

Using Tried and Tested Processes Successfully

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Abstract: How many educators wonder daily if the material being taught is actually retained for future use? Research validates that students retain information learned when they acquire knowledge, make meaning of that knowledge and are able to discern when to transfer that knowledge to a new situation on their own. With the development of the “Boomerang Strategies” for the book, *A Value Added Decision*, these researchers help readers and, when applicable, session participants improve their pedagogical practice to make learning powerful and engaging for their students, taking them from mere compliance to complete engagement and commitment to their own learning processing. The research tool used has immediate application in any educational setting, is interactive, and is enlightening as participants construct knowledge from their own experience as learners at any grade level and in any discipline. The most important detail is that participants own the process and can see how what they construct has immediate application in their own situations.

Keywords: Collaboration, engagement, learning strategies, professional development, stages of learning.

Introduction

The report *Silent Epidemic* presented a study of high school dropouts in which 47% reported that they had dropped out of school because they were bored, unmotivated and disengaged from their own learning (Bridgeland, Dilulio & Morrison, 2006). Lack of engagement was also noted as a cause for students not becoming involved in their own learning as cited in a meta-analysis of factors that contribute to student drop outs. (Cheatham & Chappell, 2015). So, how do teachers hold learners’ attention, focus the learning process, and move students toward transfer of learning, rather than just regurgitation of newly acquired information? How does the teacher get students who are not “academically inclined,” as Philip Schlechty suggests, to engage in the work (Schlechty, 2014)? Through his extensive work in the area of engagement as it compares to compliance, Schlechty advises the following: “If our schools are to succeed in

the twenty-first century, they must be organized to nurture and develop engagement, just as they are now designed to produce compliance... students who are engaged comply because they believe in what they are doing, see meaning in the tasks they are assigned, and are willing to voluntarily commit personal resources (time, energy, attention) to these tasks and activities.” (pp 16-17). Generally speaking, the concept of “student engagement” is predicated on the belief that learning improves when students are inquisitive, interested, or inspired, and that learning tends to suffer when students are bored, dispassionate, disaffected, or otherwise “disengaged.” Stronger student engagement, or improved student engagement, is a common instructional objective that most educators desire in their classrooms. As Katrina Schwartz, in her work *Mindshift: How we Learn*, states, “Engagement is a crucial part of learning, but ensuring students are actively engaged is more complex than whether a student is paying attention or not.” The engagement issue is a difficult one to concretize because it is a multi-dimensional concept. In fact, James Almarode from James Madison University looks for eight different qualities that include elements such as personalization of the task, authenticity, choice, and social interaction to name a few (Schwartz, 2016). Quite often the teacher has spent countless hours preparing a lesson and delivered it with minimal results at best. How can that be? If the teacher has worked that hard on preparing, why are students not engaged and, more importantly, why are results on assessments showing that students have not learned the material well enough to be able to use it in a new and completely different context?

An examination of the three stages of learning, according to Grant Wiggins and Jay McTighe shows that these, when properly applied, yield learning results for the long term, not just for the short term, for all learners of all ages (Wiggins & McTighe, 2007). The concepts which undergird the stages of learning are simple and do not constitute a taxonomy, such as Bloom’s Taxonomy. Instead, the three stages describe the processes a learner undergoes as the learning becomes more and more long lasting. During the acquisition stage, learners are exposed to information, memorizing, and basically learning steps, procedures and facts. Learners in the meaning-making stage analyze, synthesize, and evaluate, but doing it all in their own minds. In so doing, learners are trying to understand the material. The teacher is merely the guide through the meaning making stage, allowing the learners to process the learning. Finally, the transfer stage is the point at which the learner has truly understood the learning and is able to use it independently. Sadly, plans for teacher learning opportunities do not normally include all these stages. Usually, their workshops include acquisition through a speaker’s talk and Power Point presentation and some meaning making with hands-on activities that allow for practice either as a group or individually. However, because of time limitations, professional development usually falls short of learning for transfer, thus assuming teachers will somehow, on their own, transfer the learning to their classrooms. Perhaps that may explain why professional development for teachers has not delivered anticipated results, even after a sizeable investment of time, money and resources have been allocated. In other words, regardless of the complexity or simplicity of the professional development, just delivering pearls of wisdom in a nicely bound binder will not guarantee transfer into the

classroom setting. Maybe that is why more teachers are not using the research-based strategies that they “learned” in a workshop environment. Teachers are generally good note takers and can capture the essence of a presentation. However, if nothing happens beyond the workshop to take the learning to transfer, the learning will remain in the well-written notes.

The problem is, in fact, multi-faceted. The first thing to consider is whether teachers really learned the strategy well enough to use it independently, to be able to transfer it to their own pedagogical practice. Should the presenter be held accountable? If that is a possibility, how can a presenter with a roomful of participants even begin to assess the level of understanding with traditional means of delivery and with limited presentation time? If not the presenter, should the teacher be required to submit a summary of the main understandings, concerns, and next steps? Perhaps a quick reflection might make use of what is learned in a workshop, but more likely it will become an unnecessary burden that does not go beyond the actual acquisition of knowledge level which never transfers into the day-to-day teacher planned learning activities. The next point to consider is whether it fits the teacher’s individual “style.” Do the strategies, methods, and ideas presented hold enough appeal that the teacher will do whatever is necessary to embed them into his or her instructional design? Finally, even if a teacher worked through a strategy in a workshop and actually understood its purpose and value does not mean that it will transfer naturally into that teacher’s classroom without additional support. Most teachers already have otherwise busied lives outside their classrooms. Any major adjustment that the teacher must undertake to make the new strategy with its multiple steps fit into what the teacher had already planned is a burdensome undertaking at best. To be able to implement a new strategy, the teacher must first understand the thinking behind it, its theoretical basis, and its applicability.

More importantly, the teacher must feel certain that the workshop learning is a good “fit” for his or her students. Onsite support and follow-up on workshop strategies are generally not the rule. Teachers are left on their own for the accurate implementation of new concepts and ideas delivered from a consultant in a workshop setting, probably as a lecture. Consequently, the whole point of the workshop is forgotten or buried in workshop treasures that teachers accumulate in binders and handouts as a good intention or failed attempt. The truth is that teachers willingly attend workshops, perhaps even try some parts, but are soon discouraged when what happens in their classrooms does not equate to the promise of the workshop presenter. Another point to consider is that new, research-based strategies and ideas require participants who are willing to change what they are currently doing. Over and over, workshop after workshop, teachers look upon the idea with a jaundiced eye and think, “This too shall pass.” Ironically, usually it does, “pass” and teachers go on to what they are used to doing.

Method of Research

As previously stated a common concern among all teachers of all subjects and in all grade levels is whether a particular strategy will work with their students in their classrooms. A troubling question which teachers face is how they can

customize what they heard and adapt it to their particular situation. There may be district or school wide edicts that require teachers to use a particular strategy following some sort of professional development activity. In light of the requirement, teachers may comply, acquiesce, and say that a particular strategy holds promise. However, trepidation that they may or may not possess the necessary expertise or skills becomes a deterrent and a quick mind block to even attempting the idea. If they have the courage to try a new process and fail, the results that follow are devastating to all concerned, particularly the students who may be blamed for the failure.

Recognizing that replicating the learning is essential, this research project began with the development of the tried and tested ideas later called *Boomerang Strategies* (Guilott & Parker, 2012). The research question became, why not use the approaches teachers revert to when they get back in their classrooms and make them the best they can be? To accomplish this, teachers of all grade levels and disciplines have been asked to become learners again. They have been asked to think like a learner. Most teachers normally return to using what is tried and tested, what they already know and what their teachers used to help them learn. In fact, Bryk states that a “previous approach has been to generate lists of what works. However, “the new paradigm should be to figure out how to make it work, with replicability as the new gold standard” (Bryk, 2015). Teachers at all levels and in all disciplines needed to know that regardless of their content, they could all use the same thinking in their instructional design so that it would lead to transfer of learning.

A common research-identified problem is that teachers do not typically transfer what they learn in a workshop into their own practice. Another commonly accepted idea is that teachers need feedback, and that they want to be in charge of their own learning. Teachers, like most human beings, do not like someone else imposing their ideas unless they choose them and recognize them as their own. Teachers’ ownership of ideas is probably the most powerful component in teacher development. If someone gives the teacher “the answer” or “the strategy,” what will happen when neither works? Will the teacher assume an internal locus of control or blame the person who told him/her to use the particular strategy? These findings were critical in constructing ideas that would actually improve learning and would be used by teachers in their classrooms. Another common challenge is trying to reach common understandings about instructional design and pedagogical practice. Educational authors typically introduce a concept or program until it becomes a household word, but at the institutional level and at the classroom level, educators fail to commit to and build upon what they already know collectively in order to share common understandings of the concept. For example, in a K-12 group of educators, the idea of differentiation seems like a common term that everyone knows and understands. The term has become so commonplace, that many teacher evaluation documents include it as a desirable teaching behavior. In fact, in a group of ten, most would nod their heads in agreement because everyone knows that it needs to be present in all classrooms. However, if each of the ten present were asked what it means in their classrooms, ten different interpretations would emerge for a “commonly used” term that holds certain expectations in both instructional design and pedagogical practice. Still,

educational leaders wonder why calibrating observers of teaching behaviors is a difficult and almost impossible task. What educators fail to do is to have meaningful discussions about what each of these commonly held terms means in their individual classrooms and with their own students. So, there is no surprise that educators make assumptions that everyone is talking about the same thing when, in reality, they are not. In fact, in a room of ten teachers, if each teacher were asked to write a paragraph describing differentiation in their classrooms, there would be ten different scenarios that have little in common with one another. So the research question was to target this common problem of removing assumptions that were far from reality and alleviating a complete lack of common understandings.

To begin, participants were provided a brief presentation of the stages of learning followed by a check for understanding of the differences each provided. During the check for understanding of the differences between each stage of learning (acquisition, meaning making and transfer), participants at all grade levels and in all disciplines quickly grasped the concepts and were able to identify which activity represented which stage with total ease. Additionally, participants were referred to Philip Schlechty's *Description of the Levels of Engagement* which makes clear distinctions between engagement and compliance, as these apply to an educational setting. In *Creating Great Schools*, Schlechty states that "First, the development of higher-order understandings and skills requires considerable self-direction, discipline, and persistence, elements likely to be lacking when inducements external to the task or activity (and not engagement) are the primary means of gaining attention and action. Second, the likelihood that what is learned will be transferable to contexts other than the specific context in which the learning has occurred is increased when the tasks that result have meaning and value to the student. Engagement increases the likelihood that such meaning will be present. Third, considerable evidence exists that retention is also increased when new learning occurs in contexts that have meaning and value to the student" (Schlechty, 2014). The distinctions between engagement and compliance were easy to follow as participants were asked to think like learners, not teachers, as they completed the research tool in small or large group settings.

Table 1 is a research tool, which asks teachers to identify what they need as learners to make each learning situation an experience that leads to meaning making and transfer of learning. By design, the research tool included twelve common processes that occur in classrooms from Pre-Kindergarten to the university level and across all disciplines. The procedure engaged teachers from all levels and from all disciplines to collect the qualitative data that steered the research.

Table 1: Boomerang Strategies Worksheet.

Learner Situation	What conditions must be present for you as the learner?
1. When is reading text engagement in meaning making, leading to transfer?	When...
2. When is completing a worksheet engagement in meaning making, leading to transfer?	When...
3. When is solving a problem engagement in meaning making, leading to transfer?	When...
4. When is talking to a peer engagement in meaning making, leading to transfer?	When...
5. When is classroom discussion engagement in meaning making, leading to transfer?	When...
6. When is listening to a lecture engagement in meaning making, leading to transfer?	When...
7. When is taking notes engagement in meaning making, leading to transfer?	When...
8. When is writing a paper engagement in meaning making, leading to transfer?	When...
9. When is working on the computer or some other form of technology engagement in meaning making, leading to transfer?	When...
10. When is working on a project engagement in meaning making, leading to transfer?	When...
11. When is doing homework engagement in meaning making, leading to transfer?	When...
12. When is making a presentation engagement in meaning making, leading to transfer?	When...

Process Used

In small groups, teachers responded as learners. In *A Value Added Decision*, the authors named the process the *Boomerang Strategies* because it is what teachers revert to when they go back into the classrooms (Guilott & Parker, 2012). The Boomerang strategy is inherently collaborative in nature. In fact, the process cannot be done alone. Learning for teachers (like their students) is more profound and transferrable when they are engaged in collaborative learning with their peers. John Hattie, in his work, *What Works Best in Education: The Politics of Collaborative Expertise*, states, "What we need instead is a defensible and compelling narrative that leads to long-term, coherent and focused system-wide attention on student learning. I call this territory 'the politics of collaborative expertise'. Its premise is that there is differential expertise across our schooling system and that there can be wide variation within schools. At the same time, there is a remarkable spread of expertise that can be identified, nurtured, esteemed and brought together to reduce this variance" (Hattie, 2015).

He further states that the teacher cannot be the only one that we rely on for changes to instruction. Specifically, Hattie writes in his opposing work, *What Doesn't Work in Education: The Politics of Distraction*, "Certainly there is a constant clamor to emphasize the teacher is the key, with claims that the system is only as good as the teacher and that teacher standards must be raised. In many ways this is correct, except that teachers cannot do it on their own: they need support; they need to collaborate with others in and across schools; they need to develop expertise, and they need excellent school leaders. Further, supportive and great systems are needed to support and nurture great leaders (Hattie, 2015). Once again, the importance of creating opportunities for collaboration among teachers is clear from a Canadian nation-wide research study on student engagement, entitled, *What Did You Do in School Today?* "Affecting a deeper transformation to school and classroom practices calls upon all of us to begin looking at school improvement as a collaborative, knowledge-building activity where teachers themselves are actively engaged in co-constructing ideas that contribute directly to school improvement and development (Dunleavy & Milton, 2009).

Anyone who teaches may not remember what he or she learned in a workshop, or find it cumbersome to implement given the current situation, but they are already comfortable with the *Boomerang Strategies* because they are universally identified. They are the way everyone learned in one setting or another. Additionally, teachers typically emulate their teachers in their own instructional delivery. So why not make these *Boomerang Strategies* the best they can possibly be given what teachers already know about their own learning experiences? A portion of the qualitative research collected for *A Value Added Decision* was published and has been included to illustrate the power of this process.

Every conversation begins, preferably, with a discussion that distinguishes acquisition, meaning making and transfer and describes what each looks like for each participant as a learner. How does the instructor know when a student is making his own meaning? How can anyone tell when the teacher is working with students on transfer? Although deceptively simple, these processes are quite complex and difficult to pinpoint. In fact, that is why a well-behaved classroom full of compliant students on task is highly praised. Educators delude themselves into believing that these students are really learning; they are actually just memorizing or "learning it" for the test, not taking it to transfer for the long term. If educators want to see students doing work individually that will endure beyond the test, they will need to change how they deliver instruction. Lesson plan design must be engaging and challenging for students; otherwise, it is a just fun activity with no real and lasting learning actually taking place.

Before completing the research tool, participants are provided examples of what the presenter needs to make a particular experience a meaning making one that leads to transfer for the participant as a learner. For example, if the instructional design is "reading text," the presenter identifies the conditions that must be present for him or her as a learner and will make the experience one that produces meaning making and leads to transfer. The presenter might say that she needs to set her own purpose for reading text. Another example the presenter may provide for a learner situation such as "filling out a worksheet" is

that the presenter needs to know that it will connect with what he or she just learned and that it will lead to what she will learn next. By providing at least two examples of what is expected, each participant is able to proceed following a word of caution from the presenter that the response cannot simply be “because it is relevant.” The participants need to consider and then articulate what makes that particular learner situation “relevant”, and why is it “relevant”? Once all participants understand that they are completing the research tool as learners, not as teachers and that they are taking the stages of learning into account, they begin filling in the research tool. Each participant completes the research tool individually and quietly. The presenter provides as much time as participants find necessary to complete the tool thoughtfully and completely. The main question to be answered is what each participant needs as a learner to make the experience a meaning making one that leads to transfer in a particular learning situation.

When everyone is finished, depending on the size of the group, a sharing process begins in a small group or in pairs. The main data collection begins when the presenter asks each group member to share what he or she needs to make the particular learning situation a meaning making experience leading to transfer. A critically important part of the process is that the facilitator capture and display in writing large enough that everyone can see from any section of the room each individual response to a particular learner situation. As the facilitator begins collecting individual responses to each question collectively, participants begin to “see” how their peers learn, identify deeply how they learn, and begin to ponder what else they need to make their instructional design and delivery one that engages the learner in the learning and one that is a meaning making experience leading to transfer. If any clarification is necessary, it happens on the spot. The information collected must be crystal clear to everyone who participates in the process. Suddenly, before their very eyes, participants begin to realize where their gaps are, where their blind spots have been, possibly based on their assumption that everyone needed the same things. Without pointing any fingers or making anyone wrong, the group begins to discover where their deficiencies lie and what some other options might be based upon the collective responses of the group (Guilott & Parker, 2012). First year teachers from Springbank High School in the Rocky View School System in Canada who participated in the Boomerang Strategies discussion had the following to say about the process.

Teacher A: I found it helpful to be asked to consider what I am doing in the classroom from the perspective of the students. The variety of people involved helped to add a second opinion about what is relevant/engaging for everyone. I found it useful to remind myself that while I am trying to survive each day in the classroom, it would be easier if the students were excited/engaged with what we are doing. I think the key for me is to make sure that as a student I would be engaged in the activities.

Teacher B: It was good to hear different strategies that people use in the classroom and also to hear how each of us learns and thinks differently, recognizing that our students would be even more diverse than our small group. It was also nice to know that we could discuss teaching strategies

and not be evaluated on recognizing our own flaws, but instead we see them and think of how we could fix them (*Guilott & Parker, 2012*).

Validation of the Research Tool

Each process included in the research tool has been traditionally considered standard practice in formal educational settings. With the advent of personal computers, cell phones, tablets and the like, a call for change in instructional practice has been the dominant theme in educational circles. Consequently, a paradigm shift is in order when asking teachers to shift from being a “sage on the stage” to being a “guide on side.” Teachers have traditionally been the keepers of the knowledge and the dispensers of information. However, now that students can readily access information by simply asking Google a question; the need for an adult to only disseminate information has diminished to the point that many traditional practices have taken a negative spin. This negative spin results from the idea that students are disengaged in the learning process, that they are bored, and that they see little value in their schooling process. So, does that mean that traditional schools are no longer in vogue and should shut down? Or, does it mean that teachers who use traditional processes are doomed to failure? Unfortunately, left to their own design without taking into account changes in the 21st Century, teachers could become irrelevant. That is precisely what the research tool used in this project intends to prevent.

The research diverts from the premise that teachers cannot continue using their tried and tested instructional processes as long as they incorporate the stages of learning and view learning from the learner’s perspective. In other words, why not take what teachers typically already use and turn the pedagogical practice into engaging experiences that focus on meaning making leading to transfer? This process had to be generative. Teachers had to feel a sense of ownership. And, the processes had to be based upon solid research. The researchers chose to use the stages of learning as identified by Wiggins and McTighe in their seminal work, *The Understanding by Design Guide to Creating High Quality Units*, because of its sound basis and ease of use (Wiggins & McTighe, 2007).

The first process included, *Reading Text*, is one that is universally used by teachers and one that has controversial approaches. Rather than become mired in the controversy, the tool sought to uncover what each learner individually needs to make the experience engaging, not just about acquisition but about meaning making leading to transfer. By eliciting individual responses, teachers began to see the many facets of reading text without being given recipes or complex programs to follow.

The second process, *Completing a Worksheet*, is one that has been belittled and repudiated as a time management tool designed to bore students with trivial work that leads nowhere. In fact, frequent use of worksheets is not considered good teaching and has been controlled by rationing the use of the copying machine. Granted, the abuse of worksheets that fit the classroom control criteria has made many repudiate worksheets in general. However, once teachers break down what they themselves need as learners in the design of a worksheet, the opportunity for making this practice a good one again emerges. When teachers express what they need in the worksheet to make it a

meaningful, meaning making experience, they realize what changes they need to make individually and collectively in a simple tool that has been cast aside but still has merit when properly designed.

The third process, *Solving a Problem*, once revised, offers participants a variety of approaches, ideas, and tools they can include in their design if the intention is that learners actually solve a problem in any discipline. The suggestions that emerge from the group think process offer participants a wealth of information for pedagogical design.

The fourth process, *Talking to a Peer*, allows learners to clarify misconceptions and add to their own bodies of knowledge based upon how others have interpreted specific information. Think, Pair, Share, a common strategy, that could become a trite and overused idea, takes on a new scope when using acquisition, meaning making and transfer as the basis for its design. Besides building confidence and allowing for think time, the question format and the interaction between students increase in rigor and cease to be useless.

The fifth process, *Classroom Discussion*, opens the door for steps that may have been overlooked but that, if included, make a measurable difference in the results.

The sixth process, *Listening to a Lecture*, provides possibly the most significant opportunities for changing another rejected process and making it a stellar learning experience. At Harvard University, the Mazur Group has determined that traditional “lectures simply reinforce students' feelings that the most important step in mastering the material is memorizing a zoo of apparently unrelated examples.” The standard belief in educational circles is that students “check out” when listening to a lecture. However, when teachers reveal what they need as learners to make the experience an engaging one that leads to transfer, they begin to see that some minor changes in their own practice will transform a negatively held performance into a positive and powerful prospect for transmission of knowledge that has a high yield for student engagement. In fact, the Mazur Group has developed a process to enhance lecture that takes into account student engagement in meaning making (The Mazur Group, 2016).

The seventh process, *Taking Notes*, reveals the various assumptions that are interfering with making this experience a productive one. Teachers tend to forget what they needed as learners. But, they also know how important good note taking is to learning. As they share what they need as learners, they are reminded to deconstruct the process without “dumbing it down” and focus on how to improve it for students.

The eighth process included, *Writing a Paper*, is another one that is universally used regardless of the grade level or discipline as a means of demonstrating understanding. Once again, as participants disclose their own needs, they begin to realize components that make the process worthwhile. Respondents included statements that pointed to specific issues in the process that need attention and ways to make the process whole and compelling for the learner.

The ninth process, *Working on the Computer* or using another current technology, is particularly germane as accessing information and creating documents becomes more and more dependent on the tech tools. In other words, the question becomes how does the technology enhance the learning experience

from just being mechanical in nature? How does using technology provide insights in helping to answer questions that students cannot just Google for themselves? Preventing technology use from being a virtual workbook of low level design is critical to ensuring depth of understanding. The responses participants provided illustrated the depth of thinking that must be elicited if the tools indeed support and enrich learning.

The tenth process, *Working on a Project*, covers projects across disciplines and grade levels that are individual and group endeavors. As participants shared their own needs, what emerged showed the socio-emotional, technical, and organizational requirements that must be in place to make the experience a fulfilling one. When using a project as the vehicle to demonstrate true understanding, teachers realized that specific and detailed elements had to be in place. Otherwise, working on a project would result in failure or complete compliance where students just do the absolute minimum to get credit. Preferences for individual or group projects pointed to the need to personalize the experience.

The eleventh process, *Doing Homework*, is one that generally calls forth passion either for or against any sort of homework assignment. Traditionally, homework has been a contentious point with teachers aligning themselves on either side of the debate. However, when teachers considered what they themselves would need to make a homework assignment a meaning making leading to transfer opportunity, they once more began to re-assess its particular value and wanted to discuss how to achieve consensus on the faculty if homework were to be used school or district wide. However, the rationale for the value of homework was not as important as understanding its purpose.

Finally, *Making a Presentation* as a typical classroom practice, is also used to demonstrate mastery of content or depth of understanding. Typical responses from participants pointed to what needs to be in place to add value to the experience.

Findings

Once everyone has completed his/her individual sheet, as a group we complete a blank version of Table 1. *What conditions must be present as a learner in our tried and tested teaching practices? We complete the process by asking ourselves what we need to do as teachers to make those conditions happen for diverse learners.* The representation developed gives everyone a frame of reference and a set of reminders to make the learning experience a meaningful one. While each completed Table had variations of answers, and are too numerous to list, each illustration offered teachers and administrators insights into their own instructional design, its strength and shortcomings, and, ultimately, their students' learning processes and needs. When used within a school, the process built ownership and yielded a rich and generative conversation and new, but common, understandings. This process works well with students as well. Following the exact same format, teachers can assess their learner needs and begin to plan accordingly. Each student then begins to see why her teacher is using a particular design and how he or she too can benefit from it.

The process levels the playing field and builds on what teachers already know. Everyone is already a learner. Everyone is therefore an expert of his or her own learning. No new learning is necessary.

During the April 2016 Ireland International Conference on Education, presenters shared the tool with willing participants. Following are some of their responses.

When “listening to a lecture,” academicians in attendance said they needed the following from the lecturer:

- *The subject to be interesting.
- *To add to the body of knowledge.
- *To answer specific questions.
- *To provide space to consider and time to play with the information presented.
- *To help the participant find similarities with his/her own understandings.
- *To connect with the participants.
- *To use various modes of presentation.
- *To be passionate about the subject presented.

When “working on a project” the academicians present said they needed the following:

- *The project has to have real value; not be a time-filler.
- *To like other members of the team if a team project.
- *To have choice in the approach to the topic.
- *To have full understanding of the concept at hand.
- *To make a contribution.
- *To make mistakes and explore.
- *To be able to cooperate with others.

When “making a presentation” academicians said they needed the following:

- *To be passionate about the subject at hand.
- *To be able to pose challenging questions to others.
- *To present to an authentic audience.
- *To field questions from participants.
- *To teach others something they did not already know.

The process was well received by those present as they could readily see its replicability in their own individual situations. Every time this process is shared participants comment with appreciation of its instant and easy use with their groups. The magic is actually in the individual and group participation and in the sharing of individual needs captured for everyone to see right away. Just having people complete the research tool without the group sharing is a waste of time. Because the process is not threatening at all and because it is based on what learners already know about themselves, the barriers and resistance disappear.

As learners, educators already instinctively know all these things. However, educators forget and tend to narrow the focus of their instructional design to the point that learners get lost and disengage in the learning process. The tool can be adjusted to fit whatever processes are most common in the particular grade level, institution, or discipline. For example, if the school is K-5, then typically certain processes may be more appropriate than others. To have

the most impact, the process should be limited to no more than four processes in an hour. The point of the process is to capture everyone's expert contribution as a learner. Everyone needs to feel as a contributor, an expert in his or her own learning, and a willing participant who commits to self-reflection and change. Obviously, the point is to move the needle with the people in the room. Just reading about how everyone else learns lacks the impact of being in the room participating. Therefore, using this process by design with small groups of 10-12 people optimizes the dialogue that ensues and the enlightening of all participants. Once everyone shares what they need to make the experience a meaning making one that leads to transfer, the professional dialogue that follows begins to illustrate the need to design using acquisition, mean making and transfer as the basis, regardless of the discipline or grade level.

Table 2 is a qualitative compilation of responses from a group of teachers in Toledo, Ohio.

Table 2: Qualitative Data from Toledo, Ohio.

Tried and Tested	Teacher Learning Needs	As a Designer of Learning
Class Discussion	<ol style="list-style-type: none"> 1. I need to have background knowledge of the topic to be discussed. 2. I need parameters so that the discussion is safe and does not get out of hand. 3. I need to know that we will be building on what we know individually. 4. I need to know that we will stay on task and not stray from the topic at hand. 5. I need to know that there is a so what with the discussion. 6. I need to know that there is order and respect in how we go about discussing. 7. I need to feel safe to speak. 8. I need a prompt or a cue to help me get started. 9. I need a relevant topic for discussion. 10. I need sufficient time to complete the discussion so that I do not feel rushed and cut off. 	<ol style="list-style-type: none"> 1. I need to set clear parameters with set expectations. 2. If necessary, I need to make sure that there is a group leader. 3. I need to guide the discussion on the side with guiding questions. 4. I need to motivate the group to engage fully in the discussion. 5. I need to make sure that the format or protocol is consistently followed to maximize use of time. 6. I need to make sure that students know the outcome beforehand. 7. I need to be engaged myself as the teacher. 8. I need to make sure that I provide closure and ask the students for their takeaways from the discussion.

Administrators are always looking for ways to provide meaningful professional development for their staffs. Is there a better way to focus professional development than one that comes from individual ownership based

upon his or her own learning needs? One particular example that focused professional development follows. Using the exact same process, participants identified the seven strategies that they wanted to complete within the time allotted. The process began with a conversation on acquisition, meaning making and transfer, what it means, how it shows up, and what are examples. Additionally, there was an important discussion on Philip Schlechty's levels of engagement. Teachers had to understand fully the difference between engagement that had learners committed to the task even in the absence of the teacher and compliance that had students merely doing the work to meet some of sort of external reward, a grade, a prize or the like. Unfortunately, students are quite often motivated to do the work simply to comply to receive the grade. Consequently, the task is completed and, if the student is a high achiever, the task is completed well. However, there is no lasting learning. Typically, the student promptly forgets what got him or her the excellent or at least passing grade on the test. The only thing that matters to the students is the grade that certifies that she or he has passed the exam or the course.

When teachers were asked what they needed as learners, their responses are captured in Table 3.

Table 3: Engagement Responses

Tried and Tested Teaching	Learning Needs	Designer's role
Filling out a worksheet	<ol style="list-style-type: none"> 1. I need to know the purpose. 2. I need to know what happens next. 3. I need clear instructions, directions, and a sample. 4. I need to have prior knowledge so that I don't become frustrated. 5. I need clear procedures. 6. I need a breaking down of the steps to facilitate my engagement. 7. I need the worksheet to be high interest (it must count). 8. I need a peaceful learning classroom environment. 9. I need to build on what I already know and apply skills I have practiced. 10. I need it to be relevant to what just happened during class. 11. I need it to be open-ended when possible. 12. I need feedback that I am on the right track. 	<ol style="list-style-type: none"> 1. Secure, create, and share resources that work with colleagues in my building. 2. I need to make sure that whatever I create is student focused. 3. I need to take cues from the students as I design the worksheet. 4. I need to make sure that the worksheet is purpose-driven and not a time-filler. 5. I need to offer it to the students in a timely fashion. 6. I need to design it so that it's just right (Goldilocks) and at the correct level of difficulty and depth of understanding. 7. As I design it, I need to focus on the process of learning, not just the end result. 8. I need to build in feedback that is non-evaluative, is descriptive and is ongoing.

<p>Homework</p>	<ol style="list-style-type: none"> 1. I need it to be limited in quantity but high in quality. 2. I need it to review what I already know so that I can deepen my understanding. 3. I need to have a “so what” for the task. 4. I need to know that I will get feedback. 5. I need a real life connection that grabs my interest. 6. I need to see how I will use this at some point. 7. I need it to incorporate a spiral review of what I have been learning. 8. I need to be able to self-assess along the way. 9. I need choice. 10. I need to know that there is some sort of reward...(intrinsic or extrinsic) 11. I need to experience a feeling of success. 12. I need to be able to do it by myself, without outside help. 	<ol style="list-style-type: none"> 1. I need to create an accountability system that works, based on the “so what.” 2. I need to create the situation myself whenever possible (not just commercial sheets or those taken from the Internet). 3. I need to locate good websites to help me design the homework 4. When I find something that works, I need to find time to share with my colleagues. 5. I need to design homework that has purpose and is meaningful, not busy work. 6. I need to remember that there is a possibility that someone may be helping with the homework. 7. I need to design homework that is achievable in the time and with the resources allocated 8. I need to build a safety net into my accountability system in case the homework is incomplete through no fault of the student.
<p>Class Discussion</p>	<ol style="list-style-type: none"> 1. I need to have background knowledge of the topic to be discussed. 2. I need parameters so that the discussion is safe and does not get out of hand. 3. I need to know that we will be building on what we know individually. 4. I need to know that we will stay on task and not stray from the topic at hand. 5. I need to know that there is a so what with the discussion. 6. I need to know that there is order and respect in how we go about discussing. 7. I need to feel safe to 	<ol style="list-style-type: none"> 1. I need to set clear parameters with set expectations. 2. If necessary, I need to make sure that there is a group leader. 3. I need to guide the discussion on the side with guiding questions. 4. I need to motivate the group to engage fully in the discussion. 5. I need to make sure that the format or protocol is consistently followed to maximize use of time. 6. I need to make sure that students know the outcome beforehand.

	<p>speak.</p> <p>8. I need a prompt or a cue to help me get started.</p> <p>9. I need a relevant topic for discussion.</p> <p>10. I need sufficient time to complete the discussion so that I do not feel rushed and cut off.</p>	<p>7. I need to be engaged myself as the teacher.</p> <p>8. I need to make sure that I provide closure and ask the students for their takeaways from the discussion.</p>
<p>Working on a group project</p>	<p>1. I need to know what our deadlines are.</p> <p>2. I need to know what the goals for the project are from the beginning.</p> <p>3. I need to know what my assigned role will be and why it's an important role.</p> <p>4. I need to work with other students who respect me and value my opinion.</p> <p>5. I need to know what our product will be and how it will be assessed against a rubric.</p> <p>6. I need an exemplar that I can use as a model.</p> <p>7. I need to know whether I will have choice in product, process, and role.</p> <p>8. I need to have access to the necessary resources from the beginning.</p>	<p>1. I need to make the project a progression in small chunks to insure success until students are able to do it on their own and provide appropriate feedback along the way.</p> <p>2. I need to release responsibility at the right time and build that into my design of the work.</p> <p>3. I need to provide the students with a clear rubric.</p> <p>4. I need to provide examples of excellent work so that students may use them as models.</p> <p>5. I need to build in feedback along the way so that students have an opportunity to redo the work if necessary.</p> <p>6. I need to give the students a realistic timeline for completion of the project.</p> <p>7. I need to provide directions in print to serve as the contract with the students.</p> <p>8. I need to give the students a powerful goal and a realistic purpose for their work ahead.</p> <p>9. I need to provide some reminders so that the group does not get behind in its work.</p> <p>10. I need to make sure that students know the point of the project.</p>

Following their contributions, eliminating duplicates and clarifying anything that seemed confusing, teachers were asked to look for commonalities across the processes and identify the ones that were most significant to each of them as learners. The faculty consisted of twenty-five members. Each participant was given a set of five sticky dots to vote for what they considered most significant on the various lists on flip charts around the room. The group was given 30 minutes to converse with other faculty members concerning questions they might have, issues that were raised, or other important details impacting their own learning process so that they could decide how they would vote. The intention for the vote was to further crystallize ownership prior to identifying what the faculty professional development would be for the year and what they would look for in their own instructional designs and in their peer observations. Everyone was poised to commit to improvement and growth. The voting process clustered particular needs and readily identified what the faculty as a whole needed and wanted. Here is a summary of what resulted from their choices.

1. Appropriate release of responsibility is evident.
2. Frequent and appropriate checking for understanding
3. Individual feedback is ongoing and evident
4. Clear statement of lesson goals
5. Instruction is interactive
6. Lesson is engaging and challenging
7. Appropriate time to practice learning during the lesson
8. Lesson is relevant
9. Activities are targeted and purposeful
10. Lesson connects to prior learning

This list provided them a guide for the year that offered a means for professional dialogue that was based on clear understandings of learning needs and on collaboratively achieved learning design targets. Everyone could now hold everyone else accountable because nothing had been imposed on them. They had designed their own school improvement targets that would actually pass muster against any set of critical elements. The beauty of this set of targets was that teacher resistance to change was virtually eliminated and that a spirit of collaboration was firmly in place.

Conclusion

The process of bringing teachers together to share their collective expertise while using the Boomerang Strategy honors the group's thinking, allows for creativity in helpful ways, thus providing assistive tools for providing meaning making and transfer of learned information. By having teachers and administrators complete this activity, they actually return to what they know already and have done in their own classrooms. What they identify collectively are reminders of what they already knew intuitively. This collective thinking then becomes a reminder of what they need to do as designers of learning, individually and collectively, to make the learning experience one that engages the learner and will ultimately lead to transfer of learning. Since the design of the learning task predicts learner performance and individual and group accountability begins with the tasks students are asked to do, this process has actually provided

educators at all levels and from all disciplines with real tools to include in their instructional design without being punitive or judgmental. Without declaring it, on their own, teachers come to the realization that planning for learning is not the same as planning for teaching. Terms such as collaboration and cooperation become real. They are no longer empty words that teachers distrust and consider a mockery. Teachers begin to trust as they see themselves as contributors to the greater good and to the learning of their own students. The process creates an opening for everyone concerned. In its simplicity it opens a multitude of avenues for improvement. Ideas that may have gone unnoticed are suddenly on everyone's front burner and brought to the group's attention. Having these tools at hand will lead to the creation of a powerful culture of instructional practice. As professionals, educators need to begin to see pedagogy as a collective and powerful practice leading to transfer of learning. As a result, when the learning environment shifts its focus to the personal growth of teachers and administrators, students, too, reach a higher level of engagement. Like their teachers and administrators, they also discover that learning is a personal endeavor involving autonomy, self-reliance, and commitment within the community of other learners (Dary, Pickeral, Shumer, & Williams, 2016).

Thus, as stated in *Neil Learning and Leading Cycles*, "Our work as leaders is to make sure that these types of structures and routines (knowledge building cycles) are embedded in the school culture and across the division so that all teachers come to understand that this is where we are going, and it is everybody's professional responsibility to continue to grow and learn" (Brandon, Saar, Frierson, 2016).

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