

You're Coming in **HOT:** Active Learning Strategies for Inclusive Classrooms

Laura M. Pipe, PhD
Teaching Innovations Office, UCG



UNC
GREENSBORO



YOU ARE ON TRADITIONAL

Catawba

LAND

USDAC.us/nativeland

#HonorNativeLand

Artwork by Bryan D. Parker

(Muscogee Creek/Choctaw/White Mountain Apache)

LOTERÍA HUMANA

<p>I grew up with more than one language or dialect spoken at home.</p> <p>_____</p>	<p>I depended on public transportation to get to places.</p> <p>_____</p>	<p>I am left-handed.</p> <p>_____</p>	<p>I have coped with forced unemployment.</p> <p>_____</p>
<p>I am a first-generation college student.</p> <p>_____</p>	<p>I play an instrument.</p> <p>_____</p>	<p>I have more than three siblings.</p> <p>_____</p>	<p>I know home remedies due to family or cultural knowledge.</p> <p>_____</p>
<p>I grew up in a predominately white, middle class, monocultural neighborhood.</p> <p>_____</p>	<p>I have lived or studied abroad in a different country.</p> <p>_____</p>	<p>I have been marginalized by someone in authority due to the way I look.</p> <p>_____</p>	<p>I have learned the skills necessary to live my life with a permanent or long-term disability.</p> <p>_____</p>



A Model of Learning Objectives

based on

A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives

Among other modifications, Anderson and Krathwohl's (2001) revision of the original Bloom's taxonomy (Bloom & Krathwohl, 1956) redefines the cognitive domain as the intersection of the Cognitive Process Dimension and the Knowledge Dimension. This document offers a three-dimensional representation of the revised taxonomy of the cognitive domain.

Although the Cognitive Process and Knowledge dimensions are represented as hierarchical steps, the distinctions between categories are not always clear-cut. For example, all procedural knowledge is not necessarily more abstract than all conceptual knowledge; and an objective that involves analyzing or evaluating may require thinking skills that are no less complex than one that involves creating. It is generally understood, nonetheless, that lower order thinking skills are subsumed by, and provide the foundation for higher order thinking skills.

The Knowledge Dimension classifies four types of knowledge that learners may be expected to acquire or construct—ranging from concrete to abstract (Table 1).

Table 1. The Knowledge Dimension – major types and subtypes

concrete knowledge		abstract knowledge	
factual	conceptual	procedural	metacognitive*
knowledge of terminology knowledge of specific details and elements	knowledge of classifications and categories knowledge of principles and generalizations knowledge of theories, models, and structures	knowledge of subject-specific skills and algorithms knowledge of subject-specific techniques and methods knowledge of criteria for determining when to use appropriate procedures	strategic knowledge knowledge about cognitive tasks, including appropriate contextual and conditional knowledge self-knowledge

(Table 1 adapted from Anderson and Krathwohl, 2001, p. 46.)

*Metacognitive knowledge is a special case. In this model, "metacognitive knowledge is knowledge of [one's own] cognition and about oneself in relation to various subject matters . . ." (Anderson and Krathwohl, 2001, p. 44).

This taxonomy provides a framework for determining and clarifying learning **objectives**. Learning **activities** often involve both lower order and higher order thinking skills as well as a mix of concrete and abstract knowledge.

The Cognitive Process Dimension represents a continuum of increasing cognitive complexity—from lower order thinking skills to higher order thinking skills. Anderson and Krathwohl (2001) identify nineteen specific cognitive processes that further clarify the scope of the six categories (Table 2).

Table 2. The Cognitive Processes dimension — categories & cognitive processes and alternative names

lower order thinking skills		→ higher order thinking skills			
remember	understand	apply	analyze	evaluate	create
recognizing <ul style="list-style-type: none"> identifying recalling <ul style="list-style-type: none"> retrieving 	interpreting <ul style="list-style-type: none"> clarifying paraphrasing representing translating exemplifying <ul style="list-style-type: none"> illustrating instantiating classifying <ul style="list-style-type: none"> categorizing subsuming summarizing <ul style="list-style-type: none"> abstracting generalizing inferring <ul style="list-style-type: none"> concluding extrapolating interpolating predicting comparing <ul style="list-style-type: none"> contrasting mapping matching explaining <ul style="list-style-type: none"> constructing models 	executing <ul style="list-style-type: none"> carrying out implementing <ul style="list-style-type: none"> using 	differentiating <ul style="list-style-type: none"> discriminating distinguishing focusing selecting organizing <ul style="list-style-type: none"> finding coherence integrating outlining parsing structuring attributing <ul style="list-style-type: none"> deconstructing 	checking <ul style="list-style-type: none"> coordinating detecting monitoring testing critiquing <ul style="list-style-type: none"> judging 	generating <ul style="list-style-type: none"> hypothesizing planning <ul style="list-style-type: none"> designing producing <ul style="list-style-type: none"> constructing

(Table 2 adapted from Anderson and Krathwohl, 2001, pp. 67–68.)

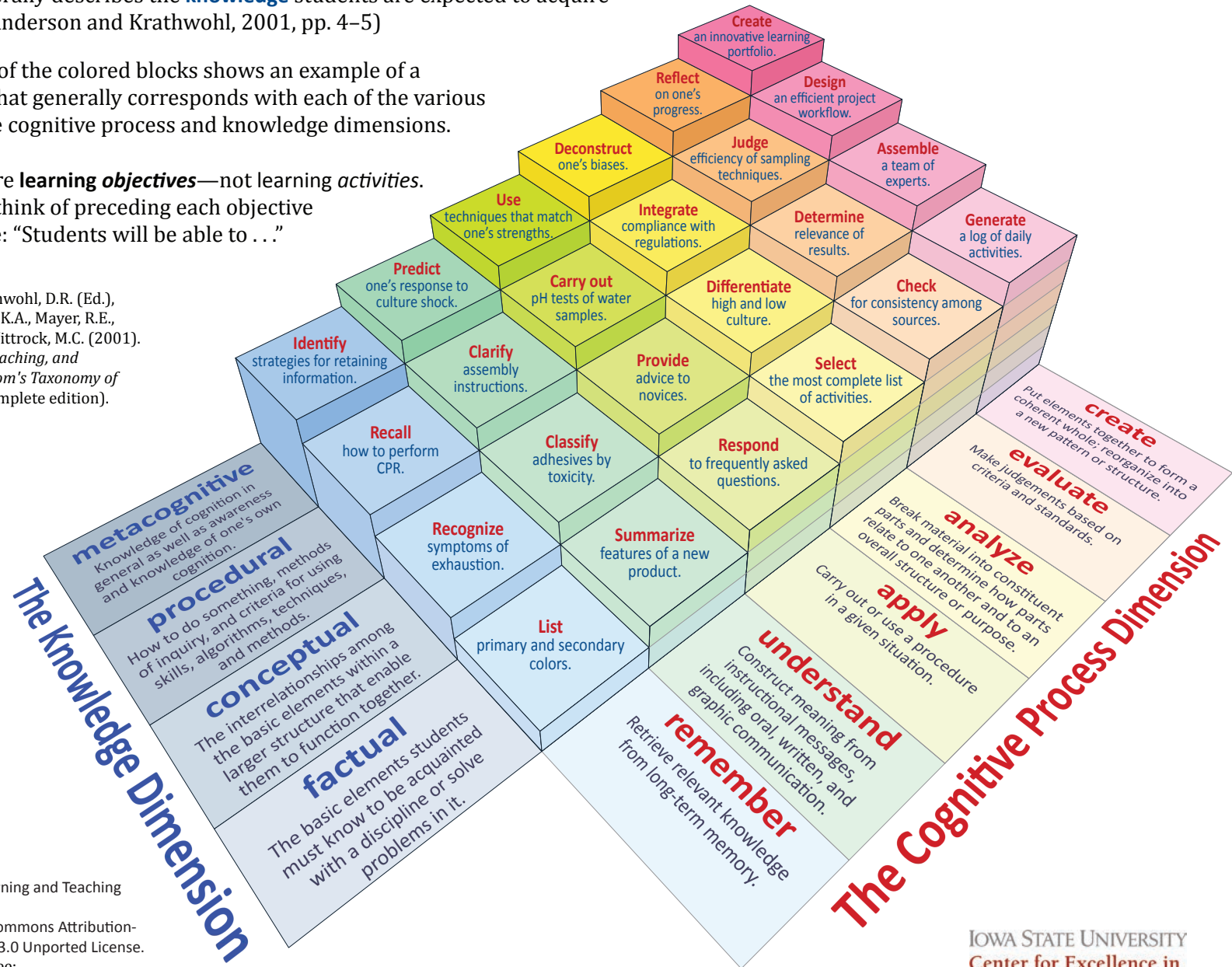
A statement of a **learning objective** contains a **verb** (an action) and an **object** (usually a noun).

- The **verb** generally refers to [actions associated with] the intended **cognitive process**.
- The **object** generally describes the **knowledge** students are expected to acquire or construct. (Anderson and Krathwohl, 2001, pp. 4–5)

In this model, each of the colored blocks shows an example of a learning objective that generally corresponds with each of the various combinations of the cognitive process and knowledge dimensions.

Remember: these are **learning objectives**—not learning *activities*. It may be useful to think of preceding each objective with something like: “Students will be able to . . .”

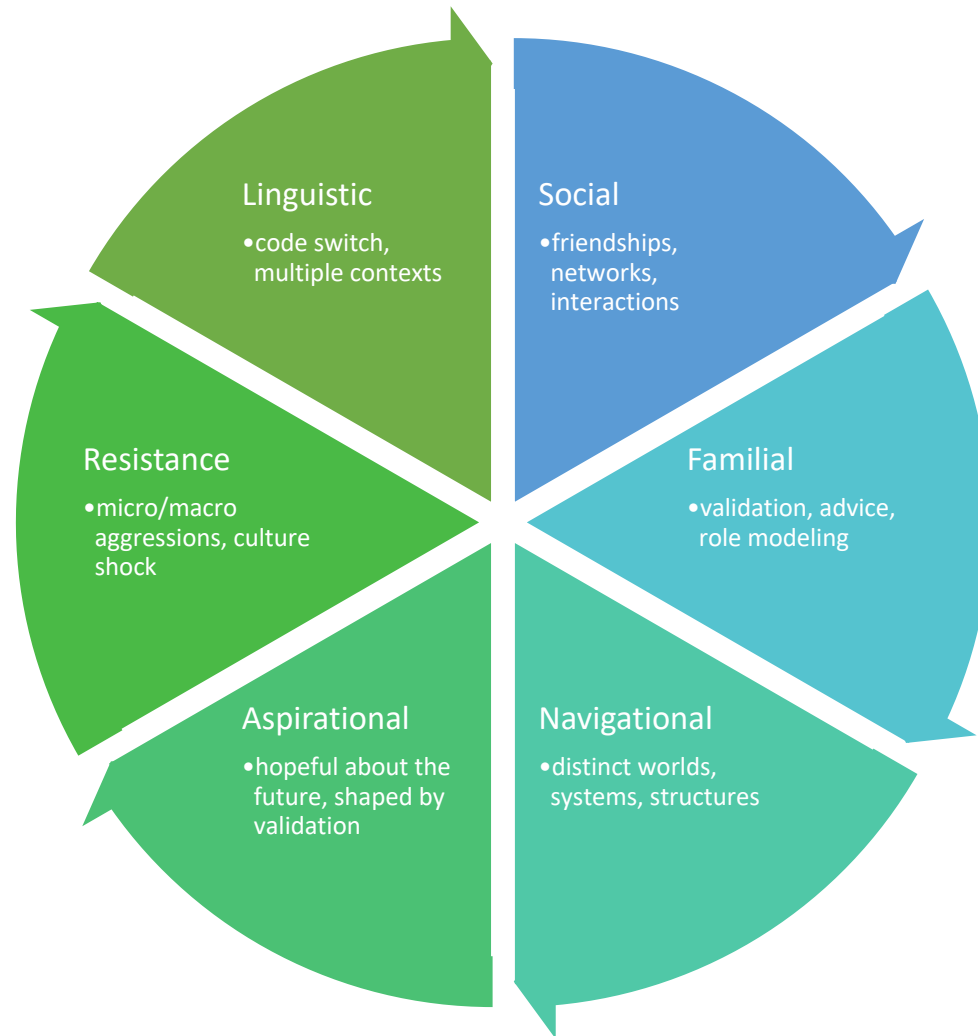
*Anderson, L.W. (Ed.), Krathwohl, D.R. (Ed.), Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J., & Wittrock, M.C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of Educational Objectives* (Complete edition). New York: Longman.



Model created by: Rex Heer
Iowa State University
Center for Excellence in Learning and Teaching
Updated January, 2012
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For additional resources, see:
www.celt.iastate.edu/teaching/RevisedBlooms1.html

IOWA STATE UNIVERSITY
Center for Excellence in Learning and Teaching

Tara Yosso's Model of Cultural Wealth



Yosso, Tara (2005). Whose Culture Has Capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education* 8(1):69-91

Selecting a Framework for the Labor of Learning

Liberation Pedagogy

- Critical Consciousness
- Interrogation (political, academic, social worlds)
- Paulo Freire

Civic Humanism/Civic Discourse

- Active citizenship
- Moral Virtues (e.g., social responsibility)
- Derek Bok

Academic Detachment/Analysis

- Detached discussions
- Objects of academic investigation
- “What do our readings say?”



Ways to Encourage Student Buy-In

- **Avoid Assumptions:** never guess about others' social/personal identities or preferred pronouns (better to use they/them/theirs)
- **Use Inclusive Language:** wait for others to self-identify, put people before abilities, show care—not political correctness—through language choices, avoid corrections of language as “right” or “wrong” (use “I” statements to share personal impact), recognize that language is always evolving (from the work of Vernon Wall)
- **Value Community-Building:** icebreakers; whole group-, small group-, and pair-shares
- **Talk Less:** facilitate learning, recognize student expertise, ask simple questions (e.g., “Tell us more about that.”)
- **Practice Active Listening:** attend (SOLER), paraphrase, summarize, clarify
- **Attend to Intent vs Impact:** What is a possible positive intent? Negative impact? What could you do to improve the situation? (e.g., clarify, invite others to chime in, challenge with a credible alternative perspective)
- **Diversify Learning Activities/POV:** round robins, anonymous note cards, caucuses, case studies, experiential activities, simulations, fish bowls, panels, guest lectures
- **Reward Failure/Risk-Taking:** recognize students for asking difficult questions/sharing/experimenting with ideas, reward risk taking within formative/summative assessments
- **Use Current, Real-Life Examples:** update examples to reflect current events/trending issues, use case studies/simulations, take learning outside of the classroom/bring guests to class
- **Cite Personal Stories:** self-disclose as appropriate, model vulnerability/risk-taking
- **Give Students Choice:** co-create the course syllabus, develop assessment rubrics that allow for student choice in projects/presentations/papers
- **Moderate Reflective Activities:** interactive journals/notebooks/online posts



Steps for Setting Up Classroom Ground Rules

*What guidelines can we agree on now in order to create a **learning environment** in which we can ask each other anything? -Claude Steele*

Create an Active Learning (not “safe”) Space: reserve “safe space” terminology for trauma-related healing spaces

Solicit Student Input: facilitate brainstorming, revisioning, and prioritizing processes

Reframe Non-Specific Behaviors: help move student language from broad ideas (ie “be respectful) to specific behaviors that demonstrate the broad ideas

Develop Check-in Procedures: check-in regularly on how well the class is adhering to the ground rules

Advice from the Chronicle of Higher Education

The Rules About Classroom Rules, Jenkins, R. Dec 13, 2011

Think About What You Can Do: don't over extend the boundaries of what you as the faculty member are able to enforce

What Are Your Deal Breakers: what are the things you can absolutely not live without in the classroom environment

What Can You Live With: what are the things that you can tolerate, even if it is not your first choice

Be Consistent: what are things you can consistently follow-up on, what are things you cannot?

General Rules of Practice

Understand the Consensus: ask students to agree on each rule, and gain consensus before enacting

Keep the Ground Rules Visible: create a shared document or visual that keeps the ground rules visible every class

Setting Up Conditions for Culturally Responsive Teaching

Diversity and motivation: Culturally responsive teaching. Wlodkowski, R. J. & Ginsberg, M. B. (1995)

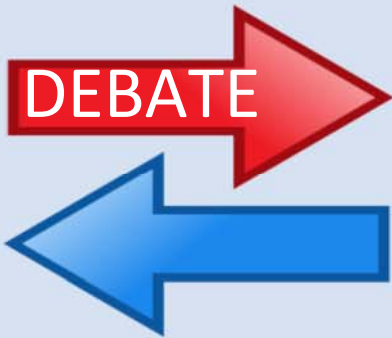
Establish Inclusion: ground rules, learning communities, cooperative base groups

Develop Positive Attitude: culturally responsive teacher-student conferences, learning contracts, experiential activities

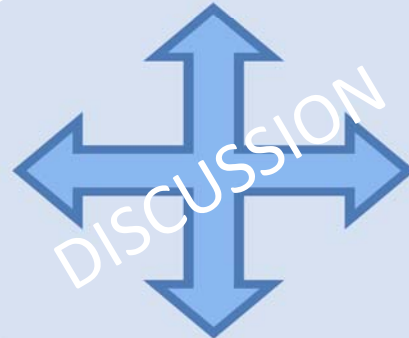
Enhance Meaning: projects, simulations, problem-based curriculum, problem-posing models

Engender Competence: self-assessment, portfolios, narrative evaluations, credit/no-credit systems, grading contracts

Debate vs. Discussion vs. Dialogue



- Competitive
- Succeed or win, often by proving others' logic to be "wrong"
- Focus on "right" and "wrong" through evidence
- Look for weaknesses
- Search for flaws in others' logic; critique their position
- Listen, in order to form counter-arguments
- Focus on conflict and difference as an advantage
- Disregard relationships
- Use silence to gain advantage



- Conceptual and/or conversational
- Present ideas, often in a "clean" or "sophisticated" way
- Share information; seek "neutral" conclusions
- Seek answers and solutions
- Give answers, often those in accordance with academic standards
- Listen, in order to find places of disagreement or to gather rational pieces of argument
- Avoid areas of strong conflict and difference
- Retain relationships
- Avoid silence

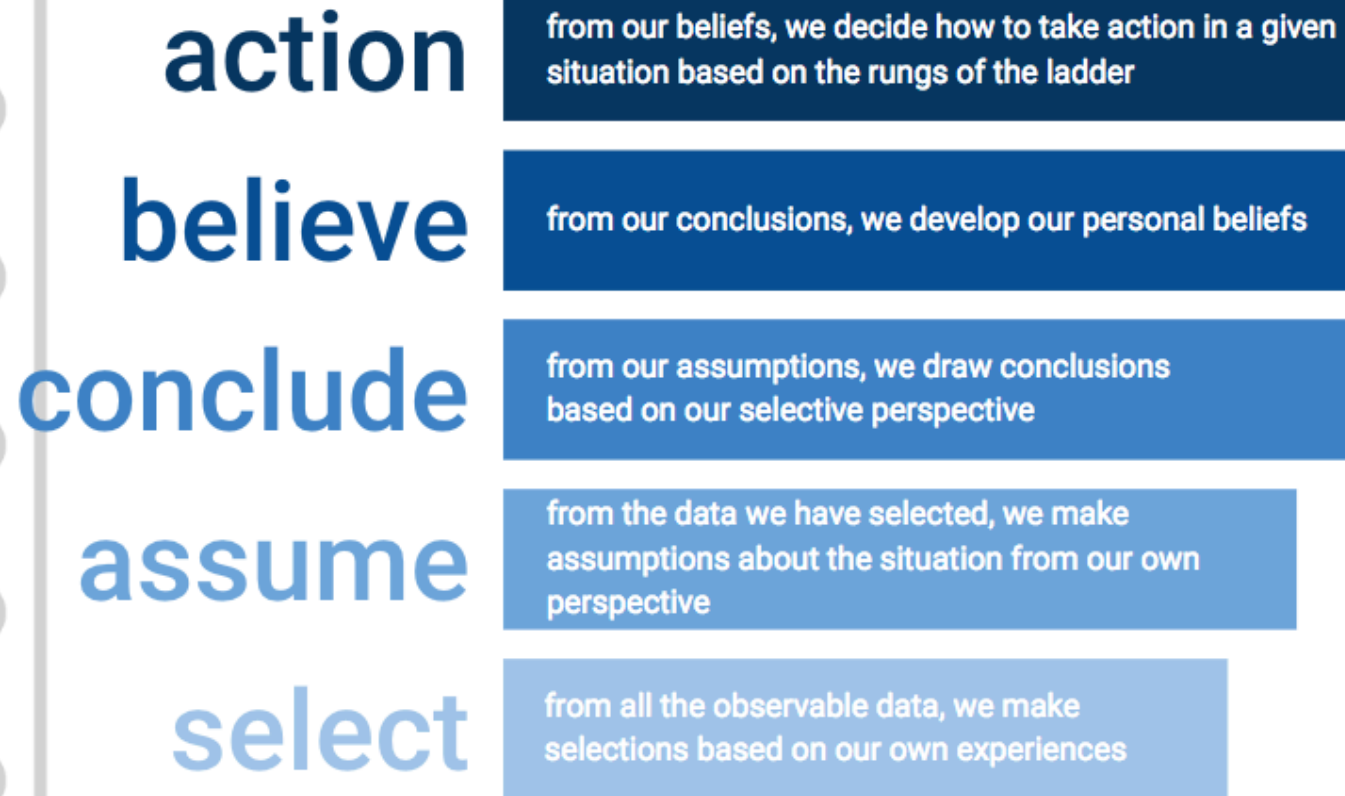
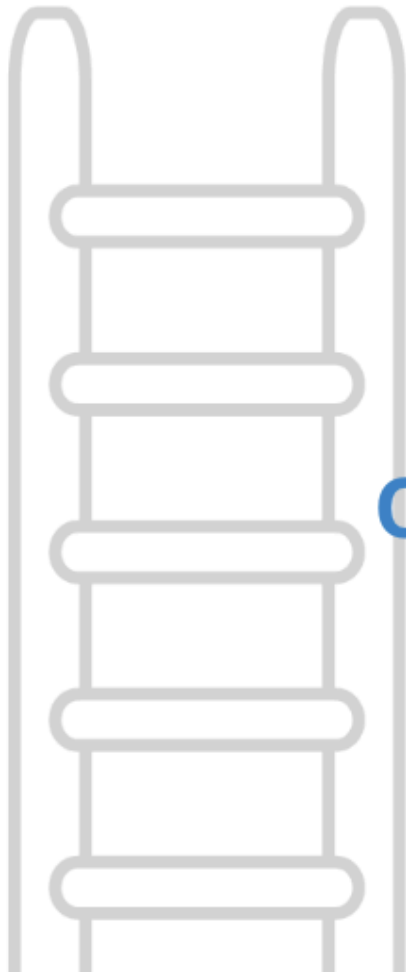


- Collaborative, towards a sense of community understanding
- Re-evaluate and acknowledge assumptions and biases
- Bring out areas of ambivalence
- Look for shared meaning
- Discover collective meaning; re-examine and destabilize long-held ideas
- Listen without judgment and with a view to understand
- Articulate areas of conflict and difference
- Build relationships
- Honor silence

*Table adapted from the Sustained Dialogue Institute, Washington, D.C. (based on the work of Kardin and Sevig, Kachwaha, and Nissan).



The Ladder of Inference



*Adapted from the Chris Argyris & Peter Senge

Handling HOT Moments in the Classroom

Clarify

- ask the student to clarify what they are saying

Change

- the conversation to past experiences, students often speak from opinions.

Create

- space for others in the room to react and respond

Challenge

- the statement with a credible counterpoint

*Adapted from Sustained Dialogue.org



Handling HOT Moments in the Classroom

When should I intervene:

You should intervene when you need to adjust to the needs of the group in order to keep the conversation moving forward.

Do not intervene because you are curious. Additionally, intervention should not be avoided because you might be uncomfortable or disinterested in the topic.

7 Intervention Types

1. Intervention to CLARIFY:
 - “Can you tell the group more about what you are meaning when you said...”
2. Intervention to KEEP TIME
 - “This conversation is very important, but in order to hear from everyone we need to move on.”
3. Interventions to ADDRESS MISINFORMATION
 - “I don’t know that to be the case. Let’s look at this specifically, as it is important that we are working with a similar understanding.”
4. Interventions to AVOID TANGENTS
 - “This conversation is expanding. Let’s head back to the topic of...”
5. Interventions to ADDRESS DIFFICULT BEHAVIOR
 - “I believe that I just noticed cutting off.... Let’s remind ourselves of our shared ground rules.”
6. Interventions to INCREASE PARTICIPATION
 - “This is an important exchange. Does anyone have a different experience?”
7. Interventions to ENCOURAGE GREAT BEHAVIOR
 - “I want to take a moment and thank the group for sharing candidly about their experiences.”

*Adapted from Sustained Dialogue.org

Virtual Reality Apps to Get You Started...

These are free software applications that you can use in the classroom with your students:

- Google Expeditions (<https://edu.google.com/expeditions/#about>) - hundreds of pre-made VR experiences that you can have students go through. If you have a dedicated router, you can see where you are leading students through the expeditions. Without a router – students will need to move through scenes on their own with your prompting.
- Google Street View (<https://www.google.com/streetview/>) - any image that has been uploaded by google cardboard camera users or people with a 360 camera can be viewed in VR by tapping the VR image in the right corner.
- Within App (<https://www.with.in/>) - these are commercial grade experiences with sound that take students everywhere from life in a maximum security prison to dancing in Havana.
- Google Tour Creator (<https://vr.google.com/tourcreator/>) - didn't see an expedition that you liked, with Tour Creator you can create your own using your own 360 images or images in the Google Street View App. You can add narration and 2D images. Here is one I created on the Martinsville Speedway for a VR project (using both my own images and Google Street View): <https://poly.google.com/view/83mJqQzNUtN> (click on the settings icon on the top right to turn on sound).
- Cardboard Camera (<https://itunes.apple.com/us/app/cardboard-camera/id1095487294?mt=8> or https://play.google.com/store/apps/details?id=com.google.vr.cyclops&hl=en_US) - this app allows students or you to take 360 photos using your smartphone that can be uploaded to Google Street View or shared with classmates.
- Google Arts & Culture (<https://artsandculture.google.com/>) - has a number of free tours of international art events and installations along with a number of must see locations (like inside the Oval Office).
- Discovery VR (<https://www.discoveryvr.com/>) - for more than the Shark Week enthusiast among us, this app brings to life a number of the Discovery Channels greatest adventures in 360 immersions.