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National School Reform Faculty®
Harmony Education Center

July 2013

Connections

## From the Director

# The Gift of Feedback

By Michele Mattoon, NSRF® Director, NSRF National Facilitator, and CFG® Coach in Indiana, michele@nsrfharmony.org

*This is the conclusion of a two-part series begun in the May 2013 issue of* ***Connections****, entitled* ***How to Give Feedback Effectively****. Follow this link to the May issue to review that article.*

Studies have shown that the most stressful situation for many people is standing up in front of a group of people to speak. If that is true, then publicly putting forth your work so that others can give you feedback must be a close second. Very few people rest securely in their comfort zone when their peers examine their work with the intent of evaluating or improving it. It's even worse, when it isn't your peers, but people higher on the ladder of the organization.

Why does this situation create such strong feelings of anxiety? One obvious reason is that the majority of us have been on the receiving end of some badly conceived and poorly given feedback. Perhaps the feedback wasn't useful or it was personal instead of referring to the product or action. It might have been given at the wrong time and at the wrong place. Maybe the giver was highly emotional and instead of waiting to calm down, gave the feedback in the heat of the moment. (You get the picture. Insert your own "feedback nightmare" here!)

Another reason receiving feedback is stressful is that it is hard for us to separate ourselves from our work. We often perceive our work as an extension of ourselves. Therefore, our fearful thoughts go something like this: "If my work isn't perfect, then that means I'm not perfect either. And what if I'm not just imperfect, but I'm not even 'good enough'? What if I'm really bad at what I do?" When this line of reasoning is actually written down, it seems a little silly. Yet, if we're honest with ourselves, how many of us have gone down this path?

On the other hand, maybe you are very secure in what you do—in fact, you're known as an expert in your field. One of the reasons you may not want to receive feedback is that you perceive it to be a waste of your time. People wind up giving you suggestions that you've already tried and didn't work or you know they won't work because of the context of the situation. Additionally, you may become impatient with others because they insist on giving you feedback around something that you feel is perfectly fine the way it is instead of the thing that you know could be better. Who wants their entire piece of work pulled apart when they only needed suggestions around one small piece of it?

With all of this in mind, NSRF offers the following suggestions when receiving feedback from others:

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**Before the feedback session begins, target the specific area to be addressed.** We strongly suggest that you frame a focusing question to articulate what exactly you want to get out of the feedback session. The clearer you are about what kind of feedback you want, the more likely you'll get feedback that is helpful to you. Protocol use will ensure that the participants will stick to this one area, and not waste time with feedback that isn't useful.

**Be open to the feedback.** OK, you're putting your work out there for all to examine. You are hoping that participants won't judge you, but help you with areas you clearly state. What's the first thing you should do to make sure that you are open to suggestions? Take a slow, deep breath. That's right. Taking a few slow, mindful breaths will trigger your sympathetic nervous system, lowering the levels of cortisol and other chemicals in your body that add to anxiety and stress. Consciously relaxing clenched muscles in the hands, jaw, shoulders and belly can also be helpful.

**Next, try to listen with curiosity, instead of defensiveness.** If a comment has pushed an emotional button, take a moment to consider why. If you can pinpoint the reason for your emotional reaction, you are closer to being able to depersonalize it. Intentionally adopting a "wondering" attitude as we teach in our protocols can help open doors to the creative part of your brain, which will happily produce new ideas given a chance.

**Don't try to defend yourself or justify your choices when you are given a chance to speak about the feedback.** This is not only a waste of valuable time for you and the participants, but also gives the participants the idea that nothing they said is helpful. Instead, focusing on what was useful not only validates the hard work of the person giving feedback, but also helps you to articulate exactly how you may move forward. Hopefully, the coach has reminded the group that only a fraction of what they say will be useful, which will allow you to let go of the urge to defend yourself, and see them as "helpers" rather than "attackers."

**Clarify and summarize your understanding of the feedback.** When it is your turn to reflect on the feedback that the group has given you, it is important that you take the time to summarize your understanding of it. When you go over your notes, you may want to ask for greater clarification of the feedback at a later time. The end of the feedback session shouldn't be the end of your quest to improve. Touching base with a colleague to pursue a greater understanding of a suggestion can be extremely helpful.

Many people who have brought in work or a professional dilemma for feedback often end the session by sincerely thanking their colleagues for all their help. What a change from leaving a session feeling as if your work was judged and found wanting! At NSRF we are dedicated to giving people the skills and tools necessary to make this shift from seeing feedback as a punishment to valuing it as the gift that it is.

Michele Mattoon
Director, NSRF

P.S. Talk to us about great and not-great feedback—email us.

**"After a week of this training I feel we now have more tools to improve meetings, communication and the community at [my] school. Thank you so much." -- A new CFG coach from Wisconsin**

Our last few open trainings have filled really fast, so apply now if you want to join this group!

## Autumn Critical Friends Group New Coaches Open Training Oct. 6-8, in Bloomington, IN

Only $795 for five full days of training (last two days scheduled by participants, probably in Nov. or Jan.)

Visit the website or call NSRF at 812-330-2702 for details.

# Reflections on Adapting/Creating Protocols

**Adapted from "A Facilitator's Book of Questions by David Allen & Tina Blythe**

*This is an edited reprint of part of the NSRF Resource Book. We felt it was time to give these ideas more "air time" within the context of* ***Connections****, and also to encourage you* ***Connections*** *readers to send us protocols you've adapted or created. -- editors*

## Before Adapting or Creating a New Protocol

As a facilitator of a group that is using NSRF protocols in your work, you may find that you and/or your group experience some dissatisfaction with a protocol once it has been tried. In response, you (or others) might be inclined to change the protocol or make up a new one. While either of these options could be productive, our experience suggests that you and your group might want to try the following things first, particularly in the case of the dilemma protocols or others used with student and/or adult work.

### Talk to your group

Whether the group, or you, or all of you together are sensing a problem with the protocol being used, a candid conversation is an important step toward identifying possible issues. Almost every protocol has a built in "debriefing" step at the end of it. Be sure to leave enough time for this step!

### Give the protocol some time

Protocols, by their nature, place restrictions on the natural flow of conversation. This is not always comfortable for participants, and this discomfort might be at the root of the group's dissatisfaction. If this is the case, getting familiar with a protocol by doing it a few times as it is written might be the best strategy. Furthermore, protocols, like any complex tool, take a bit of practice in order to be used effectively. So, it might take a few tries before you and your group are able to figure out just what your chosen protocol can really help you achieve and what it can't.

### Try another "established" protocol

If lack of experience with protocols in general or with the particular protocol you've chosen isn't the problem, it might be that you have chosen a protocol that doesn't match well with your presenter's needs or purposes. It might be worth revisiting (and perhaps revising) goals with the presenter and/or with the group, and then experimenting with some other protocols. Again, if the protocol is one that is new to you, it might take a few tries before everyone can really determine how well it helps to achieve the presenter's objectives.

### *Ask a more experienced coach, the facilitator who trained you, or the NSRF office*

A conversation with someone who has used the protocol frequently can help you pinpoint some possible areas of difficulty and come up with strategies for dealing with them.

### *If you decide to adapt or create a protocol*

In adapting or creating a new protocol, there are two kinds of issues to consider: conceptual (having to do with how you construct the new protocol) and logistical (having to do with how you share the protocol with others).

## Conceptual issues

Good protocols can take a long time to develop. Most of the protocols in popular use now have been through many rounds of experimentation and revision. Good protocols are designed to create particular kinds of balances among competing needs, interests, and inclinations. Different protocols create different kinds of balances, depending on their purposes. Because of these delicate balances, seemingly small changes in a protocol's steps can create big changes in the kind of conversations people have and, therefore, in the kinds of things they can accomplish. As you adapt or create a protocol, here are some questions to think about:

***What is your purpose?*** What does your presenter want to have come out of the protocol? Why is it important to the participants to talk about this dilemma or work together? Are you seeking to open up and explore issues broadly? Or are you hoping to solve specific problems? (Or some mixture of the two?) The other questions on this list should be considered in light of your answer to the purpose question.

***How will your protocol balance opportunities for people both to express their own perspectives and to consider the perspectives of others?*** Typically, this is done through a careful orchestration of who can talk when. Does the presenter or the group start the conversation? Does the presenter or the group have the last word? Is there a time when the presenter & group should talk together, or should one always be listening while the other is speaking?

***How will your protocol balance the interests and needs of the presenter with the interests and needs of the group?*** Should the presenter identify a focus for the conversation? The group? Both together? Is the focus here on helping the individual improve their practice or on creating opportunities for the whole group to reflect collectively about their own educational practice? (Of course, to some extent, all protocols allow for both of these things. The question is where you want the emphasis to be.)

***How will your protocol balance free conversation and structured conversation?*** Protocols typically ask people to respond in specific ways to the work that is on the table: At what points will your protocol invite very focused conversation? At what points will it invite more open-ended, less-focused conversation and comment?

***When (if at all) will context for the work be shared?*** In the beginning of the conversation? In the middle? Only at the end?

***Note: Even though many of these questions raise the issue of how to balance various needs, all those needs don't have to be given equal time in every protocol.*** For example, depending on your purposes, you might construct a protocol that allows for lots of group talk and very little presenter talk, or vice versa. The point isn't to tell you that the two needs must be met equally, but rather to encourage you to be deliberate in your choices about which needs you will foreground and how.

## Logistical issues

There are now a dozen or more protocols that are used widely throughout the world, and hundreds more that are developed and used in specific groups, schools, or districts. We suggest these guidelines to help everyone easily distinguish one protocol from another. When you commit your adapted or brand new protocol to paper or website (even in draft form), we invite you to follow these guidelines, too:

1) Give the protocol its own name. Things can get confusing when two, three, or more very different protocols are all named the Tuning Protocol! When you make a significant* adaptation or create a new protocol, give it a name that will distinguish it from other protocols. (The name doesn't have to be entirely unique: for instance, the "California Tuning Protocol" is an adaptation of the Tuning Protocol.) We encourage names that will be memorable, easy to spell and Google, and ideally, at least somewhat descriptive of the work or outcome of the protocol. (We love the Issaquah Protocol, but new

coaches struggle considerably remembering the name and how to spell it, and often have to think awhile to remember what it does and when to use it.)

2) Name the protocol which you are adapting or from which you're deriving your new protocol. For example, the Modified Collaborative Assessment Conference includes the attribution: "A variation of the Collaborative Assessment Conference developed by Steve Seidel."

3) Include your own name and/or your group's name on the new or adapted protocol. You never know where your protocol might end up once you've put it in writing, especially on the web. It can be helpful to let people know where it came from so that they can get in touch with you if they have questions about how to use it. At NSRF, we appreciate hearing stories and receiving copies of new or adapted protocols. Whenever possible, we like to share them with ***Connections*** readers, so this is an opportunity for you to be officially published.

4) Structure your protocol as follows, if possible: Include a statement of the purpose for the protocol and/or the goals it is intended to achieve, the estimated time to conduct the entire protocol, approximate time for each step, prerequisites/scaffolding, need for preconferencing, materials to gather, size of group for which the protocol is best suited, and any other details a new person would find helpful in using this protocol.

* Of course, a significant adaptation is a judgment call. If, for example, you're tinkering with the amount of time to allow for warm and cool feedback in the Tuning Protocol, you probably don't need to worry about renaming it. However, if you are altering the purpose of the protocol, moving the protocol's steps around, eliminating steps, or adding steps, those are typically the kind of changes that warrant giving the resulting protocol a new name.

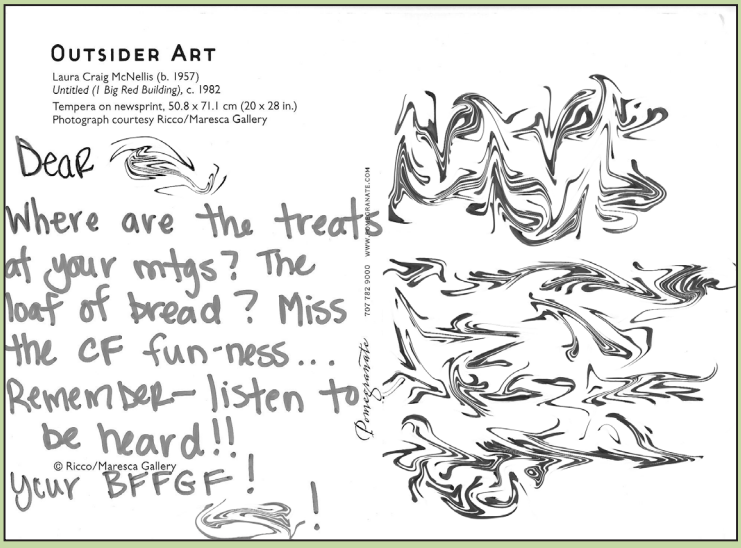
*NSRF from time to time conducts on-site trainings for experienced coaches and is currently planning an open training designed around adapting and creating new protocols. If you are interested in joining or possibly hosting this group, please email or call us at 812-330-2702. — editors*

# Postcards from The Past

**By Luci Englert McKean, Connections Managing Editor and CFG Coach in Indiana luci@nsrfharmony.org**

At the end of many New Coaches Trainings, we use an activity we call "Postcards To The Future You." The facilitator spreads an assortment of postcards on a table, and once the attendees have written their final reflections for the week, they're invited to select a postcard for themselves. They're instructed to write in their home or work address on the right side of the card. Then on the left, they write their future selves a note ... something that they'd want to remember from the training, a quote, a reminder about a piece of work they or a colleague completed, or maybe a bit of cheerleading. At the end of the day, the facilitator brings or sends me the stack of postcards, and I magically select "a future time" to mail the postcards back to the people who wrote them.

Lucky me (and the letter carrier), we get to read people's notes to themselves, some of which baffle me, but others which make me smile. We thought we'd share some with you in this and future issues of ***Connections***, and maybe you can imagine a past self of your own, sending you a special message. At the July Open Training, one of our participants told us about a website called Future Me where you can write emails to yourself and schedule them to be sent days or even years later. Although emails aren't as pretty as picture postcards, they definitely can be valuable, as well. (Thanks for the tip, Patrick!)



Lewis Hine (1874–1940)
The Empire State Building Photographs, 1930–1931
An inspector on the job
Dear
Remember that you can trust the group to find their own direction + resolution. You saw it happen. We all really are better together.
Love,
OUTSIDER ART
Joseph Garlock (Russian, active in United States, 1884–1980)
Untitled, 1954
Oil on canvas, 55.9 x 58.4 cm (22 x 23 in.)
Lobell Collection
Photograph courtesy Ricco/Maresca Gallery
Be conscious of how you frame your ideas, suggestions, etc. It's both what you say and how you say it. Also, relax and breathe.
© Ricco/Maresca Gallery
Pomegranate
707 782 9000 WWW.POMEGRANATE.COM
HENCEFORWARD SHALL BE FREE
EMANCIPATION PROCLAMATION
ABRAHAM LINCOLN
1 FOREVER USA
Elly Simmons (American, b. 1955)
Germination, 1992
Gouache, casein and collage, 30½ x 23¼ in.
Stay positive...
Make relationships...
Make changes.
Love,
Me
2914
© Elly Simmons
the ONION
Dear
Remember to use what you learned! Partner meetings, team meetings, administrator meetings — get started. And... well the main thing is to use it.
Yours,
PS; Protocols.
From Greetings from the Onion. 100 Postcards. Published by Chronicle Books.
© 2010 The Onion • America's Finest News Source • onion.com
USA 32
ALOHA
Your name here
Your street address
Your city, state, and zip
Benjamin Franklin, based on an engraving published in Paris in
From the collections of Atwater Kent Museum, Philadelphia
2161 Pomegranate Communications, Inc.
Yo, J - look over your shoulder, see how far you've come & be patient as the world gets closer to your collaborative vision. Don't let the skeptics pull you away from your confidence in the process - remember when the process is followed & is transparent, one can't help but see the power of it. From the CF6 → we evolve.
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# FROM THE RESEARCH DESK: Thinking about Teaching Thinking Part 2, How Can We Do It?

By Dave Lehman, Connections Executive Editor, NSRF National Facilitator, and CFG Coach in Wisconsin, davelehman@mac.com

*This is the conclusion of a two-part series begun in the May 2013 issue of* ***Connections****, entitled* ***Thinking about Teaching Thinking, Part 1: Why the Urgency?*** *Follow this link to the May issue to review that article.*

***"Thinking is hard. Thinking about some problems is so hard it can make your head ache just thinking about thinking about them." – Daniel Dennett***

***"Everyone thinks. But not everyone thinks equally well." – Robert and Michele Root-Bernstein***

***"We come to know what it means to think when we ourselves try to think." – Martin Heidegger***

***"Can critical thinking actually be taught? Decades of cognitive research point to a disappointing answer: not really." – Daniel Willingham***

According to these authors, thinking is hard and not everyone does it well. Thinking about how to teach critical thinking involves thinking, but may actually not be very teachable! In the initial article in this two-part inquiry into "Thinking About Teaching Thinking," I noted how crucial the various aspects of thinking are for students of today, and promised that in this part 2 I would share some specific strategies for teaching not only critical thinking, but its near relatives: creativity, imagination, feelings, intuition, even emotions; all as essential aspects of thinking!

I begin by stating that I disagree with Willingham. Let us start by asking and answering a key question as posed by Jane Healy in her book, ***Endangered Minds: Why Children Don't Think and What We Can Do About It***:

*Are so-called 'thinking skills' best taught by setting aside a special time for mental calisthenics and then hoping they will transfer to other sorts of learning? Or are 'thinking skills' better served by teaching all subjects in ways that draw students toward higher-level reasoning by the nature of the materials and the problems presented? The most generally prevailing opinion (aside from the purveyors of 'thinking skills' programs) is that persistence and flexibility in problem-solving should be incorporated into overall teaching goals, modeled and supported in every discipline – provided, of course, that the teacher's own thinking skills are up to the task.*

To give a specific example of how to teach these thinking skills, Healy suggests several simple "meta-cognitive" activities, including this one:

*When confronted with a problem, children may be taught to follow a four-or five-step plan such as the following:*

*1) Stop. Think. What is my task? (identify the problem in words)*

*2) What is my plan? (talk through possible steps to solution)*

Dave Lehman is the former founding principal/teacher of the Lehman Alternative Community School, a public middle-high school recently named after him and his wife by the Ithaca, New York Board of Education upon their retirement after 30 years. He currently is leading "School Improvement Coaching" at East High School in Madison, Wisconsin.

Contact him with your questions or comments at davelehman@mac.com

*3) How should I begin? (analyze first step)*

*4) How am I doing? ( keep on task)*

*5) Stop. Look back. How did I do? (analyze the result)*

With this perspective firmly in mind, I next turn to some specific examples of teaching the interrelated aspects of critical thinking, beginning with "hand tools of the mind" as Dennett calls them, and what the Root-Bernsteins simply call "thinking tools."

Daniel Dennett, in ***Intuition Pumps and Other Tools of Thinking,*** begins with this math puzzler [didn't you hate these in Algebra?!]:

*Two trains, 100 miles apart, are approaching each other on the same track, one going 30 miles per hour, the other going 20 miles per hour. A bird flying 120 miles per hour starts at train A (when they were 100 miles apart), flies to brain B, turns around and flies back to the approaching train A, and so forth, until the two trains collide. How far has the bird flown when the collision occurs?* [Check your answer in the footer of this page.]

Did you solve this puzzler correctly? How did you do it? Is there more than one way to do this? What thinking tools did you use? Did they work? Since we're not in math class now, I'm less interested in whether you found the correct answer, but in the thinking involved. Dennett presents dozens of "handy prosthetic imagination-extenders and focus-holders [that] permit us to think reliably and even gracefully about really hard questions. The first of these is 'making mistakes.'" He maintains, "making mistakes is the key to making progress…. Mistakes are not just opportunities for learning; they are, in an important sense, the only opportunity for learning or making something truly new."

Did your math teachers return your homework papers and quizzes expecting you to correct your mistakes before going on?; or did they simply return the papers and move on, never emphasizing the importance of learning from your mistakes? Among numerous others, Dennett initially describes these four simple "hand tools of the mind:"

*1) Labels – Sometimes just creating a vivid name for something helps you keep track of it while you turn it around in your mind trying to understand it.*

*2) Examples – Some philosophers think that using examples in their work is, if not quite cheating, at least uncalled for – rather the way novelists shun illustrations in their novels…. Good for them, but they can't expect me to recommend their work to any but a few remarkable students.*

*3) Analogies and metaphors – Mapping the features of one complex thing onto the features of another complex thing that you already (think you) understand is a famously powerful thinking tool.*

*4) Staging [scaffolding] – Some of the most valuable thinking tools in this book are examples of staging [scaffolding] that take some time to put in place but then permit a variety of problems to be tackled together.*

These all no doubt sound familiar; do you use them regularly in your teaching at whatever grade level and with whatever subject matter? In mathematics we have long division and finding-the-average, each of which describes a clear arithmetical process which when named can quickly remind us how to solve a problem. This simple, four-part summary is a useful reminder for all of us. And then there is Dennett's last hand tool, what he calls "intuition pumps" or thought experiments.

Dennett's friend and co-author of ***The Mind's I,*** Doug Hofstadter, offers this familiar sounding list of hand tools: "wild goose chases, tackiness, dirty tricks, sour grapes, elbow grease, feet of clay, loose cannons, crackpots, lip service, slam dunks, and feedback." Each of these short-hand words or phrases, when used in a conversation, conjures up a process that quickly helps us understand the other person. Take, for instance, "sour grapes." No doubt you'll recall this comes from Aesop's fable, "The Fox and the Grapes."

*[It] draws attention to how sometimes people pretend not to care about something they can't have by disparaging it. Look how much you can say about what somebody has just said by asking, simply, 'Sour grapes?' It gets her to consider a possibility that might otherwise have gone unnoticed, and this might very effectively inspire her to revise her thinking, or reflect on the issue from a wider perspective…*

I believe that teaching young people these kinds of simple stories and simple thinking tools can help them become better thinkers.

 *[240 miles!]*

In ***Sparks of Genius: The 13 Thinking Tools of the World's Most Creative People,*** Robert and Michele Root-Bernstein present their own list of thinking tools and believe strongly in the importance of integrating these as a central part of our educational system:

*Our educational system is the embodiment of our cognitive and creative understanding of ourselves. If we fail to understand creative thinking, we cannot hope to have an educational system that will produce creative individuals. Conversely, a society that understands the nature of creativity will be able to foster it in the classroom. Indeed, we intend that these tools be used to cultivate imagination along with intellect, to reintegrate knowledge of mind with knowledge of body, to reveal in glorious detail the ways in which artists, scientists, dancers, engineer, musicians, and inventors think and create, so that the most unexpected surprises may illuminate all our lives.*

The authors believe deeply in a need for a new kind of "trans-disciplinary, synthetic education that does not require a change in what we teach, rather a synthetic education that requires only that we change how we teach, drawing on these eight basic goals":

*First, we must emphasize the teaching of universal processes of invention in addition to the acquisition of disciplinary products of knowledge.*

*Second, it follows that we must teach the intuitive and imaginative skills necessary to inventive processes.*

*Third, we must implement a multidisciplinary education that places the arts on an equal footing with the sciences.*

*Fourth, we must integrate the curriculum by using a common descriptive language for innovation.*

*Fifth, we must emphasize the trans-disciplinary lessons of disciplinary learning.*

*Sixth, we must use the experiences of people who have successfully bridged disciplines as exemplars of creative activity within our curricula.*

***"Mistakes are not just opportunities for learning; they are, in an important sense, the only opportunity for learning or making something truly new."***

***— Daniel Dennett***

*Seventh, to reach the widest range of minds, ideas in every discipline should be presented in many forms.*

*Finally, we must forge a pioneering education, whose purpose is to produce the imaginative generalists who can take us into the uncharted future.*

With these goals in mind, the authors draw on extensive interviews with people from all fields of endeavor in deriving their list of 13 tools for thinking, involving the creative integration of "emotional feelings, visual images, bodily sensations, reproducible patterns, and analogies." They propose these as a kind of meta-logic which they feel is close to what others, i.e. Dennett, call intuition. These 13 tools are divided into two sets. Here are the first set of nine, which the Root-Bernsteins call primary tools:

1) Observing – paying attention to what is seen, heard, touched, smelled, tasted or felt within the body.

2) Imaging – images can be recalled or created for any sense or sensation, seeing in the mind, hearing sounds and songs, feeling not yet touched.

3) Abstracting – the process of pairing down complicated things to simple principles is the same.

4) Recognizing patterns – discovering nature's laws, the rhymes and rhythms of language, dance, music, and formal intentions of the painter.

5) Forming patterns – almost always begins with combining simple elements in unexpected ways, and patterns to pattern forming itself.

6) Analyzing – the realization that two apparently different things share important properties or functions.

7) Body thinking – pre-verbal and pre-symbolic thinking that occurs through physical sensations, awareness of muscle, sinew and skin.

8) Empathizing – related to body thinking, losing themselves in the thing they are studying [like "in flow" as Mihaly Csikszentmihaly describes].

9) Dimensional thinking – the imaginative ability to take a thing mentally from a flat plane into three dimensions or more.

The Root-Bernsteins view none of these as absolutely independent of any of the others, but see them all as integrated and as connected. I believe these are all highly teachable at whatever grade level and within whatever subject matter context. These authors then go onto describe four additional higher order tools for thinking, relying on the nine primary tools:

10) Modeling – often requires combinations of primary tools.

11) Playing – involves a childlike joy in the endeavor at hand, playfully challenging the limitations of a science, an art, or a technology just to see what happens; a common way in which novel ideas are born.

12) Transforming – becoming aware of problems through feelings of mental or bodily discomfort, yet having to express the solution logically in words, movements, equations, or as an invention, requiring a series of steps to transform the problem into a solution, often integrating one or more of the other tools of thinking.

13) Synthesizing – finally, and most importantly, understanding always involves synthetizing, combining many ways of experiencing (e.g. "synesthesia," and "synosia").

This last tool of a "synthesizing education" connects to the third of the ***5 Minds for the Future,*** the synthesizing mind, in the recent book by Howard Gardner. The other four are "the disciplined mind, the creating mind, the respectful mind, and the ethical mind." Within this category of the synthesizing mind, Gardner sees eight elements:

a) Narratives – the synthesizer puts material together into a coherent narrative; examples range from the Bible to a contemporary history or social science textbook as well as in fiction.

b) Taxonomies – materials are ordered by some essential characteristic; e.g. the Dewey decimal system in the library, the Linnaean classification of plants and animals, double-entry balance sheets in an annual report [similar to the "labeling" of Dennett].

c) Complex concepts – newly stipulated concepts can tie together or blend a range of phenomena; e.g. Darwin's evolution, Freud's "unconscious" [similar to the integrating of concepts described by the Root-Bernsteins].

d) Rules and aphorisms – much folk wisdom is captured and conveyed to short phrases, designed to be memorable and widely applicable; e.g. "Think first, act second," or "An ounce of prevention is worth a pound of cure." [again as seen in Dennett's "hand tools for thinking"]

e) Embodiments without words – as in works of art [as emphasized by the Root-Bernsteins].

f) Theories – concepts can be put together into an over-arching theory; e.g. Adam Smith's theory of a market economy weaving together ideas of supply and demand, labor, production, profit, and loss.

g) Metatheory – as in an overall framework for knowledge, as in a "theory of theories."

Gardner goes on to describe the creative mind, noting the connections and similarities to the synthesizing mind, much as in the ***Sparks of Genius***, the Root-Bernsteins emphasize the interrelatedness of their tools of thinking. Gardner also points out, usefully, that much of the synthesizing and creative thinking is not done simply by the individual, but by teams of as few as two, or as many as hundreds when speaking of the sharing of experimental results within the scientific community. He calls for students to learn how to be collaborative

and how to give and receive effective feedback, again, recalling the Root-Bernsteins' tools.

Over thirty years ago, I, along with one of the teachers from my school, had the opportunity to participate in a series of four, two-to-three day workshops over a year, in the use of a series of "Instrumental Enrichment" booklets of student activities, designed originally by the Israeli educator, Reuven Feuerstein in the mid-1970s. [See the most recent book about this amazing work still being carried on by Reuven Feuerstein, Refael Feuerstein and Louis Falik, ***Beyond Smarter: Mediated Learning and the Brain's Capacity for Change.***] Feurerstein defines intelligence as a "force that drives the organism to change itself and change the structure of thinking and reaction in order to answer the needs that appear before it and change before its eyes…. A dynamic energetic agent or state that is unstable and responsive to the person's need to modify him- or herself in order to adapt to situations and cope with them successfully."

Feuerstein created these fourteen instruments along with the "Learning Potential Assessment Device." These booklets were designed to address the needs of the flood of Jewish immigrants settling in Israeli from throughout the world, to help fill in the gaps in the education of these students from widely divergent backgrounds. Intended to be used over a three-year period, these booklets addressed such cognitive skills as organization and relationship, orientation and directions in personal space, comparisons, analytic reasoning, classification and categorization, temporal relations, numerical relations, and hypothetical thinking.

After learning how to work with these tools, I used them with high school students in a special project that met weekly. My colleague used them, most particularly the "organization of dots" booklet as seen in the figure on the next page, with her sixth graders. We found these tools were most useful when taught in the context of specific subject matter, e.g. using the organization of dots activities (making geometric shapes out of patterns of dots – see the next page) in a middle school math class. In "New Neuroscience Findings on the Brain/Mind's Capacity for Change: An Epilogue," the closing chapter of Beyond Smarter, in support of their years of research, the authors note:

*[T]he neurosciences bring us evidence not only of the modifiability of the individual's mental functions… not just change in the structure of the behavior, of the mental processes, but are actually related to changes in both the hardware and the software of the neural system.*

I strongly recommend the work of the Feuerstein Institute and their Instrumental Enrichment activities, in light of what is happening to our current students and the increasing importance of the development of their creative thinking abilities.

This brings me to two thoughts from ***Education and Democracy in the 21st Century,*** by Nel Noddings. The first, from the closing chapter, "Critical Thinking on 21st Century Education:"

*There may be no more powerful diagnostic tool that the method of overt thinking that Piaget used in his research. The idea is to ask the student, 'Let me hear you think.' Clearly, the success of this method depends on a level of trust maintained between teacher and student.*

And her ending to this insightful book:

*If we value our democracy, we will remember that it is perpetually a cooperative work under construction. So is education. We have much to gain from a critical and appreciative appraisal of the past and, perhaps even more, from a cooperative and imaginative exploration of the future.*

Last, I'd like to add these thoughts from Meira Levinson in her recent (2012), challenging book, ***No Citizen Left Behind.*** She describes cogently the "civic empowerment gap" of today's students, particularly our students of color. Levinson makes a strong case for what she calls "action civics," the active engagement of our students in the real issues of the day, for which they will need to be creative, imaginative, intuitive, and caring, critical thinkers:

*Ultimately, this is for our own benefit as much as theirs. If we want to live in a better world, in a stronger democracy, in a United States that truly stands one day for 'justice for all,' we need the insights, energy, and knowledge that young people – including low-income youth of color – bring to the struggle. We also need the wisdom they will bring when they are older. Tackling the civic empowerment gap today expands the ranks of active citizens both now and in the future. This long-term, communal, and equitable engagement is essential for achieving the 'more perfect Union' to which we all aspire. It is time for us to move forward together.*

From the book ***Beyond Smarter*** by Reuven Feuerstein, Refael Feuerstein and Louis Falik. Connect the Dots to form a square and a triangle, like the example shown. These become increasingly more challenging as students work through the booklet.

***So what do you do? How do you teach thinking? Critical thinking? Creative, imaginative, analytical thinking? We at NSRF would love to hear from you!***

*— Dave Lehman*

**Books referenced in this article**

***Endangered Minds: Why Children Don't Think and What We Can Do About It***, by Jane Healy, adjunct professor of educational psychology at Cleveland State University

***Intuition Pumps and Other Tools of Thinking,*** by Daniel Dennett, professor of philosophy at Tufts University and founder of the Center for Cognitive Studies

***The Mind's I,*** Doug Hofstadter, distinguished professor of cognitive science and computer science at the School of Informatics, Indiana University

***Sparks of Genius: The 13 Thinking Tools of the World's Most Creative People, by*** Robert and Michele Root-Bernstein. Robert is professor in the physiology department of Michigan State University, and Michele is an independent scholar and writer.

***5 Minds for the Future,*** by Howard Gardner, professor of cognition and education at Harvard University

***Beyond Smarter: Mediated Learning and the Brain's Capacity for Change,*** by Reuven Feuerstein, Refael Feuerstein and Louis Falik

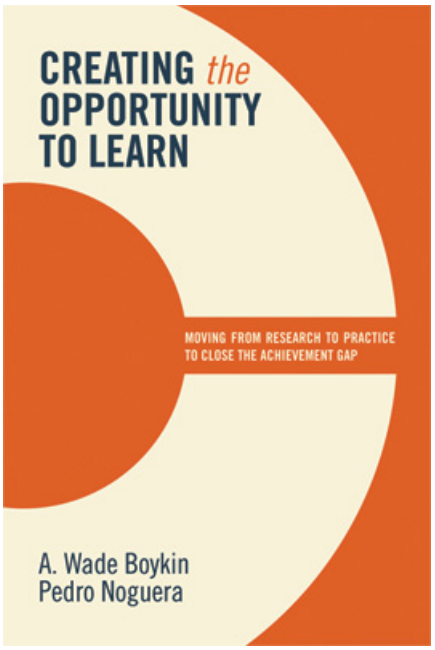
***Education and Democracy in the 21st Century,*** by Nel Noddings

***No Citizen Left Behind,*** by Meira Levinson

Book Reviews

# BOOK REVIEW: What does it mean to "Create the Opportunity to Learn?"

By Dave Lehman, Connections Executive Editor, NSRF National Facilitator, and CFG Coach in Wisconsin, davelehman@mac.com




## Creating the Opportunity to Learn: Moving from Research to Practice to Close the Achievement Gap

By A. Wade Boykin and Pedro Noguera, 2011, ASCD, Alexandria Virginia

Wade Boykin and Pedro Noguera need no introduction to many of you as they are well known and highly respected educators. Both are university professors. Boykin is the director of the graduate program in the department of psychology at Howard University, and Noguera, a professor of education at New York University. I approached the reading of this book imagining I was a high school biology teacher seeking some concrete ideas and specific suggestions of things I could do differently in the classroom. I am picturing achievement gaps in the success of my students based on race, gender, and economic class. I have to say – with few exceptions – I came up short, with hardly any specific things I might try to do differently in my classes on Monday. Yet there is value in their book, so let me explain.

***Creating the Opportunity to Learn*** is organized into three sections. Part I: Understanding the Achievement Gap, Part II: Analyzing the Research, (with 100 pages, making it the lengthiest), and Part III: Applying What We Know. Each of the nine chapters ends with a useful summary. Part II offers a lengthy review of the literature on "three 'achievement gaps' that must be confronted simultaneously: the one between White students and their Black and Latino counterparts; the one between U.S. students and students in other parts of the world; and the one between what it took to be prepared for the 20th century and what will be required for adequate preparation in the 21st century." This widening of the conventional use of "achievement gap" to include the latter two gaps is a useful re-mapping of the territory.

However, although there is an extensive review of research from the elementary school level, I was disappointed to find virtually no research drawn from the high school level. Either there is a lack of research at this level related to any of these three gaps, or it is a shortcoming of their analysis.

Part I is a useful overview for those not familiar with the achievement gap in this country, and worthwhile even for those of us already familiar with the problem, particularly their distinction between "involuntary" minorities (i.e. Native Americans, African Americans, Puerto Ricans and Mexican Americans)

A. Wade Boykin

Pedro Noguera

and "voluntary" immigrant minorities (especially Asian) who out perform the involuntary. The authors also mention the "culture of anti-intellectualism" particularly among some Black males who view being a high achieving student as being "White."

Thus, with this awareness, I thought Boykin and Noguera might have at least mentioned the devastating impact of "stereotype threat" on the success of students of color. This concept, originally researched by Claude Steele and colleagues at Stanford, is about the assumption of intellectual inferiority particularly among Blacks in their first year in college as one major factor in their lower graduation rate, "the threat of being viewed through the lens of a negative stereotype, or the fear of doing something that would inadvertently confirm that stereotype." Here, too, I was surprised to see them reference Ruby Payne's "culture of poverty" of which there is much to be criticized (see Paul Gorski's critique in particular at his website EdChange.org).

However, in Part III there was reinforcement for my strong belief in the importance of what happens on the ground, in the classroom, between teacher and students. There, the authors state, "A substantial body of research (see chapters 3-7) has shown that improving the quality of instruction is the most effective way to boost student achievement." Yet in re-visiting Chapter 5 about "Asset Focused Factors: Interpersonal Relationship," they seem to contradict themselves when they note, "there is more evidence to support the benefits of TSRQ [Teacher Student Relationship Quotient] than there is to support any other factor reviewed in this book." I agree with the importance of both quality instruction and "TSRQ" as key elements of eliminating, or at least reducing the "achievement gap," yet, again, wearing my high school biology teacher hat, there is a lack of specifics about how to do these crucial things. What do I do to bring greater quality to my imaginary class of biology students? How in my biology class of 32 diverse students in each of 5 class periods do I get to know my students individually?

Perhaps my mixed review of this book began with the title, ***Creating the Opportunity to Learn***, for I believe this language of "opportunity" provides an easy out, and can become a cop-out. I have heard too many teachers say, "I provided those students [meaning the "achievement gap" students] with plenty of opportunities to learn, they just didn't take advantage of them. It's their responsibility, not my fault!" Boykin and Noguera seem to be aware of this, when early in their last chapter, "What Can We Do To Close the Gap?" (perhaps this should be "gaps" given their earlier analysis), they state;

*How do we encourage teaching that creates stimulating and inspiring classrooms, where students engage in problem solving and use their creativity and imagination to address interesting and important subjects, and where teachers push students to continue learning long after the exam is over.*

Toward the end of that chapter, emphasizing their concern about "equity," they state,

*A commitment to equity will also force schools to adopt educational practices that allow them to take responsibility for student outcomes, evidence of mastery, and conditions that foster effective teaching and higher levels of learning.*

Note, they're finally speaking of a "commitment to outcomes," not simply providing "opportunities" to learn!

It's in this same chapter that the authors quote at length from the writing of John Taylor Gatto in what they mistakenly call his "most recent book," ***Dumbing Us Down: The Hidden Curriculum***

***of Compulsory Schooling*** (published in 2002 and revised in 2005). His "most recent" (published in 2010) is ***Weapons of Mass Instruction: A Schoolteacher's Journey Through the Dark World of Compulsory Schooling*** Having known John for many years, being on more than one program with him, he is about as strong a critic of public education and advocate of home schooling as you can find. Notice the key phrase in each of the subtitles of his two books – "compulsory schooling." Gatto's is a conspiracy theory, hardly devoted to closing the achievement gap. So again Boykin and Noguera's book disappoints my imaginary high school biology teacher who seeks specific ways to do better by his diverse students.

There are, however, other useful ideas for high school teachers and administrators. In Chapter 8, "Why Are Some Schools Making More Progress Than Others," the authors mention a 9th grade study skills class that was created in one high school to help particularly those minority students among whom the failure rate was the highest. They also list other things being done by schools making progress on closing the achievement gap: a mentoring program for Black and Latino males, block scheduling, advisory groups, increasing minority students' access to rigorous courses, improved mentoring and counseling for students at risk of failing, and instructional coaching for some teachers. And they begin this chapter noting four key professional development, gap-closing factors "such as quality teacher-student relationships, student improvement, cultural relevance, and critical thinking." Similar to educators who get excited about PLCs and new goals ... and then realize how seldom workshop leaders provide details on just how to do these things. They, then end this chapter, and the book with these five "Paradigm-Changing Issues and Their Policy Implications:"

*1) Let evidence be our guide,*

*2) Pay attention to classroom transactions and dynamics,*

*3) Focus on assets,*

*4) Educate the whole child, and*

*5) Seek multiple pathways to success.*

I particularly like their emphasis in item three on the personal, social, experiential, cultural, and intellectual "assets;" the students' strengths, interests, capabilities, passions and commitments, prior understandings, skills, and competencies they bring to the classroom. But again, how does my imaginary biology teacher learn the assets of all his myriad individual students?

In one of their footnotes that accompanies this chapter, the authors list 21 factors involved in exceptional schools that are successful, from the book by K. Chenoweth, ***It's Being Done: Academic Success in Unexpected Schools.*** An interesting list, but again, I the high school biology teacher need more specifics on what to do with such items as "use school time wisely," "like kids," and "provide teachers with the opportunity to observe one another." Enter NSRF and Critical Friends Groups peer observation protocols as an example of the missing specifics of how to go about doing this.

So do I recommend this book to you readers of ***Connections***? Well, yes, particularly to elementary teachers who could find a definitive list of research studies on the topic of equity and the achievement gap. I'd mildly recommend it to other educators as well, although you will have to take general ideas and either research them further for specific "how-to's," or create your own strategies for how to follow through with your students in your context.

I'd be interested to know what others think upon reading this book. Please email us with your comments. — *Dave Lehman*

# MAPPING OUT A SHARED VISION: Utilizing a Critical Friends Group Activity with GEAR UP Tutors and Advisors

By Melissa Calabrese, Eastern Michigan University, CFG Coach in Michigan, melissa.a.calabrese@gmail.com

Melissa Calabrese passionately promotes healthy communities and mentors high school and college students to become collaborative citizens. Her work leads them to have a voice, contribute to something that is meaningful, set goals, and to reflect about their development with others. Melissa enjoys her work as a Bright Futures 21st CCLC Site Coordinator at the Eastern Michigan University Institute for the Study of Children, Families and Communities.

Contact her with your questions or comments at melissa.a.calabrese@gmail.com

## *Background*

It is the end of the first semester and 13 GEAR UP tutors and college advisors are huddled together around the board, silently grouping Post-it notes with scribbled ideas on them. Part of a federal grant program to build college awareness and access, they are tasked with helping more than 350 high school seniors graduate high school and enroll in college next fall. They appear focused and determined; they are moving with purpose as they place the notes in groups with similar themes. Close to an hour passes before they all seem satisfied and ready to discuss their next steps. By the conclusion of the activity, staff have collaboratively selected and committed to priority tasks for the second semester.

The tutors and advisors are working on an NSRF activity, "Affinity Mapping." In previous years, staff members had lacked a shared vision of what they were engaged in, and while all staff were committed to young people's success, they were not all focused on project goals. However, for the students' senior year, a CFG model was adopted for professional development, used for several full-day workshops with participants. While CFGs have been used extensively in K-12 schools, this project took the model to a group that works with students both in and outside the classroom, during the day and afterschool. These types of programs offer CFGs the potential to reach students in new settings, and to ensure that a message of high expectations reaches students from all personnel at school.

## *The Affinity Mapping Process*

The GEAR UP CFG tutors and advisors desired an activity to help them collectively decide how best to support high school seniors during the second semester. Prior to the activity, they were not sure which specific tasks would be most beneficial. Because Affinity Mapping activity works best with an open-ended question that has many answers, it was selected for this particular task. After reading and discussing several peer-reviewed articles about high school students transitioning to college, GEAR UP CFG tutors and advisors were invited to answer the following open-ended question, "What does it take to set up and facilitate a successful transition from Wayne Memorial High School to post-secondary education for our GEAR UP students?"

They began the activity by silently writing individual ideas on Post-it notes. Once ready, staff members randomly placed the notes on large butcher paper. Then, silently, the staff moved the notes around and put them together based on their "affinities" or common themes. Finally, the silence was lifted and team members gave each group of Post-its a title to capture the intended action of each theme. For example, one theme was named "Resources." The items listed in the resources group were specific actions GEAR UP staff members could assist students with during their final semester in high

*GEAR UP Staff members, during one of their three-day planning sessions, reading and discussing articles in small groups before beginning Affinity Map Activity.*

school such as looking up and promoting free tutoring resources on college campuses.

Ultimately, the themes developed during the Affinity Mapping process helped GEAR UP staff create an action plan. [A complete list of topics generated during this protocol are found in Figure 1]. For example:

1.) GEAR UP staff can inform students of (and help prepare for) the various placement tests required for their post-secondary school.

2.) GEAR UP staff can engage in open discussions with students about their hopes, fears, challenges, and strategies for not only surviving but thriving after high school. GEAR UP staff can also create and facilitate group workshops on this theme to promote a healthy and successful post-secondary transition.

3.) The GEAR UP program can sustain a support system for students after graduation by creating resource artifacts and staying in communication with students through our WMHS GEAR UP social networking sites.

4.) GEAR UP staff can help students find ways to feel prepared, safe, and welcomed at their new post-secondary school.

The Affinity map activity suggested ideas and tasks that GEAR UP tutors could do to support second semester seniors. Staff members left the meeting with a plan and increased purpose. One staff member wrote, "All in all, the meeting was very interesting, helpful, and definitely necessary." Another said, "Affinity Mapping is a great way to organize our thoughts on next semester and jump ahead to what we should be doing."

Staff expressed high satisfaction with the affinity mapping activity, and its impact on the group's shared vision. One GEAR UP staff member expressed her appreciation for having her voice heard at the conclusion of the affinity mapping activity:

"The Affinity Mapping exercise really excited me. We all rose to the challenge and were able to organize all of our thoughts and ideas in a very diplomatic, effective way. I find it fascinating that when our actual voices were taken out of the equation, we were able to accomplish so much more than if we had tried to hash it all out verbally."

### *Results of Affinity Mapping*

During the second semester, staff demonstrated that they had a higher level of commitment to the tasks than if they were instructed to complete the exact same tasks by a supervisor. Adult learning theory suggests that adults have a deep need to be self-directing and enter into a learning experience with a problem-centered orientation to learning. The Affinity Map Protocol empowered staff to use their creativity to find solutions

## *Figure 1: College 101*

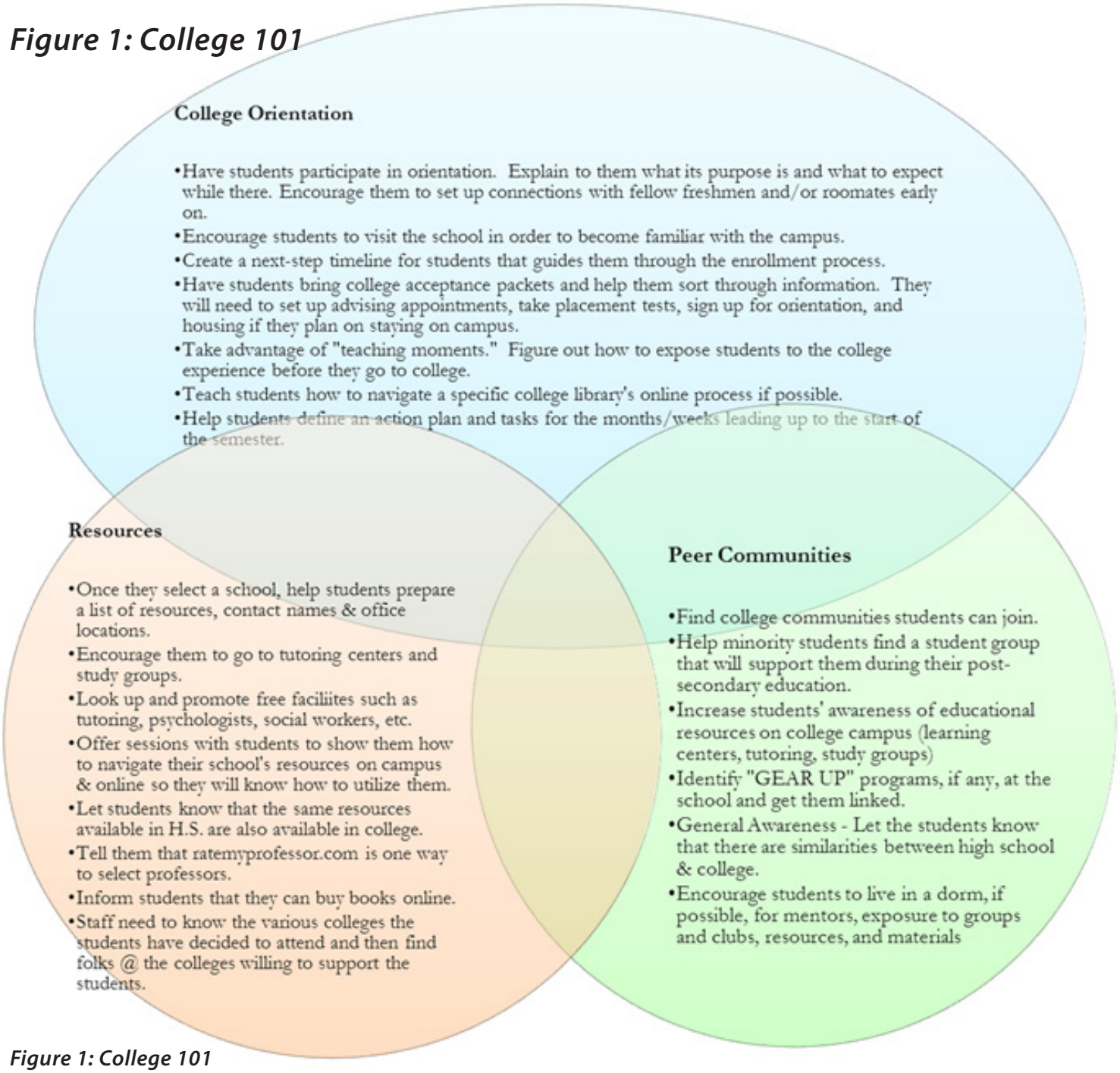



***Figure 1: College 101***
***GEAR Up staff can aid the students in: gaining familiarity with their school's campus, enrollment process, and freshman orientation; seeking out campus/student resources; finding peer communities, activities, and groups. In short, GEAR Up staff can help students find ways to feel prepared, safe, and welcomed at their new school.***

to assisting seniors with their post-secondary transition. Affinity Mapping strengthened the commitment and comradery of our GEAR UP tutors and advisors, thus leading to a better transition out of high school to higher education for our GEAR UP seniors.

### *Resources*


Bambino, D. (2002). "Critical Friends: Redesigning professional development." ***Educational Leadership***, 59(6), 25-27. Retrieved November 3, 2012, from http://www.nsrfharmony.org/articles_bambino.html

Gaining Early Awareness and Readiness for Undergraduate Programs [GEAR UP]. http://www2.ed.gov/

programs/gearup/index.html

National School Reform Faculty (2012), Affinity Map Protocol. Retrieved Oct. 7, 2012 from http://www.nsrfharmony.org/protocol/doc/affinity_mapping.pdf

*The NSRF Affinity Map Activity helps GEAR UP participants to organize their thoughts on helping students transition into post-secondary educational settings.*

## *Figure 2: Discussion Topics*

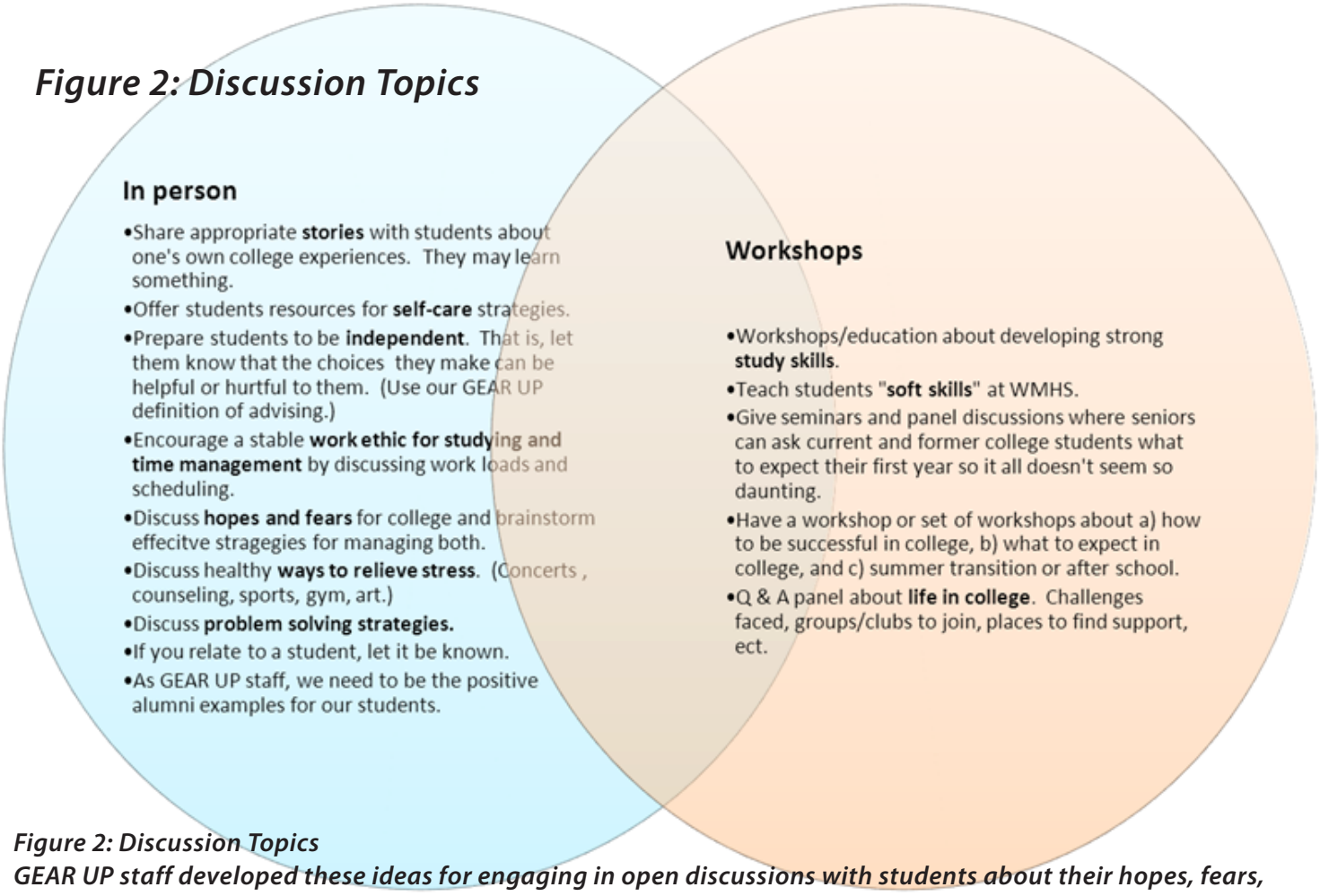
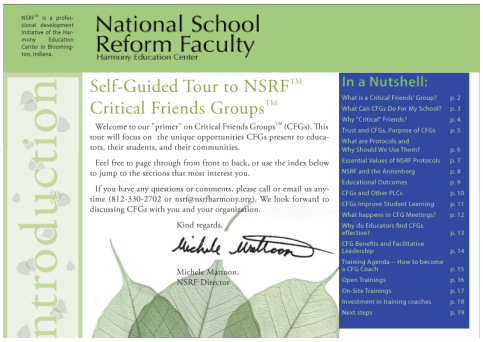



***Figure 2: Discussion Topics***
***GEAR UP staff developed these ideas for engaging in open discussions with students about their hopes, fears, challenges, and strategies for not only surviving but thriving after high school. The staff can also create and facilitate group workshops on these themes to promote a healthy and successful post-secondary transition.***



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