



1



Goofus videophones with a piece of spinach caught between his teeth.



Gallant always brushes his teeth before setting his Skype status to "available".

**Student-Centered Distance Learning (SCDL)**



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2

## The Distance Learning Turing Test

Are your online students humans or **zombies**?



- Are they are interested? **How do you know?**
- Do they understand the material?
- Are they making a good effort?
- Are they in it just for a grade?

*Can they tell if YOU'RE human?*

3

**PROPOSED:**  
More Student-Centered =  
***FewerZombies***

4

## Agenda

1. **SCDL Strategy:** Inviting More Feedback
  - Live Chat - formative
  - Critical Incident Questionnaire (CIQ) - summative
2. What is Student Centered Instruction?
  - Theoretical Base
  - Implications of Learning Theories
3. Appropriate Use of Student Centered Teaching
4. Harnessing Student "Collateral Energy"
5. Providing Guidance In Class and Online
6. Replacing Planning with Coordination
7. Online Course Development Strategies
8. *CIQ and Follow-Up Tasks*

5

Invite More Feedback

## INVITING ONLINE FEEDBACK

A key student-centered distance learning strategy.

6

Invite More Feedback

## Live Chat

- Only one person can speak live, but many can text-chat. Some can't multi-task, others need to.
- Chats are recorded, and provide good information about what worked and what didn't, both from an instructional standpoint and for individual learners.
- Encourage your students to post at least three chat messages each class, if not many.

**THE LIVE CHAT BOX**  
*When you see a question in this blue box, please post a response before moving forward.*

Invite More Feedback 7

**R The Critical Incident Questionnaire**

- **Critical incidents** are **vivid happenings** that people remember as being significant. For students, every class can contain such moments, and **instructors need to know them**.
- The CIQ is **regularly solicited** and **anonymously given**. It generates a log of changes in the engagement and emotional tenor of each section, and can also refer to online activities (which can be significant as well, of course)
- **Analyzing and Responding to Data** from the CIQ.
  - **Next class:** debrief students on the themes you found in the responses.
  - **Guard against:** "over-tweaking" and "over-reacting"
- **Advantages** of the Critical Incident Questionnaires
  - **STUDENTS:** self-reflection fosters deeper engagement and meta-learning.
  - **GROUPS:** debriefing builds intimacy; instructor response builds trust.
  - **INSTRUCTOR (DURING):** feedback informs facilitation and management
  - **INSTRUCTOR (AFTER):** feedback logs from different classes suggest changes / constants and inform professional development.

Invite More Feedback 8

**R The Critical Incident Questionnaire**

1. At what moment in class this week did you **feel most engaged** with what was happening?
2. At what moment in the class this week did you **feel most distanced** from what was happening?
3. What action that anyone (teacher or student) took in class this week did you find most **affirming and helpful**?
4. What action that anyone (teacher or student) took in class this week did you find most **puzzling or confusing**?
5. What about the class this week **surprised you** the most? (This could be something about your own reactions to what went on, or something that someone did, or anything else that concerns you.)

[http://www.stephenbrookfield.com/Dr\\_Stephen\\_D\\_Brookfield/Critical\\_Incident\\_Questionnaire\\_files/CIQ.pdf](http://www.stephenbrookfield.com/Dr_Stephen_D_Brookfield/Critical_Incident_Questionnaire_files/CIQ.pdf)

9

What does Student Centered Mean?

## Student-Centered Instruction

Activating our conceptual maps as a group; placing discourse in context.

What does Student Centered Mean? 10

## What is Education?

"All genuine education comes about through experience."  
- John Dewey, *Experience and Education*, 1916

**LIVE CHAT QUESTION**

*Identify or describe the "non-genuine" education you imagine Dewey was referring to.*

10

What does Student Centered Mean? 11

### Student-Centered means:

- **Empowerment**
  - Giving learners activity choices and control
  - Giving learners input into what standards and methods will be used for their evaluation
  - Respecting and valuing learners for their opinions
- **Individualization**
  - Adapting to learning preferences & styles
  - Providing individualized attention
- **Optimization**
  - Challenging learners to go deeper in their thinking
  - Encouraging learners to work cooperatively

<http://www.apa.org/ed/governance/bea/learner-centered.pdf>

This historical document is derived from a 1990 APA presidential task force (revised in 1997).

12

Theoretical Base

## Instructional Theory and Distance Learning Design

Your ZPD: Bringing what you know to what you're learning about now.

Theoretical Base 13

## Learning Theories

“Student instruction” implies placing a “structure” inside a student, and is a theory of learning. Here are some other theories, based on that sense:

- Ex-struction (Behaviorism – Gagné )
- In-struction (Cognitivism – Piaget )
- Con-struction (Constructivism – Vygotsky)
- Super-struction (Connectivism – Siemens)
- Social Construction (SC-ism – Searle)

Theoretical Base 14

## R Cognitivist Implications

- Stimulate **Semantic Knowledge**
  - Relate material to existing experience and knowledge to facilitate recall and learning
- Manage the Learner’s **Cognitive Load**
  - Organize material into small chunks, build up gradually from simple to complex concepts
- Immerse in **Problem-Centered Activities**
  - Provide opportunities for learners to work immediately on meaningful, realistic tasks.
- Emphasize **Interactive Experiences**
  - Encourage active construction & processing of material to build lasting memories and deepen understanding
- Provide **Frequent, Varied Practice**
  - Create interactive problems for practice, exercises and tests that aid understanding

[http://availabletechnologies.pnl.gov/media/33\\_97200670001.pdf](http://availabletechnologies.pnl.gov/media/33_97200670001.pdf)

Theoretical Base 15

## R Constructivist Implications

**Focus: active cognitive reorganization.**

**Student Autonomy:** Ask for personal theories and understandings

- Allow **student thinking to drive lessons and alter instruction based on responses.**
- Place thinking and learning responsibility in students’ hands to foster ownership.

**Meaningfulness and Personal Motivation:** Make learning personally relevant and meaningful. Relate learning to practical ideas and personal experiences. Adapt content to personal interests.

**Cognitive Framing:** Organize information around concepts, problems, themes, and interrelationships, framing activities using thinking-related terminology (e.g., classify, summarize, predict).

**Prior Knowledge and Misconceptions:** Adapt the cognitive demands of instructional tasks to students’ cognitive schemes, while building on prior knowledge. Design lessons to address students’ previous misconceptions, e.g. by posing contradictions to original hypotheses and then inviting responses.

<http://www.publicationshare.com/docs/Bon02.pdf>

Theoretical Base 16

## R Constructivist Implications

**Questioning:** Promote student inquiry and conjecture with open-ended questions. Also, encourage student question-asking behavior and peer questioning.

**Individual Exploration and Generating Connections:** Provide time for the selection of instructional materials and the discovery of information, ideas, and relationships. Encourage students to generate knowledge connections, metaphors, insights, and build their own learning products.

**Self-Regulated Learning:** Foster opportunity for reflection on skills used to manage and control one’s learning. Help students understand and become self-aware of all aspects of one’s learning, from planning to learning performance evaluation. In cooperative learning or peer interaction, look for opportunities to model and support new individual meta-cognitive skills.

**Assessment:** Focus assessment on individual cognitive development within predefined stages. Use authentic portfolio and performance-based measures with higher order thinking skill evaluation criteria or scoring rubrics.

<http://www.publicationshare.com/docs/Bon02.pdf>

Theoretical Base 17

## R Social Constructivist Implications

**Focus: social interaction, induction into an established community of practice.**

**Authentic Problems:** Learning environments should reflect real-world complexities. Allow students to explore specializations as they develop interests and deeper knowledge and skills.

**Team Choice and Common Interests:** Build on common interests and experiences. Make group learning activities relevant, meaningful, and both process and product oriented. Give students and student teams choice in learning activities. Foster student and group autonomy, initiative, leadership.

**Social Dialogue and Elaboration:** Use activities with multiple solutions, novelty, uncertainty, and personal interest to promote student-student and student-teacher dialogue, idea sharing, and articulation of views. Seek elaboration on responses with discussion and group presentations.

**Group Processing and Reflection:** Encourage team reflection and group processing on experiences.

**Teacher Explanations, Support, and Demonstrations:** Demonstrate problem steps and provide hints and cues for successful problem completion. Provide explanations, elaborations, and clarifications.

<http://www.publicationshare.com/docs/Bon02.pdf>

Theoretical Base 18

## R Social Constructivist Implications

**Multiple Viewpoints:** Foster explanations, examples, and multiple ways of understanding a problem or difficult material. Build in a broad community of audiences beyond the instructor.

**Collaboration and Negotiation:** Foster student collaboration and negotiation of meaning, consensus building, joint proposals, pro-social behaviors, conflict resolution, and general social interaction.

**Learning Communities:** Create a classroom ethos of joint responsibility for learning, where students are experts and have learning ownership, meaning is negotiated, and participation structures are understood and ritualized. Use technology to facilitate idea generation and knowledge building within this community of peers. Thematic & problem-based instruction is incorporated wherever possible.

**Assessment:** Focus on team participation in socially organized practices and interactions. Educational standards are socially negotiated. Focus on collaboration, group processing, teamwork, and sharing of findings. Assessment is continual, less formal, subjective, collaborative, and cumulative.

<http://www.publicationshare.com/docs/Bon02.pdf>

Theoretical Base 19

**R Social Constructivist Implications**

**Mediation:** Because individual development is dependent on institutional settings and cultural artifacts in one's learning environment, as technology alters tools and settings, so, too, does it alter mind.

**Zones of Proximal Development (ZPD):** Social interaction is central to the development of new patterns of thought and strategic behaviors.

**Internalization:** Learning is not an exact copying process, but, instead, the learner appropriates or applies the skills or information based on his or her own skills, needs, and experiences.

**Cognitive Apprenticeship:** Teachers and communities should apprentice and scaffold young learners into authentic learning activities, while gradually ceding control of the learning to the student.

**Assisted Learning:** Modeling, coaching, scaffolding and fading, questioning, directly instructing, task structuring, management and feedback, and pushing students to explore and articulate ideas).

**Tele-apprenticeship:** Online learning environments are mediated by experts, peers, mentors, teachers, to help build and share knowledge through access to specialized expertise and information.

<http://www.publicationshare.com/docs/Bon02.pdf>

Theoretical Base 20

**R Social Constructivist Implications**

**Scaffolded Learning:** The goal is to actively engage the learner while providing only the necessary supports for eventual independent use of such strategies, of thought and mental functioning.

**Intersubjectivity:** Conferencing and collaborative technologies can foster such shared space or situational understanding between learning participants that can help them negotiate meaning, design new knowledge, and perceive multiple problem-solving perspectives.

**Activity Setting as Unit of Analysis: Context is king.** Specific circumstances of an event or activity are essential to understanding how people act in their attempt to reach their goals. In effect, because consciousness is a product of society, we should explore the individual-in-social action.

**Distributed Intelligence in a Learning Community:** Because knowledge is negotiated by members of a community of practice, the classroom should be organized to guide student learning toward membership in a learning community. Participation in such a classroom is no longer didactic or transmissive, but a sophisticated instructional conversation.

<http://www.publicationshare.com/docs/Bon02.pdf>

Theoretical Base 21

**Theory = Development Framework**

**Implicit beliefs/knowledge on**  
Human nature  
Learning  
Teaching

**Experiences with teaching (as a learner)**

**Learning styles**

**Teaching styles**

**Teaching practice**

**Course Design**

**Explicit theoretical knowledge on**  
Human nature  
Learning  
Teaching

*"Implementation of learning styles at the teacher level"*  
(Nielsen, 2008)

**LIVE CHAT QUESTION:**  
*How did you arrive at your preferred teaching style? (theory, personality, research, formative experiences)*

22

Appropriate Use

## Student-Centered Teaching

It's not for every teacher, every course, or every lesson, is it?

Appropriate Use 23

## Goofus and Gallant

Goofus tells his students what to think.

Gallant gives students tools to use to think for themselves.

**LIVE CHAT QUESTION:**  
*What is misleading about this message?*

Appropriate Use 24

## Introducing ... The Continuum!


*"bla, bla, bla"*

*"whatever!"*

Expository	Guided Inquiry	Free Discovery
Instructor-centered Knowledge transfer "Got it? Great!"	Instructor-guided Knowledge building "Now, what about..."	Learner-guided Knowledge seeking "Hey, let me see!"

Appropriate Use 25


## Goofus, Guide-us and Gallant



Goofus tells his students what to think.

**Expository**


Instructor-centered  
Knowledge transfer  
"Got it? Great!"



Guide-us facilitates a discussion and asks probing questions.

**Guided Inquiry**

Instructor-guided  
Knowledge building  
"Now, what about..."



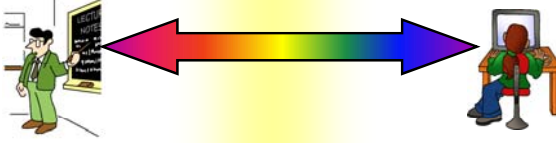
Gallant gives students tools to use to think for themselves.

**Free Discovery**

Learner-guided  
Knowledge seeking  
"Hey, let me see!"

Appropriate Use 26

## "bla, bla, bla" Working The Continuum "whatever!"



Expository	Guided Inquiry	Free Discovery
Instructor-centered Knowledge transfer "Got it? Great!"	Instructor-guided Knowledge building "Now, what about..."	Learner-guided Knowledge seeking "Hey, let me see!"


**LIVE CHAT QUESTION**

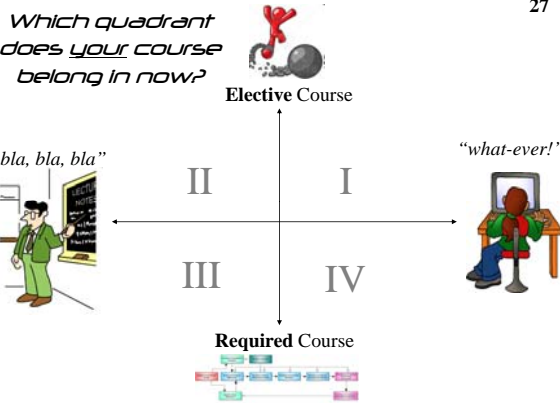
Where would you place "social learning" (social constructionism)?

Appropriate Use 27


## Which quadrant does your course belong in now?

"bla, bla, bla"



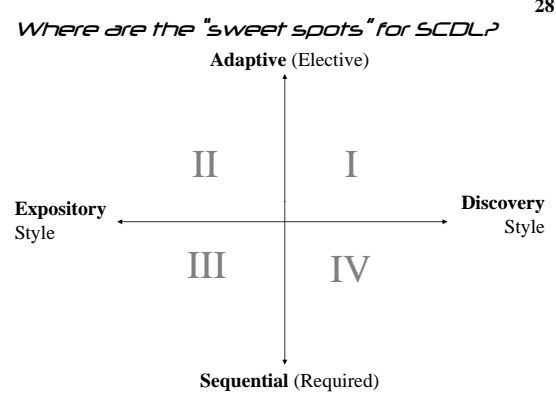


"what-ever!"



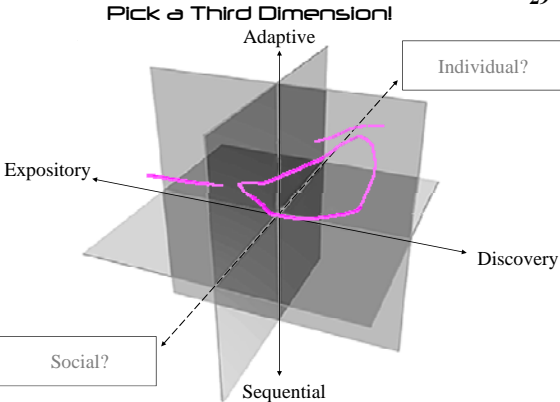
Appropriate Use 28

## Where are the "sweet spots" for SCDL?



Appropriate Use 29

## Pick a Third Dimension!




Leverage Collateral Energy

## Building "Collateral Energy" Online

A key student-centered distance learning strategy.

Leverage Collateral Energy 31

### The Customer Is Always Right.



B-Job  
"We've talked it over and we've decided that you must not really be a customer."

**LIVE CHAT QUESTION:**  
*If students are customers, and the customer is always right, what does it mean to give a failing grade?*

Leverage Collateral Energy 32

### Your Customer's Values

- Freedom and choice
- Customization and personalization
- Invitation to offer feedback
- Integrity and openness
- Collaboration and projects
- Real-life applications
- Move fast, or at their own pace
- Constant innovation



<http://www.iconoculture.com/microsites/Millennials/>

Leverage Collateral Energy 33

### What your Customers Want

- Clear guidelines, rules and goals
- Responsiveness and fast feedback
- Customization and interactivity
- Open communities to join
- Team projects (with support)
- Paths to internship / employment



<http://www.iconoculture.com/microsites/Millennials/>

**LIVE CHAT QUESTION:**  
*Does this match your experience of your current students? If not, how not?*

Leverage Collateral Energy




*Wind or Sun: whose job would YOU rather have?*

Leverage Collateral Energy 35

### Energy Source: Belonging

**Belonging** – the desire to connect with others, establish friendships, and to know that others care about us.




**To Summon Belonging-energy:**

- Introduce yourself online, and offer affiliating details
- Invite students to offer information about themselves
- Support an open and friendly online learning environment
- Invite students to team up on assignments
- Host full-group discussions and/or group projects
- *What else?*

Leverage Collateral Energy 36

### Energy Source: Freedom

**Freedom** – the need to know that we can act and think without undue restriction by others, though with personal responsibility.




**To Summon Freedom-energy:**

- Invite Discovery Learning (students pick topics)
- Allow students to choose their own deliverables
- Provide resources that allow students to determine how deeply they want to explore a subject.
- *What else?*

Leverage Collateral Energy 37

**R Energy Source: Power**

**Power** - the need to know that others recognize you for what you do or say that is important or significant.




**To Summon Power-energy:**

- Encourage students to share personal experiences
- Model and scaffold supportive and probing comments.
- Culminate in a peer review presentation
- Promote membership in knowledge communities
- What else?

Leverage Collateral Energy 38

**R Energy Source: Fun**

**Fun** - the need to laugh and feel good. Fun learning invites participation and creates positive memories. The opposite of fun is “traumatic”.



**To Summon Fun-energy:**

- Use goal-based scenarios and simulations
- Create a relaxed, informal online vibe
- Structure individual or group competitions
- Encourage creativity in thinking and projects
- *What else?*

39

Provide More Guidance

**Student Centered Learning  
Requires Instructor Guidance**

Life’s Railway:  
“Keep your hand upon the Throttle,  
and your Eye upon the Rail.”

Provide More Guidance 40

**Guidance Moves**

<p><u>Instructor Questions:</u></p> <ul style="list-style-type: none"> <li>➢ Refocus thinking</li> <li>➢ Guide discovery process</li> <li>➢ Present contradictions</li> <li>➢ Probe for understanding</li> <li>➢ Put responsibility on learner</li> </ul>	<p><u>Group Discussion:</u></p> <ul style="list-style-type: none"> <li>➢ Provoke exchanges</li> <li>➢ Examine alternatives</li> <li>➢ Judge solutions</li> <li>➢ Make predictions</li> <li>➢ Discover generalizations</li> </ul>
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**LIVE CHAT QUESTIONS:**

1. What is your reaction when you consider this list relative to your current teaching style? Are you doing enough?
2. If you wanted to increase your use of these moves, how would you do it? (course design, lesson plans, reminders, prayer?)

Provide More Guidance 41

**Now Add Online Learning!**

Online learning tools (both synchronous and asynchronous) **explode the space/time limits** of the class-period/office-hour /term-paper-margin-comments.

All that new guidance and feedback has to come from someone.... You may not need to be the only person giving guidance and feedback anymore! In fact, **you can’t be.**

Are you ready to turn your students into teaching assistants?

**LIVE CHAT QUESTION:**

*New technologies allow the substitution of **coordination** for **planning**, leading to democratization of workgroups. Do your current students seem ready for democracy? Could you train them to provide useful feedback to each other?*

42

Replace Planning with Coordination

**Replace Planning  
With Coordination**

“Distance Learning” CAN be offered as old-style training. SCDL cannot – and this involves tradeoffs.

Replace Planning with Coordination 43

### Fun with Dick & Carey

[http://www.nwlink.com/~donclark/history\\_isd/carey.html](http://www.nwlink.com/~donclark/history_isd/carey.html)

Dick and Carey Instructional Design Model

**LIVE CHAT QUESTION:**  
 Would criterion referenced tests “capture” the value students receive from your course?

Replace Planning with Coordination 44

### Old: Your Course Has No Hope Without Sequence and Scope ...

“Classical Score”: Notes, dynamics, tempo, instruments.

Eine Kleine Nachtmusik

Dick and Carey Instructional Design Model

Replace Planning with Coordination 45

### New: It Don't Mean A Thing If It Ain't Got That Swing!

“Fake Sheet”  
 Just the Melody & Chords

#### IT DON'T MEAN A THING

(If It Ain't Got That Swing)

Words and Music by DUKE ELLINGTON and IRVING MILLS

**What Happens In Real Time**

Replace Planning with Coordination 46

### Clay Shirky Says:

- “The ability of people to share, cooperate, and act together is being improved dramatically by our social tools....”

[Here Comes Everybody](#) (2008)

Replace Planning with Coordination 47

### Student-As-Teacher

“the best method for **building deep knowledge structures** is ... normally the most time-consuming.

This is why **training developers** often become experts in the subject matter -- while creating the concepts, principles, procedures, etc. for the training program, they produce within themselves **deep knowledge structures**; while in turn, the **users** of these training design products **only produce surface knowledge**.

[http://www.nwlink.com/~donclark/history\\_isd/isdwarp.html](http://www.nwlink.com/~donclark/history_isd/isdwarp.html)

48

Strategies for Success

### Strategies for Success

New technologies are hard.  
 Student centered learning is hard.  
 Together they could be easier!

Strategies for Success 49

### Planning

What you've got.      The Department wants...      The Students Want..

Strategies for Success 50

### Testing

Before Testing...      Alpha Testing      After Beta Testing

Strategies for Success 51

### Practicing

- Select an emoticon to show status and state
- Raise your hand when you want to speak

Joe: Can you tell me how to get to Carnegie Hall?

Joe: Main Room Practice!

Invite More Feedback

### Critical Incident Questionnaire (CIQ)

1. At what moment in class this week did you **feel most engaged** with what was happening?
2. At what moment in the class this week did you **feel most distanced** from what was happening?
3. What action that anyone (teacher or student) took in class this week did you find most **affirming and helpful**?
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<http://hvscouts.com/moodle/mod/survey/view.php?id=214>

[http://www.stephenbrookfield.com/Dr\\_Stephen\\_D\\_Brookfield/Critical\\_Incident\\_Questionnaire\\_files/CIQ.pdf](http://www.stephenbrookfield.com/Dr_Stephen_D_Brookfield/Critical_Incident_Questionnaire_files/CIQ.pdf)

Invite More Feedback 53

### To Dos

- Configure Moodle for Email Notifications
- Check / reply: Moodle Forums
- Complete the Roles Blog Assignment
- Read and Comment on our Live Blog / Add to the Wiki
- Optional: Watch "Late Nite Live" (Moodle Link)