Adapted from William Timpson (2002) *Teaching and Learning Peace* (Madison, WI: Atwood).

CREATIVITY CONCEPTS AND COGNITION

Mairead Corrigan Maguire (2000) was the winner of the 1977 Nobel Peace Prize for her work in Northern Ireland involving ordinary people in the effort to end the historic violence there and build a culture of peace. When addressing these kinds of complex issues, with all their systemic reasons and historic roots, she notes Gandhi's insistence that "nonviolence does not mean passivity. It is the most daring, creative, and courageous way of living, and it is the only hope for the world. Nonviolence demands creativity (p. 161)." In Maguire's outline for a sustainable peace, you can see just how daunting the challenge really is. In the comments that follow, she offers recommendations that can help students begin thinking creatively about the active dimensions of nonviolence.

> *Fifty years after his death, Gandhi challenges us to pursue a new millennium of nonviolence. This is not an impossible dream. First, we need to teach nonviolence…. Second, as individuals, we can exorcise the violence and untruth from our own lives. We can stop supporting systemic violence and militarism, and dedicate ourselves to nonviolent social change. We can take public stands for disarmament and justice, and take new risks for peace. Third, we can urge the media to stop sensationalizing violence and instead to highlight peaceful interactions, promote nonviolence, and uphold those who strive for peace. Fourth, we can embrace the wisdom of nonviolence that lies underneath each of the world's religions.…The world's religions need to come together in dialogue and respect, because there can be no world peace until the great religions make peace with one another.…Fifth, we need to pursue Gandhi's dream of unarmed, international peacemaking teams which resolve international conflict.…Perhaps the greatest contribution we can pay to Gandhi is to work to eliminate poverty from the face of the earth. Gandhi said that poverty is the worst form of violence* (161-162).

To help students consider the importance of nonviolent alternatives at every level, encourage them to explore the creative process. Most people have some intuitive feel for what's creative. We can think about it as innovation or insight, new ideas or possibilities, "thinking outside the box" or "pushing the envelope." Although we may be able to see creativity in others, we may not know much about cultivating our own creative potential. If you believe people like Maguire, creativity becomes especially important for promoting peace in the midst of conflict. If you believe the futurists, creativity will become increasingly valuable as computers and technology continue to expand into every aspect of our work and personal lives, freeing us up to explore, design and create new possibilities for old problems.

The question is, how do we best use our creativity? As a nation we can, for example, continue to put vast resources and creative energies into research on new weapons systems and our capacity for war generally or we can begin to insist on new mechanisms for peace. The U.S. currently spends $100 million dollars a day just maintaining its

nuclear arsenal. Our annual military expenditures are more than the sum of the annual military expenditures for the next fifteen countries combined. We have a cabinet level Department of Defense as well as three military academies. When do we get a Department of Peace and at least one "peace academy?"

Paradoxically, the ability to think in new ways can become increasingly difficult for young people as they move through their formal schooling. Despite their natural curiosity and drive for independence, students spend many years in formal classroom settings where they are taught to follow certain rules, master particular skills, regurgitate known "facts" and hypothesize about various theories. How much of their innate inquisitiveness and spontaneity, for example, gets stifled or lost because of this kind of prescribed learning? If you become very proficient at jumping over educational hurdles, do you run the risk of losing sight of the journey your inner self wants to make? Remember the famous Robert Frost poem about the "path less taken" and how "that made all the difference"? Addressing these kinds of questions is at the heart of the creative process.

But what defines creativity? What do we know about it? Can we recognize it? Can we teach it and how? Patrick's (1955) identification of the stages of creativity has proven useful as a starting point. The first stage is *preparation*, where you collect data and resources. Because of the very nature of creativity, however, how you prepare may be open to question. If you really do want a fresh look at an old problem, what data do you look at and what resources do you collect? When you take on some project for peacemaking, for example, you will need enough time to talk about your ideas and get lots of input, to read widely, to explore resources in the library, on the Web or in the community, to consult with others, etc. Early in this process, you will want to be active and organized but consciously uncommitted to any specific outcome, open to different perspectives and new insights.

According to Patrick, the second stage involves *incubation*, where you dwell on various ideas and possibilities, some of which may seem quite far-fetched, without a focused (or even conscious) attention to any one particular solution. You have to let ideas percolate, and then be alert to what bubbles up. Know that this process can take considerable time and cause frustration. However, just knowing about the role of incubation can help you better plan and manage this aspect of the creative process.

The third stage involves *illumination,* or what has been called the *Ah-ha!* phenomenon, when a solution may suddenly spring to mind. Whenever you feel stuck with nothing new coming to mind, you have to trust this stage in the creative process and wait. You never know when a flash of insight will happen. Useful ideas often arise when people are doing something else.

A fourth and final stage requires *verification*, when you assess the implications of your insights and conduct any additional experiments as tests of your ideas. Not all creative insights will be useful. Some might be absurd. Use this stage to assess whatever surfaces.

Now return to the challenges set out by Maguire. How can Patrick's stages help us think about teaching nonviolence or ridding our own psyches of its influence, about changing the focus of our media and celebrating peacemakers, about addressing poverty and racism as fundamental sources of conflict? Understanding more about creativity can provide much needed patience and wisdom. At the American Educational Research Association's annual conferences, the Special Interest Group on Peace Education has often featured speakers from Northern Ireland. I have been impressed with the mix of resourcefulness and perseverance in their efforts to end the violence in that long-suffering land. Schools, for example, have been the site for trying new approaches to nurture peacemaking.

Explorers, Artists, Judges and Warriors

Roger von Oech (1986) has a delightful book titled, *A Kick in the Seat of the Pants*, in which he hypothesized four essential roles in the creative process. The *explorer,* the *artist,* the *judge* and the *warrior* represent qualities that underlie innovation. Anyone of us, insists von Oech, can develop our own creative potential by nurturing these qualities in ourselves, by putting on these different "hats" and "costumes."

The *explorer* in us can take risks and venture forth into the unknown of peacemaking. In the summer of 2002, my workshop, "Teaching and Learning Peace," led directly to the writing of this book. Despite a short timeline, other responsibilities and deadlines, a spirit of adventure fueled my work. I wasn't sure I could pull it all together, but it seemed to be the right thing to do, a contribution to peacemaking I had made a promise to myself to complete after the attacks of September 11, 2001.

The *artist* in us can also bring some aesthetic appreciation to this work for nonviolence, giving us intuitive insight and another perspective. Years ago I got to visit the Children's Peace Memorial in Hiroshima, Japan. Every year, schoolchildren from all over the country bring their paper chains of origami peace cranes to dress this statue. Instead of a stoic testimonial, this statue has an engaging and enduring vitality to it, brilliantly colorful and ever changing, but requiring the attention and effort of many schools, teachers and students every year to sustain.

The *judge* in us can be both analytical and decisive. As an example, in the days after the attacks on September 11, a few of us on campus worked to organize two teach-ins. We had to make a lot of decisions in a very short amount of time—who to invite, where and when to host the event, how to advertise. The situation demanded a quick turnaround time in order to be effective.

The *warrior* in us can go out in the world and make things happen, sometimes, however, at some risk. There were a few criticisms of various speakers during our teach-ins. In a public forum, with complex issues that evoke strong feelings, would you expect anything else? In von Oech's language, the *warrior's* spirit allowed us to persevere and celebrate this kind of peaceful engagement, no matter how emotional. Nearly everyone with whom I talked, and especially the students, seemed to appreciate the opportunity to understand

more about the background to the attacks and to hear from people with different backgrounds, beliefs and values.

Another example becomes useful here, a bittersweet story about creative solutions under threat in a complex world. Reclaimed vacant lots in New York City that once were eyesores and dumps had been cleaned up by volunteers in the neighborhood and planted with vegetables and trees. Here was a local, creative community-based and life-affirming solution to neglected and often dangerous areas. Suddenly there was a place and a reason for city folks and gardeners to come together. But then came the violence of bulldozers as developers pushed to make way for the construction of new housing (Bruinius, 1999). As this story unfolds, you can see the stages of creativity as well as the roles that were played out.

> *For decades, many urban communities have cleaned up abandoned garbage-filled lots and planted gardens—often with the cities' encouragement—in an effort to improve their neighborhoods. As the economy thrives, however, these city-owned lots are now prime targets for development....So far, 44 gardens have been bulldozed....The city plans to auction 112 more in May, as part of an effort to sell some of its 11,000 vacant lots. It contends the land is needed to build affordable housing. But many community activists find it ironic that the work neighbors did to improve their communities and increase the value of the land is one reason the gardens are threatened...*
>
> *Community gardens began blooming in big cities in the 1960s and '70s as a result of the civil rights movement and its effort to find ways to improve decaying urban areas....The city contends gardeners knew from the start use of the land was temporary....But activists like David Crane say there are plenty of other parcels the city could use...*
>
> *On the block surrounding the lot where the Garden of Love used to be, 11 tenement buildings stand empty, their arched windows and ornate doorways boarded up....At the space where (local teacher and gardener) Goodridge and his students used to plant trees and listen to stories, a new, shiny chain-link fence now encloses the empty lot. Bricks jut out of the rocky soil still marked by bulldozer tracks, and garbage is already beginning to gather. 'The fence says they won't be building anything here soon,' says Goodrich* (2, 4).

You can see signs of the roles described by von Oech in this story. Facing empty, trashed-out lots where drug dealing and violence were often spawned, these neighbors called on their own talents and energies for a creative solution. On your own campus, is the idea of a garden viable, a place to raise fresh vegetables? Do you find the idea attractive? (You may need your *artist's* hat to answer that.) Can you *explore* the possibility of converting unused land into garden space? Would others get excited about that kind of possibility? Would this issue resonate with student idealism about a better world and about putting theories into practice? How could you find out? Here you will need your analytical *judge's* hat. Along with the food you could grow, what are the other

savings you could get by converting grassy areas which require water, chemical fertilizers, pesticides and weed control herbicides as well as human and other resources to mow and maintain? Do you like this idea enough to put your *warrior* into action? Becoming alert to the "violence" we commit on our own campus spaces may help link awareness to conflicts far away. Lessons learned in using our creative talents locally may help develop the skills we need for peacemaking elsewhere.

Mental Traps

In *The Ecology of Commerce,* Paul Hawken (1994) challenges traditional thinking about the relationship between economic productivity and the environment, and between the ignorance and selfish consumerism that underlies inequities worldwide, so often the source of conflicts and war.

> *Gasoline is cheap in the United States because its price does not reflect the cost of smog, acid rain, and their subsequent effects on health and the environment. Likewise, American food is the cheapest in the world, but the price does not reflect the fact that we have depleted the soil, reducing average topsoil from a depth of twenty-one to six inches over the past hundred years, contaminated our groundwater (farmers do not drink from wells in Iowa), and poisoned wildlife through the use of pesticides. When prices drop, effectively raising real income, people don't need to think about waste, frugality, product life cycles, or product substitution. When prices rise, people have to reconsider usage patterns. This may be painful at first, but it generally results in innovation and creativity* (76).

So what do we do? If Hawken is right, how do we avoid falling into guilt and despair over these enduring realities? Do we become paralyzed, defensive of our lifestyles and choices but in denial about real solutions? How do we get to innovative alternatives? Are too many of us locked into one way of thinking, addicted to our own "stuff," our cars and disposables, unable to see other possibilities, unwilling to rethink our assumptions, beliefs, values and behaviors? Does a sustainable peace require this level of soul searching?

In *A Whack on the Side of the Head*, Roger von Oech (1983) describes the creative process itself, the "locks" that confine our minds and how each of us can increase our own inventiveness. If we think through von Oech's "locks" and the challenge from Hawken quoted above, we may be able to see places where we have gotten trapped by our thinking.

Mental lock #1: The insistence on the "right" answer

It's a natural, developmental process to think about what's right. Perry (1999) refers to this as *dichotomous thinking,* where "truth" is objective, externally determined by research and authorities, textbooks and teachers. But look at the ongoing debates that swirl around our response to various conflicts and what the impact will be on tour own economy. "Experts" line up on all sides of any issue, loudly proclaiming the truthfulness

of their solutions. Who's "right?" What might be "true" about each position? Is a polarized debate useful? How can we learn from each other?

As Perry argues, intellectual maturation requires a growing ability to handle complexity and ambiguity, to sort through various arguments, to examine the data available and know when to seek further evidence, to ask questions and stay open to possibilities while developing an internal self-confidence or *agency.* Is there one right answer to the picture which Hawken paints, our inability to assign appropriate costs to the market's depletion of the environment? Is there an important economic lesson from the attacks on September 11th, for example, that we cannot abandon a military ally and its war torn landscape to the ravages of poverty and warlord chaos? Or do we need to begin to think in some very new ways?

Mental lock #2: A preoccupation with what is assumed to be logical

If you listen to advocates for the free market, you will hear all the reasons why tinkering with the economy will only cause problems, e.g., artificial manipulation of interest rates, the subsidy of various practices or the imposition of protective tariffs. You'll see all their graphs, charts and formulas, and you'll hear all their stories from the past where people wandered from the fold of marketplace orthodoxy. They'll also leave you with the "only" logical conclusion that they must be RIGHT! But wait, cautions von Oech. Are we making some faulty assumptions here? Are we using suspect logic? Are there are other ways to think? For instance, can we have a more "intelligent" market economy if we factor in the costs to the environment from pollution or from using our military forces to protect our "national interests" around the globe, formulas which might decrease our wastefulness and reduce the risk of bloodshed?

Mental lock #3: A conforming impulse to follow the rules

Why do we follow rules in the first place? Part of the problem may be our own place in the hierarchy, our need for employment, to fit into some corporate or organizational culture. Too many of us may be following conventional rules and therefore blinded from seeing other possibilities. Lawrence Kohlberg (1963) refers to mindless "obedience" as the lowest stage of moral thinking. Given Hawken's description example about accumulating environmental damage, we might find new ideas in more activist groups like Greenpeace and Earthfirst . Nonviolent civil disobedience has a long and storied history among peacemakers. If Hawken is right and the problem is largely us and how we do business, when do begin to get creative about the rules we live by?

Mental lock #4: The call for practicality

Have you ever used the phrase, "Let's be practical?" What does that really mean? Do you ever find yourself dismissing some ideas because you're convinced that "they just won't work?" And then you find out you were wrong? In later chapters of his book, Hawken describes businesses that have adopted environmentally sustainable principles and succeeded, something that may originally have been dismissed as impractical. One

example is of a carpet company, *Interweave,* which developed a system of sectional design so that a small soiled area could be replaced without ripping out an entire room and dumping a lot of perfectly good carpet into a landfill. Thinking more sustainably about the environment may help us develop a broader, more enduring vision for peace.

Mental lock #5: The pressures to stay on task

What happened in your classes or meetings immediately after the September 11 attacks? Did you break stride from the scheduled content coverage? Some instructors seem so focused on getting through their material that they lose sight of those students who have questions or might need to talk. Should instructors continue when students have lost interest, need a break or something different to renew their energies? Do you know people, good-minded and concerned but so busy with their work that they have no time or energy for anything else? Under pressure to stay competitive, can we become so efficient and so focused on our next step that we miss various warning signs all around us? Should we address “teachable moments” that go beyond the narrow definitions of our course content areas and our own expertise?

Mental lock #6: The avoidance of ambiguity

In their orientation toward correct answers, reinforced by years of formal schooling, students can become quite impatient with ambiguity and discussions about complex issues, for example. The benefit of hindsight can be illuminating when we read through the following excerpt from Godfrey Sperling’s reflections on Vice President Al Gore’s presidential chances in early 1999. It is interesting to hear a well-published commentator confess his uncertainty and admit to the difficulty of working within so much ambiguity. This analysis becomes so much more important given the attacks of September 11th and the President’s responses thereafter.

> *Politics is so hard to explain. That’s partly what makes it so interesting. So now as a prime example of this we (had) a president [Clinton] with high performance ratings and a vice president [Gore] who (was) well behind George W. Bush and Elizabeth Dole in early polls on the … presidential race...Well, I’m coming to believe (as I fight my way through this complexity) that while much of the public still (supported) Mr. Clinton, much of that same public (was) really very unhappy with the president’s conduct and now (was) looking elsewhere for its next president. ‘Elsewhere,’ it appears, (meant) outside this scandal-scarred White House. And that judgment applies to Mr. Gore* (11).

Mental lock #7: The fear of making mistakes

Some students are motivated primarily to achieve; they’re willing to take moderate risks and learn from their mistakes. They will usually avoid challenges that are either too easy or too hard. However, there are those who are more worried about making mistakes. Interestingly, these students tend to choose easy tasks where success is almost guaranteed

or impossibly hard tasks that, ultimately, only serve to reinforce their fears of failure (McClelland, 1985).

Take the very confusing situation that existed with the conflict in the Balkans. What should the U.S. have done? What should NATO have done? When we intervened in Vietnam, we got ourselves into a terrible mess. When we sat on the sidelines in the 1930's, Hitler raged through Europe and the cost in lives and destruction proved horrific. Did we exacerbate the loss of life when we began the bombing of Serbia because we feared repeating the mistakes of the past? Have we become too captive of particular historical "lessons?" Are those lessons still relevant today? Brown's (1999) history of the Balkan region can be helpful in confronting these issues.

> *In the Balkans, armed conflict spread fast—from places unexpected, over soaring mountains, across ethnic divides, and into the conscience of Western leaders....It was the winter of 1997 when Albania imploded with the collapse of a group of pyramid bank schemes, sending thousands of scorned investors to the streets. The government fell, then the police, and soon rioters had seized some 100,000 weapons from military stocks....Meanwhile in neighboring Serbia, the archenemy of Albania...[demonstrations] over election fraud were reaching the danger level, and there was talk of revolution....[Stolen guns] began seeping over the mountains, through the porous border on donkey carts, and into the southern Serbian province of Kosovo [where]...ethnic Albanian guerrillas...were already preparing to fight for independence.*
>
> *With weapons, the war was on...Meanwhile, Macedonia, sandwiched in the middle and without a real army, looked on nervously, worried that its own restive ethnic Albanian population would be the next to call for independence. As Kosovo exploded—villages razed, civilians massacred—the difficult questions it raised reached Bosnia, which was still recovering from a war of its own. Should the Muslims there support the Muslims in Kosovo?... And what about Greece? Would it side with its Christian Orthodox cousins, the Serbs, and risk a greater conflict with its longtime enemy, Turkey, a fellow NATO member that would surely back the Muslim ethnic Albanians? More than any other region in Europe this century, the Balkans have been a constant source of instability. They are poor states, rife with nationalism and volatile ethnic mixes, the crossroads between East and West, Islam and Christianity, war and peace* (12-13).

Mental lock #8: The prohibitions against play and the commandment to be serious

Play can be a powerful force for creativity, spontaneity, energy and very new thinking. For example, some of our computer breakthroughs have evolved from work on games. Fueled by fun, work becomes play. But there can be a deadly side to play. How ironic to think about "war games." Do computer and video killing games desensitize us to violence? Using the framework of Transactional Analysis, you can see both the upside and downside to the "Child" energy within each of us, the creative spontaneity or the angry rebelliousness we can express. In study groups, for example, students can get

sidetracked and frustrated when someone in the group wants to play and the group gets off task. On the other hand, a group that can have fun together can balance some of the duller, repetitive work of study. With some understanding of group dynamics and some skill with communication, however, tensions can be part of a creative unfolding.

Mental lock #9: The assumption by many that they lack creativity

Opening these locks, insists von Oech, is something we all can and should do, and higher education can provide a wonderful opportunity to begin this process. Instructors and students alike really do have a license, even an obligation, to "whack" those old ways of thinking and consider new possibilities. The risks to our collective peace and prosperity are too great to do otherwise. We can all learn to embrace complexity and confront the big questions, to offer hypotheses and dream about possibilities, to take constructive and proactive steps towards a better future. Each of us can nurture a climate for ourselves that supports our own creative processes. We can take classes that stretch us in new and different ways—intellectually, emotionally, aesthetically and physically. We can explore areas of art, music, theater and philosophy. Every one of us has some element of creative potential within ourselves. How often has any of us heard the self-judgment, "I'm not creative at all." Just what will it take to move off this kind of self-defeating posture? For von Oech, it's mostly a matter of attitude, of breaking out of those mental locks. Peace on so many levels may depend on making that break.

Be cautions of the language trap

We might add one more potential trap to von Oech's list—call it the language or concept trap. Examining how we define peace is a good starting point for recognizing how our word choices can direct our creation of concepts concerning almost any subject.

Concepts of Peace

What does the word *peace* mean to you? What are the critical attributes? The absence of war? The absence of violence? Quiet? How quiet? The quiet before an attack can be terrifying. Most historians seem to agree that the punishing and humiliating peace that was imposed on Germany after World War I provided a fertile soil for Hitler and the Fascist drive for military power and vengeance. Who gets to define this word *peace*? For that matter, who decides when our dictionaries should be modified? Will students remember better a concept whose meaning they helped to *construct*? Will active participation in a cooperative project give them some concrete understanding of what it takes to "keep the peace" as a group works toward consensus?

In *Savage Dreams,* Rebecca Solnit (1994) describes the history of the Nevada Basin from the time when Europeans first entered the area in the early nineteenth century. The words you choose to describe these events can make a great deal of difference in how you think about them, whether you see the Europeans as invaders or explorers, for example, and who must bear the responsibility for the bloodshed that ensued. Solnit describes the European perspective this way: *"The white explorers of the Great Basin always read it as*

a place of death and finality, as a terminal futurity, and though from aesthetic perspectives it might have been sublime, from the pragmatic outlook of invaders it was simply a hostile, useless place" (p. 48). You would have to ask: Would the native peoples who had made the Nevada Basin their home for centuries have used this kind of language—"place of death," "terminal futility," a "hostile, useless place?"

The impact of language and the choice of concepts get even more complicated when you read how Solnit describes the intent of the other players and forces in this story.

> *The Hudson's Bay Company sent in a group of British trappers...led by Peter Skene Ogden. The British and American trappers were engaged in a territorial battle over the West. The British, through what was to become famous as their 'scorched earth' campaign, intended to prevent American expansion into the Great basin—the Hudson's Bay Company was out to destroy every beaver in the region and leave it useless, finished, for its purposes* (48).

Is the concept "trapper," then, far too limiting for defining accurately what happened here? By using descriptors like "murderous" and "cruel" we might draw a very different picture of the actors in this conflict over beavers, resources and land. By attempting to remove the beaver from the environment, could the Hudson's Bay Company be indicted for something barbarous? Because the beaver was so important to the survival of the native populations, could this kind of policy and practice be termed "genocidal?" Ironically, if you look closely at the language commonly used by most Europeans at the time to describe native peoples in the new world, you find words like "savages" and "heathen." Again, we have to ask: Who gets to define the concepts we see in our textbooks today?

But there's more, and this time the brutality is on the American side. Solnit continues with her account:

> *When another party of Americans, Joseph Walker's, came through in 1833, it found nothing to trap on the Humboldt and named it the Barren River. The party continued west and encountered some Paiutes who repeatedly asked the trappers to smoke pipes with them. Walker became suspicious that these peace invitations were some kind of delaying tactic, so he and his party shot as many as they could. It is described as the first indigenous-white conflict of any scale in the Great Basin, though it was more like a massacre* (49).

Did the conceptual lenses that framed Walker's worldview determined his decisions? Did he see himself as a profiteer, a businessman competing for scarce resources? Or perhaps a warrior, fighting for American rights against the agents of British imperialists? Does the ease with which he was able to slaughter native peoples seeking peace reflect a racist sense of superiority? If that is so, then should the American government be responsible for some form of reparations, as we have insisted from the Germans in the aftermath of World War II and their responsibility for the holocaust?

Egocentric thinking

Another way to think about concepts in general is to examine the degree to which we are bound up by our own experiences and unable to stretch toward other perspectives or ideas. Jean Piaget and Jerome Bruner, for example, have contributed much to our understanding about the shifts in thinking that occur as we develop intellectually. Early in life, we are captives of our own senses and experiences, what we can see, feel, smell, etc. As we grow older, as our language develops, we begin to develop concepts which we then use to explain what we've experienced.

The term "violence," for example, can represent a range of experiences, extending from what you've seen or perhaps experienced first-hand to what you've read about. When you were young, you might have associated violence with the school bully or some cartoon character on television mixed in with what you saw on the news or in the movies. As an adult, however, you have now heard so much more, about killings and beatings, about the terrorist attacks on the World Trade Center and the subsequent military reprisals, about war in the Balkans and ethnic cleansing, about historic tensions in the Middle East and Northern Ireland, about the Gulf War and Vietnam. Your concept of violence is now undoubtedly multifaceted and complex, layered with thoughts, images, sounds and feelings.

Assimilation and accommodation

In Piaget's (1952) theories of development, two notions have special relevance to this discussion about concepts. *Assimilation* describes the process by which we incorporate new information into the ways we already think. In other words, if we think of Europeans as "settlers" of the Americas, then what Walker did to the Paiutes was either an aberration or somehow justified (these Indians were trying to delay his group). *Accommodation*, on the other hand, explains the changes we make in our thinking when we are confronted with new information that doesn't fit our existing mindset *(schema)*. In this particular case, we might rethink our earlier ideas and accept that some numbers of Europeans—not all, but some—were indeed "barbarians." William Perry's (1999) model of cognitive development gives us yet another way to think about this complexity—moving past simplistic, dichotomous, "right-wrong" characterizations toward acceptance of multiple and varied perspectives as we develop an increasing ability to handle complex and ambiguous material.

Rules, examples and critical attributes

Here's another way to think about language and concepts. When you think about your own thinking (i.e., *metacognition*), what rules do you find yourself obeying? For example, does your own fear of conflict rule out any acceptance of radically different viewpoints? Even if you disagree with someone else's conclusions, can you understand the rules that person used? According to Robert Gagne (1985), rules allow you to interrelate various concepts in ways that make sense to you.

At the lowest levels of organization, however, Gagne describes how we *discriminate* among different characteristics of a concept. For example, could you tell the difference

between “justifiable homicide” and “slaughter” as you examine the events surrounding the killing of those Paiutes by members of the Walker party? With some clarification of the concept of “killing,” can you then see how concepts can be interrelated through rules? For example, was this incident unusual given the rest of Walker’s exploits? Or was there a pattern of ruthlessness here that you could use to describe his behaviors generally?

According to Gagne, these kinds of rules (concept-chains) can then be linked into *higher order rules*. You might ask, for example, how influential were other background forces (economic, cultural, historic) on Walker’s actions? Was the competition for profits, the lure of wealth, driving Walker? How much can be explained as an outgrowth of long-standing colonial rivalry between Americans, British and other foreign powers as they competed for the new world? Or how much was it a function of religious beliefs about superior belief systems, or racist convictions about superior peoples? Understanding more about these “rules” provides another framework for analyzing our thinking. Understanding more about our mental traps can free our creativity and help us refine and deepen our thinking about peace.