

# PRINCIPLES of TEACHING

## lecture 1



## Lecture 1 *Knowing is being*

- 1.1) course meta-topics
- 1.2) research into teacher excellence
- 1.3) ways of knowing/being
- 1.4) knowledge vs. knowing

### 1.1) Course Meta-Topics

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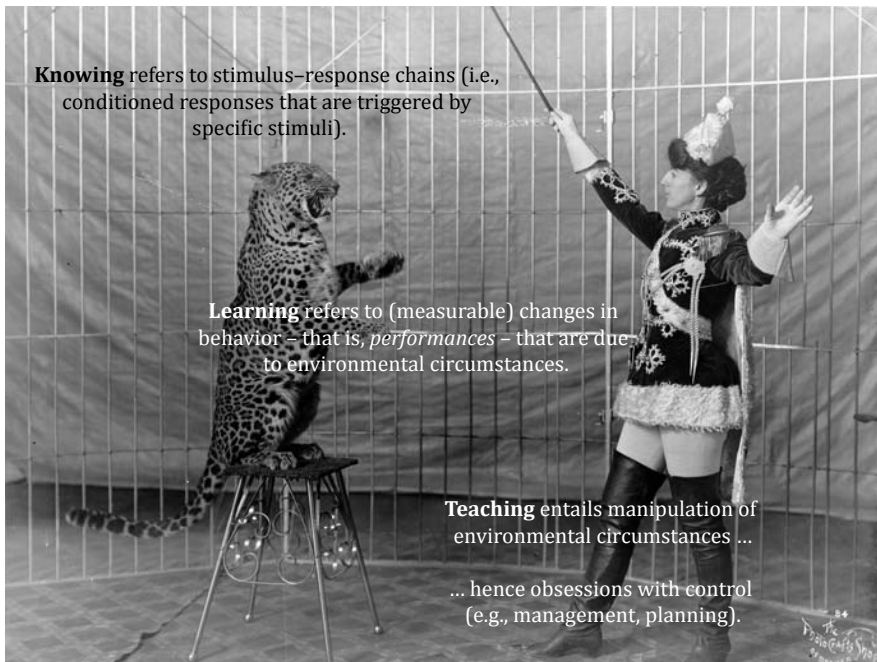
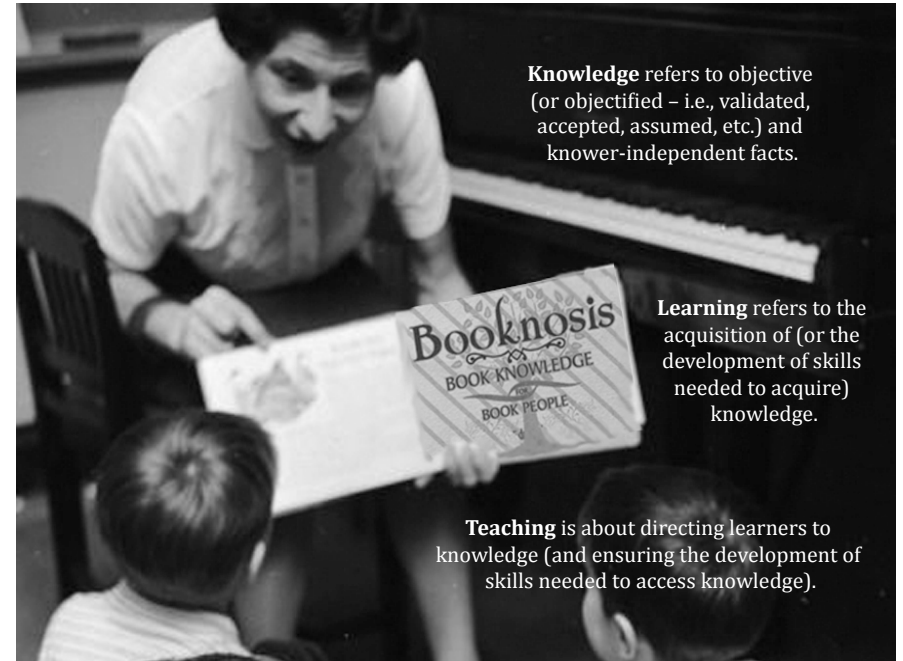
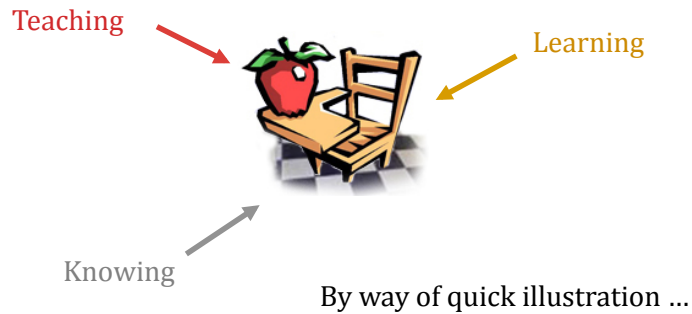
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##### principles of teaching

Derived from the Latin *principium*, "beginning, first part, source," a *principle* is not a prescription for action, but a notion that is used to orient or justify action.

There are literally hundreds of synonyms for *teaching* in modern English – let alone the varied meanings of the word in other eras, contexts, and cultures.

# 1.1) Course Meta-topics



## How would you describe teaching?

advising	drilling	imbuig	opening eyes
alerting	edifying	imparting	participating
ameliorating	educating	implanting	pedagogy
bettering	emancipating	improving	persuading
brainwashing	empowering	improvising	perturbating
breaking in	enabling	inculcating	pointing out
briefing	encouraging	indocinating	pounding into
caring	enculturating	inducting	preparing
catechizing	enlightening	influencing	processing
coaching	exercising	informing	professing
communicating	explaining	initiating	proselytizing
conditioning	expounding	instilling	protecting
conversing	facilitating	instructing	rearing
converting	feeding	interpreting	refining
convincing	fitting	lecturing	reforming
correcting	forming	liberating	remediating
cramming	fostering	listening	schooling
cultivating	framing	mastering	sharpening
culturing	giving voice	mediating	shepherding
demonstrating	grilling	mentoring	showing
developing	grounding	minding	structuring
directing	guiding	modeling	telling
disciplining	honoring	nourishing	training
drawing in	illuminating	nurturing	tutoring
drawing out	illustrating	occasioning	

Jot down a few synonyms for **teaching** that you find compelling and a few that you find annoying.

## During the course ...

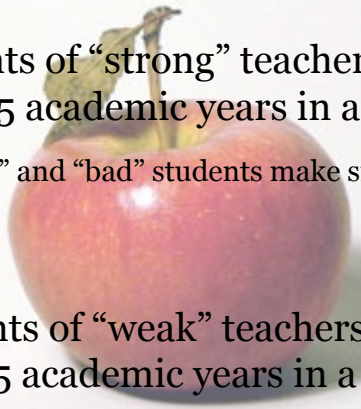
- ... think about why you chose the words you just chose,
- consider why others would choose others,
- and think about these in relation to teachers you've thought to be great and not-so-great ...
- ... because these teachers likely "inhabit" your beliefs about what (good and bad) teaching is.

## One of my top 6 favorite teachers

- Mrs. Jean O'Brien (1975)
- Math 11 & 12
- spoke to a spot on the floor
- didn't care how much we liked her
- often compared family members
- **KNEW** her stuff & was "curious"
- expected us to learn & be curious
- didn't make my "great teacher" list until several years later



## 1.2) What the research says about excellence in teaching ... and what we know about getting there



Students of “strong” teachers progress about 1.5 academic years in a single year.

(Both “good” and “bad” students make similar progress.)

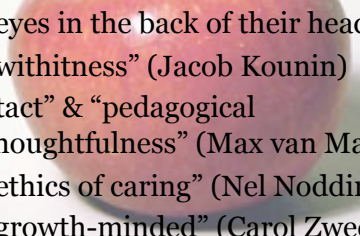
Students of “weak” teachers progress about 0.5 academic years in a single year.

(“Good” students progress about 1.0 year; “bad” students make little or no progress.)

## Research into Top Alberta and UK Mathematics Teachers

- teachers, with long & strong records, across grade levels
- “all over the map,” in terms of
  - teaching methods, homework, lesson structures
  - relationships with students and approachability
- unconcerned with “curriculum coverage” and “exam pressures”
- “curious” with high participation in pro-D and grad studies
- often departed (some times radically) from what they prepared
- complex attitude toward subject matter
  - multiple interpretations of particular concepts
  - intricate interconnections among ideas
- complex attitude toward learners
  - able to “get into students’ heads”
  - able to instill “a sense of shared project” among students

## Other popular descriptors ...

- 
- “eyes in the back of their heads”
  - “withitness” (Jacob Kounin)
  - “tact” & “pedagogical thoughtfulness” (Max van Manen)
  - “ethics of caring” (Nel Noddings)
  - “growth-minded” (Carol Zweck)
  - “high complexity” people

## “Low Complexity People”

- *tend to see the world in absolute, black-&-white terms*
- *lack (and perhaps avoid) diversity among their peers and advisers*
- *tend to be very rigid, ideologically*
- *tend to focus on what they perceive as **the** reality*
- *tend to be **fixed-minded** (to assume capacities are pre-determined)*



## “High Complexity People”

- seek out novel information across diverse categories
- change attitude more easily when presented with compelling evidence
- generate unusual (& often remote) views and actions
- integrate & relate complex patterns of many elements
- tend to be **growth-minded** (to assume capacities are mutable and developed – that is, learned)



How do you move from Point A to Point B?



## What we know about becoming ‘high complexity’

- Certain activities help –
  - parenting,
  - teamsports (participating; coaching),
  - community organization/participation –... briefly, social engagements that require ongoing interpretation, negotiation, and adaptation.
- Certain positionings help –
  - racial, gender, sexual minorities and/or oppressed groups –... briefly, positionings that prompt awarenesses of **D**iscourses.
- It takes a long time –
  - 10,000 hours of supported effort.
- It depends on events that get people ‘out of themselves.’
- Consciously deciding to be growth-minded seems to really matter.

## life- and career-long learning

### BCCT Standard #7:

Educators engage in career-long learning.

What do we know about “life-long learning”?

# Life-long learning ...

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- Huge topic in current educational research.
- We never stop learning/changing/developing.
- BIG changes – shifts in one’s way of being-in-the-world – *can* continue to occur as you age.
- Types of changes vary by culture, era, location, etc.
- Shifts tend to be prompted by a “threshold effect”.
  
- One research-based model ...

## Robert Kegan’s Life-Stages: Immediate Consciousness

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- mostly young children
- idea of “durable objects” un(der)developed
- mystified when others have different opinions
- need to be reminded of rules over and over.



## 1.3) Ways of knowing/being (“levels of consciousness”)

## Robert Kegan’s Life-Stages: Instrumental Consciousness

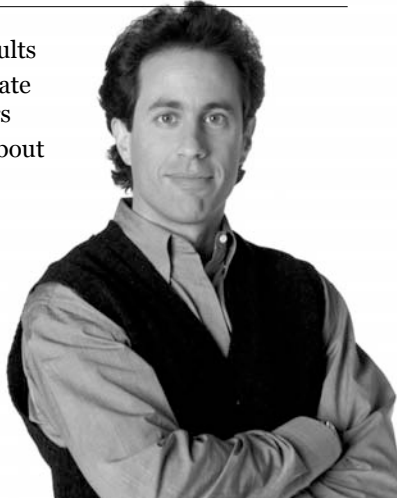
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- typically 7- to 10-year-olds, but some adults
- world is less magical ...
- and more mechanical: desires for fixed laws, uniformly applied
- tendency to focus on implications for “me”
- beliefs, feelings, interpretations, and self-perceptions gel.



## Robert Kegan's Life-Stages: Socialized Consciousness

- older adolescents and *most* adults
- considerate – able to subordinate personal desires those of others
- modulates between thinking about “me” and “us”
- capable of abstract planning, self-reflection
- “metacognitively aware”
- devoted to ‘something’ that’s greater than their own needs.



## Robert Kegan's Life-Stages: Self-Authoring Consciousness

- some, but not many
- able to examine various rule systems and to mediate among them
- more expansive awareness of what’s going on in the world
- tendency to focus on the implications for “us”
- self-guided, self-motivated, self-evaluative – takes personal responsibility (e.g., doesn’t blame disappointing experiences on others).



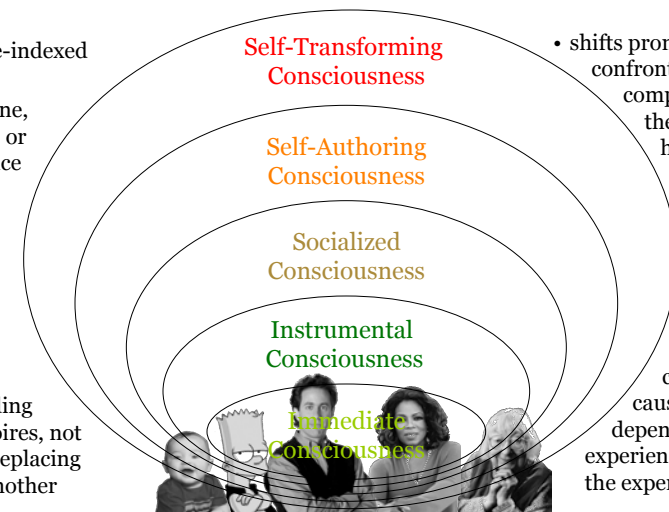
## Robert Kegan's Life-Stages: Self-Transforming Consciousness

- hardly anyone
- the ‘wise’ in western culture
- others and objects aren’t seen as separate; world is not seen in terms of polarities or clear-cut categories
- mindful participation in ongoing transformations replaces desire to cause specific changes.



## Provisos ...

- not age-indexed
- not a line, ladder, or sequence
- expanding repertoires, not levels replacing each other



- shifts prompted by confronting complexity; they don’t happen until they have to
- shifts can’t be caused; they depend on the experiencer, not the experience.

## And so ...?

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- Almost everyone reverts to instrumental mode when in a new situation.
- Teaching is no exception (see, e.g., J.G. Berger).
- Experienced teachers are more likely than the general population to manifest expansive levels of consciousness.
- **Why?**



## What we know about becoming ‘high complexity’

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## Upshot ...

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“**Career-long learning**” and “**life-long learning**” do not refer to the (low complexity) idea that we learn new things until we retire or die ...

... rather, they are intended to highlight the (high complexity) idea that **we continue to transform**, sometimes dramatically, as we gain experience ...

... and these transformations entail **new and different ways being in** and interpreting the world.

### **BCCT Standard #7:**

Educators engage in career-long learning.

So a question that we are asking here is:  
**What else might there be to learn about once  
the basics of practice have been mastered?**

## 1.4) KNOWLEDGE *versus* KNOWING

## Why the word “knowing”?

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“A person who knows is a person who is engaged with the world.”

– Madeleine Grumet

“Knowing is doing; doing is being; knowing is being.”

– Humberto Maturana & Francisco Varela

## Why the word “knowing”?

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The term *knowing* is used to flag

- a) the dynamic contexts of knowledge & knowers
- b) to flag the dynamic character of knowledge
- c) the dynamic character of knowers
- d) the inseparability of knowers & knowledge
- e) that *knowing* is about *being* ...