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THE VEXED NATURE OF LANGUAGE
LEARNING AND TEACHING*James Paul Gee***Introduction**

Language learning is a vexed topic. There really is no unitary phenomenon covered by the term “language learning.” Learning a first native language as a monolingual is not the same as learning two or more native languages (Grosjean, 1984, 2010). Learning to deal with a great many languages around you (as in parts of Africa) is not the same as learning to deal with one or two (Finnegan, 1988). People learn “foreign” languages in many different ways for many different purposes. Learning a language in a classroom is different than learning one *in situ*. Learning a vernacular variety of a language is not the same as learning a specialized register like the language of physics (Gee, 2004).

It is not surprising that learning language is not a single phenomenon, since language itself is not (Chomsky, 1986). The word “language” does not name anything very coherent from a theoretical point of view. German and Dutch are called different languages largely for political reasons and state boundaries. They could just as well be seen as dialects of the same language. At the same time, there are some dialects of German that are mutually uninterpretable, yet they are said to be the same language. Furthermore, any one language, like English or Russian, is composed of many different dialects and registers such as the language of physics or the language of Yu-Gi-Oh (Gee, 2004). Every speaker of a “language” fails to know many—actually most—dialects and registers.

And, then, too, written language is not the same as oral language, and the two are not learned in the same way (Gee, 2015; Pinker, 1994). Oral language has accompanied humans from at or near their evolutionary origins. Written language has not and is relatively new on the scene. Yet we call both of them “language.”

Talking about language teaching rather than language learning simplifies matters only if we take teaching just to mean formal classrooms. But the role of adult guidance in all sorts of language learning is important well beyond classrooms. Adults are the ones who usually meld language acquisition with primary socialization and enculturation. Extended talk with adults is also crucial for the latter acquisition of some registers like school-based forms of literacy and academic language (Gee, 2004, 2015). Adults serve as cultural brokers in many settings where people acquire languages initially as “outsiders.” Even classroom teachers can play many more roles than the role of instructor.

Indeed, the role of instruction (only one form or act of teaching) is vexed in the case of language teaching and learning. Instruction in grammar and/or via speaking drills treats a language as if it were “content” like the information in a history or chemistry textbook. While there are, indeed, people who know French only as written content to place into cloze tests in school, languages are not content but rather technologies for communicating and doing.

Real teaching—not just of language—involves several different acts. Informing (“saying”) is only one such act. Demonstrating or modeling, assessing and giving feedback, helping learners manage their attention (for example, to avoid cognitive overload), and designing well-mentored and helpfully constrained learning experiences in the world and in social interactions with others are other such acts (Hattie & Yates, 2013). Humans primarily learn from experience, but unguided, unconstrained, and unmentored experience can be overwhelming to beginners. That is why we have teachers, adults, and culture.

While there is a well-known empirical literature on learning, there is also a not-very-well-known but fairly robust empirical literature on what constitutes good teaching (Hattie, 2009). Since this literature has played such a small role in the training of teachers, it is not known to what extent it applies to language learning when languages are not treated as content but as sets of tools for saying, being, and doing in meaningful ways.

All this means that, after decades of work, it is not clear—at least to me—that we have anything like a coherent theory of the complex domains of language learning and language teaching. It is perhaps the case that—like other areas of science (e.g., psychology)—we have been misled by taking the everyday meanings of words (in this case, words like “learning,” “development,” “acquisition,” “teaching,” and “language”) too seriously as good guides for how to categorize the data and phenomena with which we are faced.

It is clear that language involves structure (grammar), function (meaning and action), and culture. In this respect, language is just like the human body. The body has a morphology or structural design in terms of organic parts and connections among them. Its organs and systems also have functions that are related to these organs and systems in complex ways. Finally, the human body exists in culture and

in environments utterly shaped by culture. At the same time, cultures have been shaped by the nature of the human body itself.

We can clearly—in the case of language or the body—study structure, function, and being-in-culture separately. But we have to study their connections and integration as well because they are integrated both in activities in the world and in growth and development (acquisition, learning). Furthermore, for both language and the body, structure, function, and culture take on different meanings and significance as an overall integrated system than they do when studied in isolation.

Going further, the connections between language and body are, in fact, much deeper than both being structure-function-culture systems. Language is “encoded” in the brain, a part of our bodies. Language is spoken and written by the body, usually for and with other bodies. Chomsky, for instance, treats language as an “organ” of the brain (Chomsky, 1986). And, finally, the basic semantics of all human languages are closely tied to how the human mind and body orient to space and time (Lakoff & Johnson, 1980). We keep things “in mind,” we can “lose” a thought, “fall” in love, “come back” to our senses, “grasp” an argument, and be “filled” with courage or “move on” in life. These connections are well studied in work on the localist (or locative) hypothesis and in cognitive linguistics (Ungerer & Schmid, 1996).

Situated (Embodied) Meaning

Having acknowledged that everything here is so complex, I certainly cannot speak to most of these issues I have just raised. Furthermore, my designated task is to say something creative about creative language teaching (where teaching might mean different things). To make matters simple for myself and for my readers, I will discuss but one phenomenon, namely what I will call “situated meaning” (it has also been called “embodied meaning”) and its implications for teaching in settings like schools, colleges, and centers (Gee, 2004, 2014).

People learning language in some fashion (there are many ways, remember) can know what a word (or phrase or structure) means in many different ways. Thus, consider an utterance like “The coffee spilled; go stack it again.” If you do not know that this means coffee cans or packages, then you cannot give the word “coffee” what I will call a situated meaning (properly contextualized meaning; for lovers of jargon, an “utterance token meaning”).

If all you know is that “coffee” names a drink or some verbal definition of “coffee” (e.g., “a drink made from the roasted and ground beanlike seeds of a tropical shrub, served hot or iced”) then what you have what I will call a “basic or verbal meaning” for the word (an utterance-type meaning). All you can really do is assign the word “coffee” some limited image or definition, not a full range of nuanced meanings fit for different contexts, let alone new meanings for new contexts.

By the way, if you think coffee is grown on a tree and not a shrub, you can still be a good meaning situator, though be a fact shy at a cocktail party. The issue of situated meaning and situating meaning (an activity) is not too serious for a word like “coffee,” but it gets more serious for words like “democracy,” “game,” “love,” or “work” (“Relationships shouldn’t be work,” “Work gives meaning to life,” etc.). If you cannot situate meaning for such terms and many more like them, then you are not really able to participate in culture and social interactions in a very wide way. In any case, I am here interested only in the issue of situated meaning in language learning and teaching.

One reason I am interested in situated meaning is that this phenomenon is crucial for people—native speakers or nonnative ones—trying to learn specialist registers and participate in specific functions or occupations. So a graduate student who says “God wants you to be my PhD advisor because I need help and it is your job to help me” (as was said to me in perfect English by a foreign graduate student who had lost her advisor) has situated meaning in the wrong way for me as a faculty member in a secular public university in the United States. I heard her (rightly or wrongly) as telling me that she knew better than me what my job was, that being needy is good grounds for accepting an advanced PhD advisee, and that I am going to disappoint someone’s god if I do not accept her.

Notice that the problem of situating meaning here might actually be mine—perhaps she meant this very differently—but, alas, in this situation, a student is supposed to consider how the faculty member is likely to situate what he or she says in the contexts of secular and (yes) hierarchical graduate institutions. The meek may inherit the Earth, but they get eaten by institutions if their language usage does not show due reflection on the nature of power and the social geography of society and its institutions.

I want to note again that this issue is as germane to a nonnative speaker as to a native one. Even a native speaker without a family background in “higher education” could have made this same “mistake.” So situating meaning is a topic for both second-language learning and register learning. Furthermore, since all academic content learning involves learning a new register, all academic learning is a form of language learning, and we, thus, add a great many language teachers (perhaps kicking and screaming) to our roles. For example, if you do not know that “work” means something different in physics than it does in the vernacular or that “heat” and “temperature” mean something different in chemistry than they do in the vernacular, you are on the way to failing your science course.

Mind, Experience, and Language

Before we get to my possibly creative idea about creative language teaching, we need to say something about the human mind and its relationship to language and the world (Gee, 2004, 2015). We once thought the human mind worked pretty

much like a digital computer. Digital computers are good at calculating, abstracting, and processing information by rules. They are really “syntactical” devices that process symbols and assign them rather general meanings. Recent research has shown that human minds do not, in fact, work like digital computers—indeed, that’s why we have digital computers. Digital computers are good at keeping your bank checkbook correct; human minds are not. Humans are good at recognizing faces; digital computers are not.

This recent research argues that our minds are filled with records of the experiences we have had in life. When we have an experience, we store it in our minds (human memory of experience is nearly endless). This mental storage works best and most deeply for experiences in which we have had a goal for an action about whose outcome we really care. Goals, action, and emotional investment are important for well-organized memories that are well integrated with the rest of our knowledge.

We do not store experience in an unedited form. We pay attention to the aspects of our experiences in certain ways. We pay more attention to some elements of an experience than we do to others. We then store the experience in our minds in an edited fashion with certain elements foregrounded and others backgrounded.

Experiences for humans need not just come from the “real world.” We treat what we have heard from others, seen in movies, and read in books as vicarious experiences. Indeed, humans often respond to media emotionally as if it were “real” (for example, we cry in movies) and they sometimes have a hard time remembering what was “real” and what was not.

We humans use past experiences not so much as a memory bank to get nostalgic about the past but as materials to help us think about what we are going to do in the future and plan it before we do it. That is why human memory is not all that factually accurate. It matters more, from an evolutionary point of view, that a memory prepares us for successful action and survival in the future than that it is a faithful reflection of the past.

That the human mind is built by associations, networks, and connections from personal experience raises a deep problem. Because humans can have very different experiences in the world and, thus, very different minds, how do they ever learn to communicate and collaborate across such differences? The answer is social groups and cultures. Social groups and cultures—via mentoring and teaching—ensure that newcomers get many of the same experiences and edit them in similar fashion so that their minds fit with the minds of more advanced members and with each other. For example, birders take out new birders and see to it that they end up in the right habitats and pay attention to the right things so they can share minds and practices with other birders. In this sense, the mind is social. Except for social isolates, the mind is shaped by experiences that have been in turn shaped by teaching in a broad sense.

There is also a problem with language, and it is a classic chicken-and-egg question. Language gets situated meaning from contexts (that is, from the elements in our past experiences relevant to what we say or hear). Experience (in the world and in the mind) gives meaning to language. We can even use past experience creatively to situate new meanings for words, for example, for “coffee” in an utterance like “Big Coffee is as bad as Big Oil.” But, at the same time, languages (and registers and other symbol systems like geometry or algebra) categorize, cut up, and regiment experience in certain ways (Vygotsky, 1987). Different languages, registers, and symbol systems help us to put a “grid” on our physical and social worlds so we can see them as organized into certain sorts of elements and combinations of elements.

So which comes first, language making experience comprehensible and meaningful in certain ways or experience giving language situated meanings that make it comprehensible and meaningful in certain ways? It is interesting that learning in schools tends to start with language (talk and texts) and only then move on to experience. Informal learning out of school often moves in the opposite direction, starting with experience and then moving to language (talk and texts).

In fact, most learners cannot learn deeply without starting with experience so that they have some fodder with which to give useful meanings to language in use. In school, some children have gotten lots of experiences at home to bring to the academic language they face, while others have not, and these others fare less well.

It is core to good teaching (here are the bare beginnings of my putatively creative idea about creative language teaching) that experience (situated meanings) and language (as system) bootstrap each other for learners. For beginners, they must alternate move by move in a dance. This is certainly true of first-language learning (where performance comes before competence). In such learning, “teachers” (parents, mentors, adults, and more advanced peers) use language “just in time” and “on demand” (Gee, 2003). “Just in time” means giving a short piece of language right when it can be applied to experience and married to it to demonstrate situated meaning. “On demand” means longer stretches of talk, symbols, and texts when learners are ready for them, prepared for them, need them, and know that and why they need them. This is, of course, after extended experiences have prepared the ground and created some useful ways of situating meanings.

There is a “funny” opening to one version of the video game *America’s Army* (a multiplayer game used for training and, in a public version, for entertainment). You as player start by hearing a flip-chart lecture that later, when you are in the field, you cannot remember or apply. The lecture’s words are about a world of images, actions, dialogue, and experience that you have not yet experienced. The words have no situated meanings, only basic or verbal ones. This beginning is meant to parody school-based learning because the Army believes in situated learning (including using video games for experiences where no one can actually get hurt). At an education conference once, someone asked a colonel why the Army taught

the way it did, using games and simulations. The colonel said, “Because we often get the kids you failed. If we teach them the way you did, this time they die. You educators should be ashamed that the Army was the one to start this.” Amen.

Social Languages and Discourses

Languages at the size of “English” or “Russian” are composed of a myriad of what I will call “social languages” (Gee, 2014). Social languages (some of which might be called dialects, registers, varieties, or styles or by other names) are styles of using words, grammar, and discourse to enact a socially significant identity. This identity might be connected to a place, an ethnicity, an occupation, or a shared interest. Social languages are distinctive ways with words that betoken a “location” in social space. Social languages include the various different ways with words in mathematics, science, gaming, carpentry, business, law, street gangs, gardening, cooking, birding, theology, and a great many more activities.

When someone wants to enact a socially significant identity, they have to get their style of language “right” (recognizable). They have to “talk the talk.” But that is not enough. They also have to “walk the walk.” They have to act, interact, and dress “right.” They have to value, think, and believe the “right” things (or seem as if they do). They have to use various sorts of objects, tools, and technologies in the “right” way. And they have to do all this at the “right” times and places. They have to be, say, and do the “right” things so that they can get recognized as having the “right” socially significant identity at a given time and place (that is, the identity recognized by a social or cultural group who created and sustains that identity).

I use the term “Discourse” with a capital “D” (Gee, 2014, 2015) for any combination of ways of “talking the talk” (ways with the words = a social language) and “walking the walk” (ways with thinking, doing, and things). I use the term “Discourse” because such identities as “Fundamentalist Christian” and “Evolutionary Biologist” or “L.A. cop” and “L.A. Street Gang Member” talk and interact (“discourse”) through history with each other via the transitory human minds and bodies that instantiate them for a time and are ultimately replaced by others.

Being able to enact and recognize identities within Discourses (= “talking the talk” + “walking the walk”) is deeply consequential in society. The graduate student I mentioned earlier—the one who had lost her PhD advisor—needed to get recognized as an advanced graduate student in an American university, and she needed to know what to expect from someone being (at a time and place) an American university research professor. Failing this, she was in danger of being thrown out of graduate school because she had no advisor and, subsequently, in danger of losing her student visa. It matters. And it is clearly not just a matter of getting your grammar right. The student needed to say, be, and do in the “right” ways.

So here I am concerned only with language teaching that focuses on social languages and Discourses. This means helping learners be able to use language

in combination with ways of acting, interacting, valuing, and using objects, tools, and technologies so as to “pull off” consequential identities, whether this identity is being an “informal person” in a certain part of the United States, an advanced student of biology in an American University, or a fellow Yu-Gi-Oh fan. Teaching people just to be able to “speak English” does not let them actually enact and recognize identities so they can navigate society, institutions, and sociocultural spaces in that language.

Creative Language Teaching

People often acquire new social languages and Discourses and the ability to situate meanings by immersion in a group that offers various forms of mentoring and teaching. Of course, in this “natural” process, not all groups cut newcomers a lot of slack. In some cases, it is helpful to have teachers in more caring and “safe” environments (but not if they do not prepare learners for what is to come).

So what might be a model of teaching, teaching for social languages, Discourses, and situating meaning? Well let me start with an odd example, namely learning the social language of Yu-Gi-Oh, an anime card game (Gee, 2015). This example is meant to have two purposes. First, it is one example of the model of creative language teaching I want to offer here. Second and more importantly, it is a metaphor for a whole class of methods that incorporate the same principles but in different ways with different tools. I am not asking people to make card games (though that is one thing you can do, but only one).

Yu-Gi-Oh is, like Magic the Gathering, a complex card game played face to face or in video games. Players select a deck of 40 cards from literally thousands of possible cards. Each card has written on it what it can do in the game. Each deck contains types of cards that facilitate a given strategy of play. Players must anticipate what might be in the other player’s deck and must be prepared to respond flexibly and creatively to challenges they face moment by moment in the game.

Each Yu-Gi-Oh card has certain powers and limitations and must be played in the right context of ongoing game play to be effective. A player has to fully understand the print on each card and understand how that print applies in concrete situations in game play.

Yu-Gi-Oh language is a complex social language. It is, in many ways, as complex as so-called academic language. Here is an example of one card (minus the picture on it):

Cyber Raider

Card-Type: Effect Monster

Attribute: Dark | **Level:** 4

Type: Machine

ATK: 1400 | **DEF:** 1000

Description: When this card is Summoned: Activate 1 of these effects.

- Target 1 Equip Card equipped to a monster on the field; destroy that target.
- Target 1 Equip Card equipped to a monster on the field; equip that target to this card.

And here is just a short bit from the official Yu-Gi-Oh rule book and a short bit from a web site where players can resolve disputes about the rules:

In order to Synchro Summon a Synchro Monster, you need 1 Tuner (look for “Tuner” next to its Type). The Tuner Monster and other face-up monsters you use for the Synchro Summon are called Synchro Material Monsters. The sum of their Levels is the Level of Synchro Monster you can Summon. http://www.yugioh-card.com/lat-am/rulebook/YGO_RuleBook_EN-v8.pdf

8-CLAWS SCORPION Even if “8-Claws Scorpion” is equipped with an Equip Spell Card, its ATK is 2400 when it attacks a face-down Defense Position monster.

The effect of “8-Claws Scorpion” is a Trigger Effect that is applied if the condition is correct on activation (“8-Claws Scorpion” declared an attack against a face-down Defense Position monster.) The target monster does not have to be in face-down Defense Position when the effect of “8-Claws Scorpion” is resolved. So if “Final Attack Orders” is active, or “Ceasefire” flips the monster face-up, “8-Claws Scorpion” still gets its 2400 ATK.

(http://www.upperdeckentertainment.com/yugioh/en/faq_card_rulings.aspx?first=A&last=C)

So Yu-Gi-Oh clearly has a social language of its own. And, clearly, to be accepted as a Yu-Gi-Oh player—let alone as a real fan—it is not enough just to know what the language means. You have to be able to do the right things in and out of the game at the right time with the right attitudes, values, and ways of interacting with fellow Yu-Gi-Oh enthusiasts. Yu-Gi-Oh is a Discourse.

So how does Yu-Gi-Oh get taught? Note that the company that makes the thousands of Yu-Gi-Oh cards would go broke if it could not ensure that its complex game and its language got learned. Here is how teaching and learning works in Yu-Gi-Oh:

First, language is given meaning by specific actions, images, effects, and dialogue in the game (by experience). The language on a card is associated with a physical move of the card on the game space between the players. The move in turn is associated with an action in the game (both as a story of a battle and as a chess-like game). The language is about the

world of the game. That world gives it meaning, not just definitions for the words.

Second, the rule book and numerous guides on websites show players how the language of Yu-Gi-Oh regiments the ontology of the Yu-Gi-Oh universe. But you do not want to read this stuff first. After you have experienced a good deal of play and found patterns and subpatterns in that experience, then you are ready to understand the rule book and websites. In turn, these sources give you a much greater meta-awareness of Yu-Gi-Oh language and play. And they allow you to learn to articulate in words and arguments the tacit understandings you have gained from play.

Third, many interest-driven fan sites on the Internet offer tutorials and cater to people's different learning preferences (e.g., didactic, guided play, watching games, individual coaching, and so forth). People can learn socially or alone.

Fourth, the company makes books, movies, and TV shows, all of which enact Yu-Gi-Oh language and game play in terms of dramatic stories of the "monsters" acting out the same moves they make in the game in story form. This shows—and not just tells—how the rules work and what the words of Yu-Gi-Oh language mean. It also keys players into how to think about the game, its language, and its universe (which is part of the much larger anime universe).

Fifth, these books, movies, and television shows, together with the interest-driven websites and video game play, help players learn how to manage their attention and cognitive load in the face of experience filled with complex details, images, actions, words, and possibilities. Players learn what to pay attention to when. This helps them store these experiences in effective and well-integrated ways in their mind and prepares them for future play at higher levels.

Sixth, early on, there are various forms of play available where players can try things out with a low cost for failure. Players can explore and can come to see failure as a form of feedback and learning. Complexity is constrained in such early play by simplified versions of the game or games played on an easy level. Video games offer early games in which complexity is greatly lowered and only a few variables are relevant. Thus, their interaction can be seen clearly. Multiplayer video games pair players by their level of play so that competition is fair and useful for learning.

Seventh, language is never divorced from action and purpose. Players either speak and apply Yu-Gi-Oh language "just in time," move by move in game play and see what happens, or they seek out lots of language (quite often very abstract and complex language) when they need it, are ready for it, and have a purpose for getting it. They often use such "on demand" language from the rule book or websites for arguments and discussions with others about rules, strategy, and possible modifications of the game. They become theoreticians of game play.

Eighth, Yu-Gi-Oh is a highly interactive social space in which players in person and on websites discuss the game, modify it, talk about strategy, share information, help each other, and sometimes teach and sometimes learn, since there are always players below and above one's current status. These spaces of talk, interaction, and guidance—almost always stressing making and producing and not just consuming and stressing active participation and not just spectating—are what I have elsewhere called “affinity spaces.” People learn to share an interest—even better, a passion—and orient to that interest or passion not to grades or outside statuses connected to race, class, gender, or ability.

Ninth, Yu-Gi-Oh does not use time as a measure of learning. It uses mastery and trajectories to mastery as a measure of learning. It does not matter how long it takes to become a good player. And there are different trajectories to mastery.

Tenth, Yu-Gi-Oh is not assessed by one-off grades or “drop out of the sky” decontextualized tests. Players can find out how they stand on multiple variables compared to many other players across different trajectories of development toward mastery. Data are everywhere, and there are lots of people there to help interpret them. The focus is on growth and progress on multiple fronts, not on getting a grade with no real operational meaning. Learners expect to get feedback that helps them know what to do and how to get better, and they expect to get feedback from multiple sources with different perspectives or focuses. Furthermore, peers know where each other stand, discuss it, and regularly see models of exemplary play, so they know what to shoot for.

Beyond Yu-Gi-Oh

There are people currently making card games for language learning, but that is not my point here. My point is the principles Yu-Gi-Oh adopts. My point is to focus on social languages, Discourses, identities, and situated meanings. And, finally, my point is to focus on a distributed system of teaching and learning that uses multiple tools, media, activities, platforms, and forms of social interaction beyond the classroom.

It may seem that Yu-Gi-Oh is a very untypical case. But I would argue that any social language is given meaning by the “game” it is in and the world it is about. That is, it is given meaning by the activities, goals, experiences, and interactions that it fuels. This is certainly true of physics, gardening, and being a graduate student. When we treat something like physics as just a body of inert content, we are not teaching physics as a “game” but as dead letters. When physicists play (work) they use information (content)—just as Yu-Gi-Oh players do—but they use content to do and be things. Facts and information—formulas and principles—are tools to solve problems.

So I want to argue that the Yu-Gi-Oh principles are more general. They characterize a possible type of language teaching. Let's call this Discourse teaching and not just language teaching or call it teaching language for Discourses.

The principles of such teaching, as we have Discussed them in Yu-Gi-Oh, are:

1. Teach the game (activities, practices, problems, challenges) the language is about. Relate words to experiences of play/work/problem solving.
2. Offer learners well-mentored, well-modeled extended samples of talk and text in the relevant social language so that they can learn the language that regiments their experience and defines its ontology. But do this after and side by side with experience that builds up situated meanings and creates preparation for future learning.
3. Offer multiple ways to learn and multiple tools and platforms of learning. Encourage learners to try several ways to learn and to try new ways. Encourage them to switch ways if one way is not working. But do not encourage learners to pass up challenges or not to persist in past failure.
4. Use multiple forms of media and multiple forms of social interactions to exemplify how to "talk the talk" and "walk the walk" and how to reflect on and think about these things during and after practice.
5. Offer constrained, well-mentored, well-designed experiences of individual and collaborative problem solving but with help for learners to know what to pay attention to in the experience and how to do so. Give learners help with managing their attentional economies and lower cognitive load for beginners.
6. Lower the cost of failure. Encourage learners to explore and try things.
7. Don't divorce language from action and experience. Use language (and information) either "just in time" when it can be applied and reflected on in application or "on demand" when learners want, need, or ask for larger blocks of language. Use such "on demand" language (see point 2) to get learners to engage in articulation, meta-level thinking, and discussion about theories and strategies.
8. Make learning highly interactive so that each learner gets to make, design, lead and follow, teach and learn, discuss and argue, and gain a shared passion for what they are doing in a community of practice, activity system, or affinity space (choose your favorite term).
9. Do not measure learning by time but by different trajectories to mastery. Be sure there are multiple models of mastery along the way and that they are discussed so learners can begin to share paradigms of excellence.
10. Assess on multiple variables across time in relation to multiple paths or trajectories different people can take to mastery. Offer operational feedback. Remember that growth is often U-shaped. Learners initially get better, then they get worse (as they are cognitively reorganizing their knowledge) and then get better again at a higher level. Watch out for downgrading people at the bottom of the U. Failure there is an indication of real learning.
11. Think of teaching as designing and resourcing a learning system with moving parts as the Yu-Gi-Oh company does.

I do have to add this as a personal peeve: Lectures are not bad when done right at the right time. Discussions are not good when done wrong at the wrong time. Learning is not just about leaving learners unchained for discovery. It is about getting the teaching, mentoring, guiding, and resourcing that learners need at whatever point they are at in the trajectory toward mastery. Toddlers don't need ten-foot basketball poles when they are learning.

Well, that is it: my (maybe) creative proposal for creative language teaching. Of course, readers will have to make it real and concrete. I cannot and should not tell teachers what to do Monday morning. They are professionals and should be or become designers. And, further, it is not about what you do Monday morning but what you do over the long haul. It is about what you make.

Questions for Discussion

1. How does regarding language as a “technology” or “set of tools” change the way we approach teaching it? How does this relate to the points Jones makes in his chapter?
2. Gee says that learning a language is learning how to be a good “meaning situator.” What are some of the ways classroom teachers can help learners accomplish this? What sorts of classroom activities might not help (or even hinder) them in accomplishing this?
3. If successful language use demonstrates the ability to reflect on “the nature of power and the social geography of society and its institutions,” can “creativity” aid in the development of such ability? What is the relationship between creativity and power?
4. How can the ways we experience things, store those experiences in memory, and make plans for the future be considered creative acts?
5. Choose any of the 10 principles for “Discourse teaching” that Gee enumerates and discuss how you might apply it in your own teaching.
6. Gee insists that often, failure is an indication of real learning. What is the relationship between failure and creativity?
7. Gee says, “teachers should be or become designers.” What does he mean by this? What kinds of things do teachers design? What is the difference between “designing” a lesson and “planning” it in a more traditional sense?

Suggestions for Further Research

1. Interview people about some activity that they have learned to do with a high degree of competence or expertise and find out what factors (social, situational, attitudinal) affected their success. See if you can identify any common themes in your interviews.
2. To what degree do current practices in language teaching concern themselves with teaching students “social languages” and “Discourses”? Survey

the teaching materials and classroom practices in your particular teaching contexts to find out. See if you can discover ways that they do and ways that they do not, and make recommendations on how these important aspects of situated language use can be addressed in classroom teaching.

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