Selves and Implications for Teachers

By Shawna Lee | Daphna Oyserman

Updated on Dec 23, 2009

While current self-concept focuses on who one is now, by focusing on the future, possible selves allow for self-improvement, malleability, and personal growth. They provide a chance to experiment with and try on various potential futures (“Maybe I’ll be a teacher or maybe I’ll be a nurse. What would it be like to become a teacher or a nurse? How would I get there? What are the stages and obstacles along the way?”). The future is the target of much of our efforts as individuals. Homework is done and broccoli is eaten all in pursuit of some future state. As noted by Oyserman & James (in press), doing or not doing homework one night really does not make that much difference, but if each night’s homework is viewed in this way, homework will rarely get done—and that does matter. Whether one eats or does not eat the potato chips with lunch today does not make or break one’s likelihood of being overweight, but, over time, each of these small choices adds up. In this sense, current actions are taken due to individuals’ beliefs about their consequences in the future. Generally speaking, individuals are motivated to reduce the gap between their present and future positive possible selves while increasing the gap between their present and future negative possible selves.

Because possible selves provide both positive images of one’s self attaining future goals and negative images of one’s self failing to attain these goals (and of the feared selves one might become instead), possible selves are an integral part of a well-functioning self-concept. By focusing on the future, possible selves can improve well-being and optimism about the future. Things may not be going well now, but a possible self suggests the promise of change. Possible selves can improve one’s ability to self-control and self-regulate because possible selves help one to focus on goals and lessen the influence of distractions in one’s social world. Possible selves are most likely to improve self-regulatory ability when they are salient, linked with strategies, feel congruent with other aspects of self-concept, and when difficulty attaining them feels like proof one really cares rather than evidence for withdrawing effort (Oyserman & James, in press).

In terms of content, school-focused selves are common in childhood and adolescence regardless of socioeconomic status (for a review, see Oyserman & Fryberg, 2006). School-focused possible selves describe positive expectations regarding one’s school success and academic attainment, including specific, immediate goals such as passing eighth grade or not failing the math test and more general long-term views such as being smart or getting a GED (Oyserman, Bybee, Terry, & Hart-Johnson, 2004). Youth are likely to have multiple, potentially competing possible selves, not all of which will influence behavior at any particular point in time (Oyserman & James, in press).

IMPLICATIONS OF POSSIBLE SELF THEORY FOR TEACHERS

Teachers, parents, and students all have possible selves— images of how things might be in the near and more distal future. These images illustrate that change is possible. Possible selves can undergird self-improvement by showing a path toward the future and by highlighting where one might end up if effort is not maintained. Intervention to help teachers, parents, and students focus

on what they want to become and avoid becoming, what they value, and how they expect to engage in becoming like their desired selves and avoiding becoming like their undesired selves can be highly effective. Indeed, the theory of possible selves has been used to understand progress and life transitions for both youth learners and adults in continuing education and other settings.

Perhaps the most important message that educators can take from the research on possible selves is that possible selves are malleable and can be influenced by intervention to enhance the content of possible selves. Changing possible selves through intervention can lead to positive changes in academic behavior, in better academic performance and lower risk of depression (Oyserman et al., 2002; 2006). Of particular note is the School-to-Jobs (STJ) intervention that focused explicitly on improving academic outcomes by changing possible selves. STJ was tested both as an after-school and an in-school intervention, running twice per week for six weeks so that it was completed by Thanksgiving break.

Each STJ session focused on developing an aspect of possible selves. Beginning sessions linked school-focused possible selves to important social identities (e.g., gender or racial-ethnic groups), linked proximal possible selves (e.g., graduating from eighth grade) to desired but distant adult possible selves (e.g., going to college, getting a good job), discussed how possible selves are influenced by role models, and linked present action to possible selves. Later sessions focused on identifying specific strategies to be enacted in the present that would help youth obtain their possible selves. Students articulated how they would cope with difficulty that they might encounter in attaining their desired possible selves. Program activities involved individualized activities such as creating a timeline into one's future, active participation by students, and group exercises. Two final sessions involved parents, with the goal of providing youth and parents structured activities in which to talk about possible selves and strategies to attain them (see Oyserman et al., 2006). Evaluation indicated that STJ successfully improved time spent engaged in strategies (e.g., improved in-class behavior, time spent doing homework) and long-term academic attainment, as measured by standardized test scores and attendance (Oyserman et al., 2004; Oyserman et al., 2002). Additionally, participation in STJ reduced participants' depressive symptoms (Oyserman et al., 2006) and buffered youth from the negative effects on grades and behavior of low parent involvement in school (Oyserman, et al, 2007). Effects were sustained through two years of follow-up assessment. In sum, possible selves are useful as descriptive and predictive tools and can be modified by in-school activities resulting in significant long-term benefits for children

Mindset Experiment



Consider this experiment from *Mindset: The New Psychology of Success* by Carol Dweck a researcher at Stanford. Dweck believes that people possess either a fixed or growth mindset. With a fixed mindset, people believe that intelligence is something you're born with – it's carved in stone and there's nothing you can do about it. (external attribution) They worry about how smart they are, and when they don't do well, it confirms their dumbness. People with growth mindsets believe that intelligence is cultivated through effort. (internal attribution). The more work you put in, the more rewards you'll see. You can always master new things. Kind of like the nature vs nurture argument, right?

Dweck goes on to wonder, what if you teach students that their intelligence can grow and increase – the growth mindset – will it make them better students? Well, being a researcher, of course Dweck needed to check this out. So, she went to a middle school and tested her theory with a bunch of 7th graders. She realized that early adolescence is when hordes of kids get turned off to school. They're constantly judging themselves and their peers, and those with fixed mindsets run for cover – quit trying – so the short supply of intelligence they're born with remains intact.

It didn't take long for Dweck and her team of researchers to identify 100 unmotivated, fixed mindset middle schoolers. Then, to keep their teachers in the dark, they separated the kids into two groups. One group got a series of workshops on study skills – the typical good stuff you need to know to do better with academics. The other group got the mindset workshop. These kids heard about the latest brain research. They learned that the brain is similar to a muscle and scientists can show how it grows and gets stronger when you learn new things. They talked about babies who aren't dumb because they can't talk, they just haven't learned yet. Then they were shown real pictures of brain scans taken in the first years of life and how brain

density grows as babies learn how to do things. And of course, they learned study skills and how to apply the growth mindset to schoolwork.

Well, Dweck and her team were eager to see if their experiment worked. So they got permission to check out math grades at the end of the semester for all 100 of the students in the study. They picked math because challenging new concepts are introduced in 7th grade, and of course, these fixed mindsetters were not doing so hot.

So, what happened? Well, after just 8 sessions, the kids in the mindset workshop saw a jump in their grades. A comment from one teacher:

"Jimmy, who never puts in any extra effort and often doesn't turn in homework on time, actually stayed up late working for hours to finish an assignment early so I could review it and give him a chance to revise it. He earned a B+ on the assignment. "(an average to below average student before)

And what about the study skills group? They showed no gain at all, despite having learned some good stuff about getting better in school. They still weren't motivated to put the skills into practice.

The one difference in the groups was that the growth mindset kids were now in charge of their brains – they actually picture neurons forming when they do homework, according to Dweck. Teachers heard comments from students like, "I have to get that into my long-term memory." And from Jimmy, with tears in his eyes after the first workshop, "you mean I don't have to be dumb?"

Dweck says this new mindset changed the kids' attitude toward learning and their willingness to put forth effort.

Growth mindset – internal attribution (I can do it if I try!).
Fixed mindset – external attribution (I can't change it, this is

Reflection: Identify the three key points from this article to share with your group.

What Neuroscience Tells Us About Deepening Learning

By Wendi Pillars, Education Week, March, 2012

Teachers are brain-changers. As I've described in a [previous article](#), our daily work physically alters students' neural networks. The more frequently a student's brain retrieves and connects information, the better the chance that the student will recall it quickly and accurately. The strongest—and most easily accessible—memories are created through dense, interwoven neural networks. Information has a much better chance at being recalled more quickly when it has been retrieved repeatedly and connected to as many other pieces of information as possible.

However (and this has been a significant reflection point for me as an armchair neuroscientist) even a densely connected, sensory-rich memory is essentially reconstructed when it is recalled. The recalled information can be shaped by context, influenced by the student's emotional state, attention level, and receptivity.

As teachers, how can we help students forge long-term memories that will boost their future learning? Here are some of my take-aways:

Return to information over time.

Strengthening long-term memory is not merely a matter of squirreling information away—but of returning to it and building upon it. It's a continual process rather than a linear one-stop experience.

This realization has led me to plan for pointed repetition and the accurate, explicit spiraling of information over time, particularly for my younger students and language learners. I plan weeks in advance to be more strategic about review and transitions. I also ask fewer "on-the-fly" questions, opting instead for higher-level questioning and opportunities to make connections from the start.

Graphic organizers are more tangible tools I use to encourage the repetitive synthesis of information that the relationship-seeking brain craves.

Slow down.

When I ask a question, I now give students more "wait time" (well beyond the typical one to two seconds) so they have the opportunity for efficient, thorough memory reconstruction. This is especially critical for language learners who must translate their reconstructions to English.

And slowing down is especially important when I am trying to initiate topics by eliciting more than a cursory statement or two. At the start of a recent unit, I posed a challenging question, then gave students time to think, share, and make connections with each other. Within ten minutes, I realized that students could already use about half of the "new" vocabulary I had chosen, and had answered nearly half of the anticipation guide questions. Thanks to those precious 10 minutes, I realized I needed to tweak the unit to improve its rigor and the interlinking of knowledge.

Time it right.

Students tend to be best at recalling the first and last chunks of new information we share with them. Neuroscientists refer to this as the **primacy-recency effect**. New information presented first has the best chance of being recalled (due to primacy), while the last information presented has the next best chance of recall (due to recency). Those who study learning cycles also suggest that some sort of consolidation needs to occur about every 20 minutes or so.

What does this mean for us in the classroom?

Here's what I don't do during the first peak learning time: homework discussion, in-depth review, announcements, and attendance. (I save these for later in the class period.)

I try to ensure the first 10 minutes of class are extremely pointed, explicitly linked to the

new lesson. Then students work on tasks that require application and exploration of this knowledge.

About 20 minutes into class, we take time for consolidation, to improve the chances that knowledge is as connected as possible. (This can be as simple as having students turn to a partner and repeat facts they have just learned.)

The last five or 10 minutes of class constitute the recency period, ripe for another dose of important information. I use that time for closure, asking students to synthesize information from the lesson.

Develop strong relationships with students.

As mentioned above, memories are retrieved and reconstructed within one's current context. Research suggests that a student's recall of knowledge is determined in part by his or her current emotional state, learning level, attention, receptivity, and other factors.

Attending to the emotional states of our students can no longer be dismissed as too touchy-feely to consider—even by those of us who are self-professed tough-love advocates. The better we know our students, the more we can gauge behavior, beliefs, and feelings that can affect their ability to learn.

For example, short-term stress hormones such as adrenaline have shown positive effects on long-term semantic memory. But a student who is experiencing prolonged stress may have higher levels of cortisol, a hormone that can suppress long-term memory.

When I know my students well, I can recognize when they are under stress and provide appropriate scaffolding so they can experience some level of success even when challenged. For example, I might make sure the lesson includes novelty or prompts laughter to suppress the cortisol. I can also model a mindset that helps students control their own stress, prizing the development of ability rather than perfection of results.

Establish relevance.

And of course, the better our relationships with students, the more effectively we can gauge their prior knowledge and what they truly understand. Then we can better help students relate to new information. We can discover their powerfully established neuronal networks, then "hitchhike" on these networks as we navigate the curriculum.

James Zull states it succinctly in *The Art of Changing the Brain*: "Prior knowledge is the beginning of new knowledge. It is always where learners start."

In other words, teachers may be brain-changers, but we must also give credence to the physical connections our students have already established! Too often, in the interest of expediency, I have assumed what students knew, then proceeded with "my" planning, "my" instruction, "my" connections, on "my" clock—when it should be about students' learning. In the past, I have struggled with frustration at what my students "don't get" or "don't know", when I should be celebrating what they do know and building upon that.

Slowing down (see tip #2!) helps with this. Rather than dismissing or glossing over seemingly random comments or "incorrect" responses, I give students time to explain. This has frequently showcased roundabout connections to students' previous learning and highlighted exactly where missed connections are. This means I can better influence how learning is bridged—and increase the chances it will be forged in long-term memory.

In the words of **Steven Levy**, teachers "need to look for the best, expect the best, find something in each child that we can truly treasure." Relationships—and the strategic investment of time—are critical aspects of mindful teaching.

The tips I've outlined here may seem obvious—indeed, effective teachers already practice them on a daily basis. The neuroscientific perspective can help us understand exactly why they are worthy of consistent implementation: to improve not only the recall of information but students' deeper understanding of our world.

Cooperative Learning PIES

Core to the Kagan approach to cooperative learning are four basic principles symbolized by the acronym PIES. For each of the four PIES principles there are one or two critical questions. If we get a positive answer, we say the principle is in place. If we fail to get a positive answer, we say the principle is not implemented. Empirical studies, theoretical analysis, and years of observation and experimentation all converge on the same conclusion: If PIES are in place a wide range of positive outcomes result. If not, we cannot be assured of the positive outcomes. Implementing PIES is so important that we say PIES define cooperative learning. In the Kagan model, when PIES are not in place, we are merely doing group work, not cooperative learning. Group work does not consistently produce active engagement by all, so the gains of cooperative learning are not assured.

What, then, are the four PIES principles? They are defined by simple critical questions:

	Principle	Critical Questions
P	Positive Interdependence	Does the success of one benefit others? Is everyone's contribution necessary?
I	Individual Accountability	Is individual, public performance required?
E	Equal Participation	How equal is participation?
S	Simultaneous Interaction	What percent are interacting at once?

Let's briefly apply each principle in turn to **Kagan Structures**: first, to understand how the structures implement PIES, and second, to better understand how the structures maximize active engagement. In different ways, each principle ensures there is more active engagement for more students. The PIES principles reveal that students who otherwise might slip through the cracks become engaged when teachers use **Kagan Structures**.

Positive interdependence

Structures Increase Active Engagement: Peer Support. Positive Interdependence has two components. The first critical question we ask is if the task we have set before our students results in a positive correlation among outcomes. *Does the success of one benefit others?* That is, have we structured the situation so that if one student does well, that will benefit other students? If so, students hope for and work for positive outcomes for each other. For example, if you score well on a test and that boosts our team score, I will be inclined to encourage you, and will be more likely to tutor you if you need help. When there is a positive correlation among outcomes, when your gain helps me, then two powerful forces are released: peer encouragement of achievement and peer tutoring.



Increased Active Engagement: Everyone Must Contribute. The second critical question we ask to determine if positive interdependence is in place is whether the learning task is structured so that no one person can do it alone: *Is everyone's contribution necessary?*

It is obvious how this second critical question contributes to increased active engagement. We have all been in a group where one or two students do most or all the work while others take a free ride. To ensure cooperation of all, the task must be structured so that a contribution by each person is required for successful task completion. If a teacher gives each group a worksheet and asks them to complete the worksheet, the likely outcome in many groups is for one or two students to do most or all the worksheet. If in contrast, the teacher uses a Kagan Structure like **Showdown**, the outcome is active engagement for every student. In **Showdown**, each student does each problem on their own before receiving help. When "Showdown!" is called, each student shows teammates their work, and they begin the process of checking, coaching, and celebrating. In Showdown, no student can slip through the cracks

Individual Accountability

Increased Active Engagement: No Hiding, No Free-Riders. Individual Accountability has three components. *Is individual, public, performance required?* If we leave out any one of these three components, active engagement becomes less likely.

To see how individual accountability increases active engagement, let's contrast a learning task in which individual accountability is absent versus one in which it is present. The traditional teacher-directed question-answer approach provides an excellent example of a structure that lacks individual accountability. First the teacher asks a question of the class. Next, the hands of the high achieving students shoot up, waving. They hope to be called upon, to win teacher and peer approval, to validate their thinking, to be active. The teacher calls on one student to respond. Although an individual, public performance is required of the student who is called on, not every student had to respond. In fact, the weak students are relieved to have someone else answer, as they do not have to risk the public embarrassment of possibly failing in front of the whole class. They can hide by simply not raising their hands. In contrast, let's say the teacher chooses. **Numbered Heads Together**. In **Numbered Heads Together**, after the teacher asks a question, each student writes her/his best answer and then the students compare answers and put their heads together to improve their answers. Finally the teacher calls a number and students with that number share their best answer with the class. **Numbered Heads Together** requires every student to make an individual, public performance on every round (write their own answer and show it to their teammates) and on a quarter of the rounds students are also called upon to share with their classmates. Because **Numbered Heads Together** requires an individual public performance of each student, students who otherwise

would not be engaged become engaged. Without an individual public performance required, some students seek the safe harbor of not responding and become disengaged.

Equal Participation

Increased Active Engagement: Equalized Participation. The third PIES principle, Equal Participation, has us examine the equality of participation among students: *How equal is the participation?* This principle too results in more active engagement.

Let's contrast two different classroom scenarios: one in which the teacher has structured for equal engagement, and one in which the teacher does not. A teacher has presented two sides of an enduring social issue—let's say the pros and cons of capital punishment. Following the presentation the teacher says, "Discuss the issue in your teams." The result is predictable: the more articulate students, those who feel more deeply about the issue, and the more outgoing students will do most or all the talking. The less articulate, those who do not care much about the issue, and the shy students will contribute little or nothing to the discussion. If, in contrast, the teacher structured for equal participation, perhaps by doing a **Team Interview**, each student would contribute about equally. In a **Team Interview** each student in turn stands for a minute and is interviewed by their teammates, in this case they would be asked about their opinion on the issue. Notice, because **Team Interview** structures for equal participation, students who otherwise would not participate become actively engaged.

Simultaneous Interaction

Increased Active Engagement: Increased Per Student Participation. The last PIES principle focuses not on the equality of active engagement, but rather the absolute amount of engagement per student. We ask: *What percent are engaged at once?* Engagement can take the form of interaction (as when all students are in pairs interacting) or it can take the form of individual action (as when all students are writing at once). To evaluate cooperative learning we focus on simultaneous interaction, but we consider other forms of simultaneous engagement to be important as well.

When the teacher calls on one student in the class to respond, the result is that one of the thirty learners in the room verbalizes their thoughts. This is an unacceptably low percent. All but one student in the class is somewhere between partially to fully disengaged as they look at the back of the head of the student responding to the teacher. Another common situation that lacks simultaneous engagement is the traditional approach to reading—the reading group. The teacher wants students to practice reading so she/he has students in groups. One at a time, each student reads aloud so the teacher can evaluate and coach. In a class of thirty, if the teacher did not say a word and if there were no transitions among reading groups, and no interruptions, the maximum amount of oral reading per hour a student could do is two minutes. But of course students don't get a full two minutes of oral reading because the teacher must take some of the time to give compliments or corrections. There is also time lost for transitions between groups and interruptions because most of the class is unsupervised while the teacher focuses on the one student who is reading. In contrast, let's look at what happens in the classroom of a teacher who maximizes simultaneous engagement by having students read in pairs all at once. The teacher abandons the traditional reading group and instead uses **RallyRead**. With **RallyRead**, students are seated in pairs, taking turns reading sentences or paragraphs to each other. The teacher circulates evaluating and coaching. In that situation each student reads aloud approximately thirty minutes an hour, not just two minutes an hour, and the teacher has just as much opportunity to evaluate and coach. With **RallyRead** compared to the traditional reading group there is fifteen times as much active engagement per student! Whenever we implement the principle of simultaneous interaction we dramatically increase the amount of active engagement.

Structures Increase Active Engagement Through PIES

Imagine a classroom that makes frequent use of **Kagan Structures** and so implements the PIES principles. Students work in teams. They are on the same side. They discuss issues in teams. They solve problems together. They create products and presentations together. They disagree and reach consensus. Teammates tutor and encourage teammates who otherwise might give up, tune out, and get off task. Every student is expected to contribute; they are all regularly held accountable to their teammates, classmates, and teacher for their contributions. This is a class buzzing with active engagement. When we look at the internal dynamics of each team, we find each student is actively engaged.

Each of the **Kagan Structures** implements the PIES principles. In turn the PIES principles dramatically increase active engagement:

	Principle	Increased Active Engagement
P	Positive Interdependence	Students encourage and tutor those who otherwise might give up. Every student's contribution is necessary.
I	Individual Accountability	Students who otherwise would not participate are required to respond.
E	Equal Participation	Shy and weaker students are given equal time.
S	Simultaneous Interaction	Per pupil active engagement is increased dramatically.

With the structures in place, no student can hide, no student can fall between the cracks. Every student is an active participant in the learning process. Structures optimize active engagement.

Kagan, Spencer. "Structures Optimize Engagement." Web. <<http://www.kaganonline.com/KaganClub/FreeArticles/ASK28.html>>.

Fixed Mindset to Growth Mindset: Changing the language we use

Directions: For each of the following statements, reword the thought from a Fixed Mindset framework to a Growth Mindset framework.

- 1) I already know how smart I am. I know I'm not smart enough to understand these problems.

- 2) I don't want to fail.

- 3) He can do it. She can do it. They don't have to work at it at all. They are just better than I am.

- 4) Wow, you must be really smart to have gotten that so quickly!

- 5) It isn't my fault that I got this wrong.

My Effort and Achievement Log

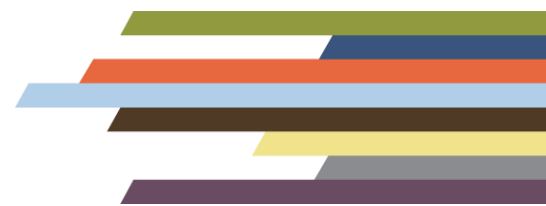
Name: _____

Assignment	Effort Score from Rubric	My Score on Assignment

3 – I worked hard and finished my assignment. When things got hard or I couldn't find the answer right away, I didn't give up.

2 – I worked hard, but I stopped when it got too hard.

1 – I didn't put much effort into my assignment.



Evaluating My Effort

1. **Time:** I'm willing to put in the time to finish the job well.

Not true Somewhat true True Very true

2. **Focus:** When I work, I concentrate and stay focused and am not distracted by TV or anything else.

Not true Somewhat true True Very true

3. **Resourcefulness:** When I'm stuck, I know where to go and whom to ask for help.

Not true Somewhat true True Very true

4. **Use of feedback:** I look carefully at my teacher's feedback on my work and know exactly what I need to fix.

Not true Somewhat true True Very true

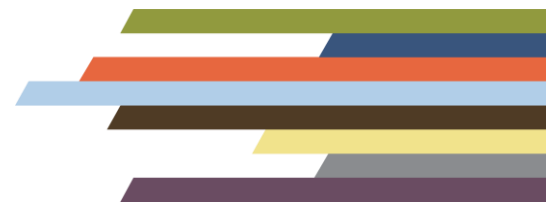
5. **Commitment:** I am determined to complete my assignment and do my best.

Not true Somewhat true True Very true

6. **Persistence:** If one strategy isn't working, I keep trying different ones until I find one that works.

Not true Somewhat true True Very true

Adapted from work by Jeff Howard



My Best Possible Self

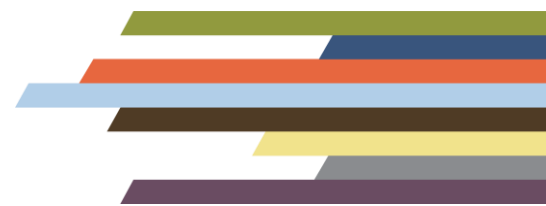
Imagine a future a year from now in which you have accomplished all your goals, and that things have gone as well as they possibly can. Think about the areas of life that matter to you the most and all of the positive changes you'd like to see happen. Imagine in vivid detail that you have worked hard and succeeded at accomplishing your goals. Close your eyes and spend a few minutes exploring this "future you." Imagine how you'll feel, where you'll be, and who you'll be with. Get a detailed picture in your mind.

What successes have you had in school this year? What hobbies are you enjoying? What activities are you doing with your friends and family? What character strengths have helped you make the most of this year?

Based on the "future you" picture in your mind, what goals will help you make your Best Possible Self a reality? Are you making any efforts towards achieving your goals now? What is your plan to reach your goal by the end of the year?

Goals, Current Efforts, Plan to Reach this Goal:

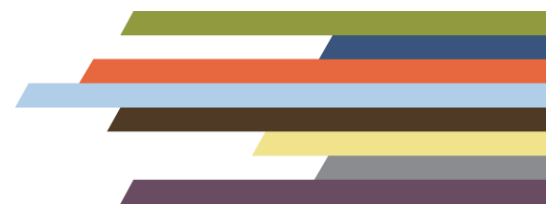
Goals	My Current Efforts	My Plan to Reach This Goal
1.		
2.		
3.		



Now, imagine the future is not the best it possibly could be. "Future you" has not had success this year and is not enjoying life the way you'd like. What concerns do you have that could sidetrack your Best Possible Self vision? What are you doing to make sure these negative concerns do not interfere with your future? What plans would help?

Concerns, Current Efforts, Plan to Avoid Concerns

Concerns	My Current Efforts	My Plan to Avoid this Concern
1.		
2.		
3.		

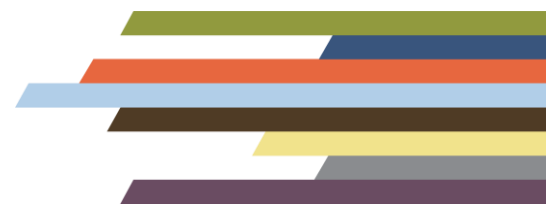


Accounting for Character Strength

Directions: Decide on a set of character strengths that are important to you. How do you act when you are at your Best Possible Self? What are the most important ways we should treat people in our classroom? How can these strengths help you achieve the goals of your Best Possible Self? Write these character strengths in the left column. Then, each day put a mark in the box each time you *failed* to use that strength when you could have. A blank box means no “violations.” At the end of the week, decide which character strength you should focus on more next week. Try to remember when you didn’t use the character strength and see what you can learn from the circumstances to improve next week

Character Strengths, Tracker

Character Strength	Monday	Tuesday	Wednesday	Thursday	Friday
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					



My Best Possible Self in the Classroom

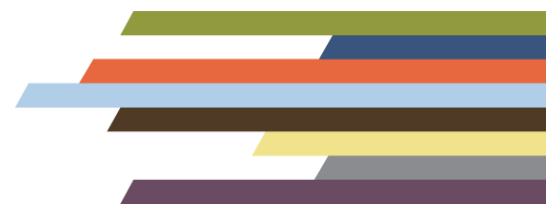
Practice I Choose to Implement: _____

Imagine the future a year from now in which you have successfully implemented this practice in your classroom and that things have gone as well as they possibly can. Imagine in vivid detail that you have worked hard and succeeded at accomplishing your goal. What successes have you had in school this year? How are your students better as a result of your success? How is your professional life improved?

Based on the “future you” picture in your mind, what goals will help you make your Best Possible Self a reality? Are you making any efforts towards achieving your goals now? What is your plan to reach your goal by the end of the year

Goals, Current Efforts, Plan to Reach this Goal

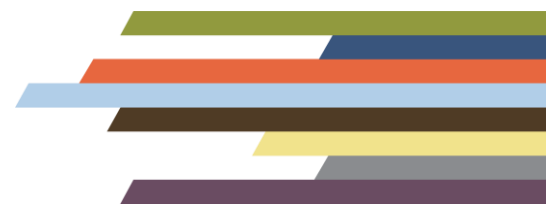
Goals	My Current Efforts	My Plan to Reach This Goal
1.		
2.		
3.		



Now, imagine the future is not the best it possibly could be. "Future you" has not implemented this practice well and is not enjoying success with your students the way you'd like. What concerns do you have that could sidetrack your Best Possible Self vision? What are you doing to make sure these negative concerns do not interfere with your use of this practice? What plans would help?

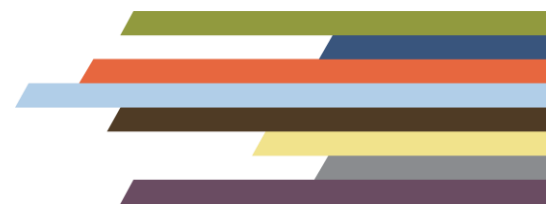
Concerns, Current Efforts, Plan to Avoid this Concern

Concerns	My Current Efforts	My Plan to Avoid this Concern
1.		
2.		
3.		



Role Cards

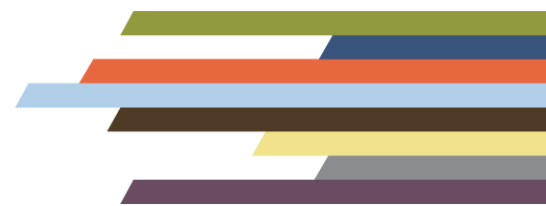
Role Cards	
<p>Summarizer</p> <p>Tell your group the main idea of the reading and important supporting details. Remember a summary includes the most important information in the reading – what it's mostly about or what the author wants you to learn.</p>	<p>Questioner</p> <p>Ask your group questions that can be answered by important information in the reading. You can also ask their opinion about the reading (What do you think?) or extension questions (What does this make you curious about?)</p>
<p>Clarifier</p> <p>Point out any confusing words or ideas or ask if anyone in the group got stuck on a word or didn't understand part of the reading. Use resources such as dictionaries or glossaries, or strategies such as rereading or context clues to help clarify.</p>	<p>Predictor</p> <p>Predict what will happen next in the reading or ask the group to predict. Point out the clues or what you already know that lead to your prediction. Write the predictions on the board or chart.</p>



Skills in My Group

As your group works, check off any behaviors you see.

Group Members	A	B	C	D
Came prepared and was ready to share with group				
Kept focused on the group discussion				
Spoke up and shared ideas, thoughts, and feelings				
Helped others share their thoughts by asking questions				
Helped the group make decisions				



Peer Rating of Team Members

Your Name _____ Your Team _____

Please write the names of all of your team members, INCLUDING YOURSELF, and rate the degree to which each member fulfilled his/her responsibilities in completing the team assignments. *DO NOT LEAVE ANY COMMENTARY BLANK!* Place this form in a sealed envelope, with your team name/number on the outside, and give it to your instructor. The possible ratings are as follows:

Excellent: Consistently carried more than his/her fair share of the workload.

Very good: Consistently did what he/she was supposed to do, very well prepared and cooperative.

Satisfactory: Usually did what he/she was supposed to do, acceptably prepared and cooperative.

Ordinary: Often did what he/she was supposed to do, minimally prepared and cooperative.

Marginal: Sometimes failed to show up or complete assignments, rarely prepared.

Deficient: Often failed to show up or complete assignments, rarely prepared.

Unsatisfactory: Consistently failed to show up or complete assignments, unprepared.

Superficial: Practically no participation.

No show: No participation at all.

These ratings should reflect each individual's level of participation and effort and sense of responsibility, not his or her academic ability.

Name of team member	Rating	Commentary (DO NOT LEAVE BLANK!)
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_____	_____	_____
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_____	_____	_____
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_____	_____	_____
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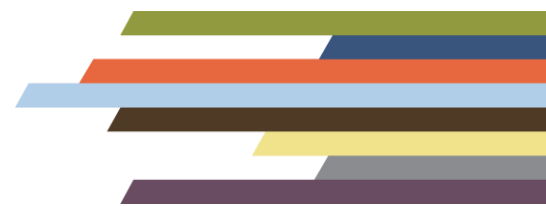
Your Signature _____

Group Project Rating System

1. Determine group project grade.
2. Convert individual verbal ratings from the Peer Rating form to numbers, as follows:
 - Excellent = 100
 - Very good = 87.5 Satisfactory = 75 Ordinary =62.5
 - Marginal = 50
 - Deficient = 37.5 Unsatisfactory = 25 Superficial =12.5
 - No show = 0
3. On a spreadsheet, enter numerical ratings received by team members in rows.
4. Average individual marks, calculate overall team average, and calculate adjustment factors as individual average divided by team average. If an adjustment factor is greater than 1.05, reset it to 1.05.
5. Individual project grade = (team grade) x (adjustment factor).

Example

Team Project Grade	80								Individual Project Grade
Name	Vote 1	Vote 2	Vote 3	Vote 4	Individual Average	Team Average	Adjustment Factor		
Betty	87.5	87.5	75	87.5	84.4	82.0	1.02		82
Carol	87.5	100	87.5	87.5	90.6	82.0	1.05		84
Juan	62.5	75	50	75	65.6	82.0	.80		64
Carlos	87.5	87.5	87.5	87.5	87.5	82.0	1.05		84

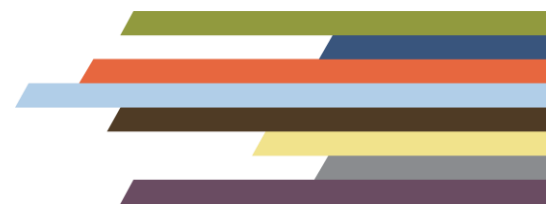


Positive Interdependence

Type of Positive Interdependence	What it Means	Examples of How to Structure	Classroom Strategy
Positive Goal Interdependence	Students must realize that they can achieve their learning goals if, and only if, all the members of their group also achieve their goals	A single product produced by the group Each group member can explain the group's answer	Rally Coach Numbered Heads Together
Positive Reward Interdependence	A mutual reward is given for successful group work and members' efforts to achieve it	Group is rewarded for improvement in average of all member's test scores Group is rewarded for members sharing, helping, explaining	Jigsaw II Show Down
Positive Resource Interdependence	Each member of the group has only a part of the information, resources, or materials necessary for his or her task. In this way, the members' resources have to be combined so that the group accomplishes its goal.	Each member has one part of the assignment The group has only one copy of the assignment to turn in Each member has only partial set of supplies needed for the project	Jigsaw TAPPS Crumple and Toss
Positive Role Interdependence	Each member is assigned complementary and interconnected roles that show the responsibilities required by the group to fulfill a common task.	Each member is given a distinct role e.g. Reader, Recorder, Time-keeper, Dictionary Manager, Calculator, Accuracy Checker, Encourager	Role cards
Positive Task Interdependence	Work has to be organized sequentially. As soon as one member accomplishes his portion, the next member can proceed with his/her responsibility, and so on.	The task is divided into portions and each member must complete his/her portion for the group task to succeed	
Positive Outside Enemy Interdependence	The teacher puts groups in competition with each other. In this way, group members feel interdependent and do their best to win the competition	Team Quiz on Friday afternoon	Group Battle

Individual Accountability

Role Assessment	Weighted Scoring	Call on Random Students
<p>Student picks piece of a group project that reflects their major contribution and how it shows their achievement. 2 team members must sign off to confirm it was the student's contribution.</p>	<p>Individual test first, then same test taken in the group. All group members receive the same score on the group test. Average the two tests for the overall grade or create percentage such as individual test 2/3, group test 1/3 of grade</p>	<p>Playing Cards/Popsicle Sticks</p>
<p>Alternate leaders and supporters on a set of tasks. Only leaders are graded on the task, supporters graded on how they supported the team.</p>	<p>Group project score includes team member ratings</p>	<p>Numbered Heads Together</p>
<p>Checker in each group responsible for confirming each group member understands the content.</p>		<p>Group Battle All group members do problem, can work together. Random number drawn to earn point for their team</p>
<p>Simultaneous teaching – one member of a pair must teach a concept to their partner while teacher observes. Roles are switched for next problem.</p>		<p>Pick a student App Reciprocal Learning Rally Coach</p>



Cooperative Structures

Rally Read: Students are seated in pairs, taking turns reading sentences or paragraphs to each other. The teacher circulates, evaluating and coaching.

Rally Coach: Students complete a worksheet together, taking turns, each solving a problem while their partner serves as coach.

Timed-Pair-Share: The teacher first has students think about a topic. Then for a pre-announced time (often a minute), one student in each pair shares his/her thoughts while the partner just listens. Finally, the students reverse roles so the listener becomes the speaker and the speaker the listener, for the same amount of predetermined time.

Numbered Heads Together: Have members of each group number off. The teacher asks a question and says, "Heads together." The group discusses and agrees upon the answer. When time is up, the teacher says, "Heads up" and calls a number. Every student with that number stands and the teacher calls on one or more of the standing students to answer the question, beginning with "My team says..."

Roundtable / Round-Robin: In Roundtable, group members take turns writing answers on a piece of paper, passing the paper around the group clockwise. In Round-Robin, group members take turns answering orally. A recorder can be used in Round-Robin to record the group's work.

Jigsaw: Information is divided into pieces and each group member receives only part of the information "puzzle" to master. The group's task is to reassemble the pieces so that all members have all the information; usually by having each member teach the group the part they were assigned. Jigsaw II adds an individual and group score on a test covering the content. Individuals receive their own score, plus scores are averaged together to decide the team score.

Three-Step Interview: Group members pair up and interview each other, first one way then the other. Then they go Round-Robin within their group, sharing what they learned in their interview by paraphrasing what their partner said.

Showdown: Each student does each problem on their own before receiving help. When "Showdown!" is called, each student shows teammates their work, and they begin the process of checking, coaching, and celebrating.

Crumple and Toss: Teacher asks the class a question. In groups, students agree on an answer and write it on a piece of paper (one paper per group). At your signal, all groups hold up their answers at the same time. Every group that answers correctly sends one student up to the front of the room with their paper. They crumple it up and shoot it into the trash can. If they make it in, their team gets a point. The team with the most points at the end of the game wins.

Reciprocal Teaching: Every pair consists of a "Student A" and a "Student B." Each student has their own set of problems or exercises to work on. Here's the twist: *Student A has the answers to Student B's problems, and Student B has the answers to Student A's problems.* Students take turns coaching each other through the problems, not giving the answers, but helping their partner reach the correct answer on their own.

Think-Aloud Pair Problem Solving (TAPPS): Students work in pairs and alternate roles. For each problem one is the solver while the other is the listener. The solver thinks aloud narrating his/her reasoning process—while solving the problem. The listener prompts the solver to *keep talking* and asks for clarification but does not intervene to help. Pairs alternate roles for each new problem.