

Classroom Communication: Creating Synergy Between Instructor, Students, and Learning Process

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My "Laundry List"

Instructor

Lecture

PowerPoint Slides

Worked examples

Professional Software

Websites

Blackboard CMS

[Black/White] Board

Students

Notes/ Handouts

In-class group activities

Calculator

Computer

Personal Response

Tool

Homework

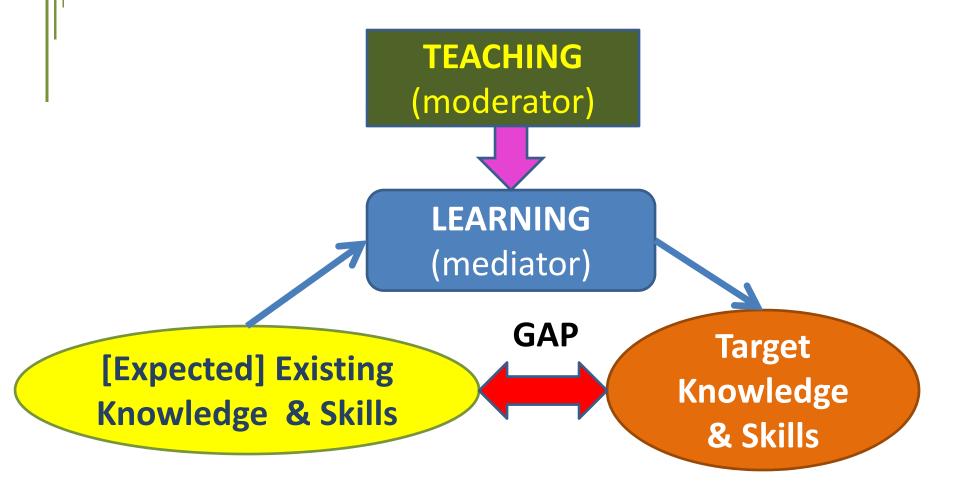
Projects

Quiz/Test

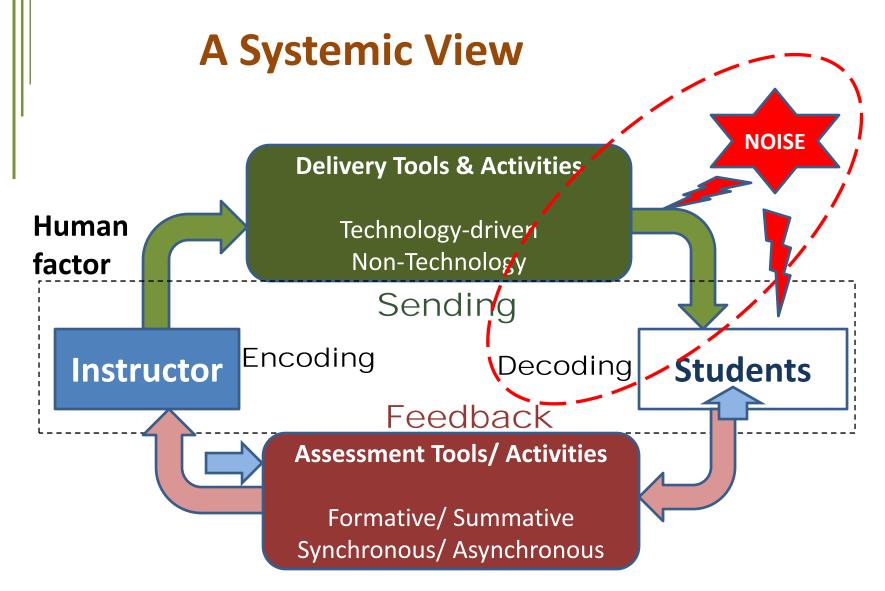
[e]Portfolio



Instructional Context



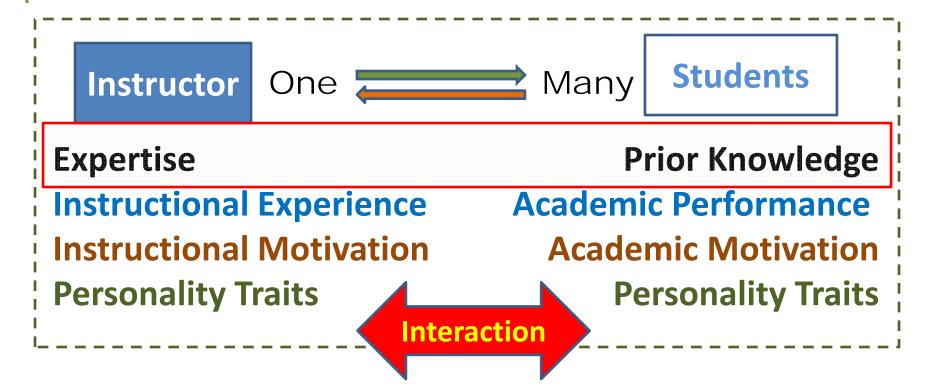






"Noise" due to Human Factors

Internal factors





Expertise can be your Friend or Foe

Foe if...

- Try to convey everything you know;
- Assume silence as a sign of learning;

Friend if...

- Use stories based on your expertise;
- Integrate your research and teaching;

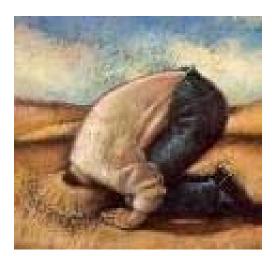


Prior Knowledge – the hidden enemy?

At the class level, expect to have a GAP between

Needed and Actual

Prior Knowledge/Skills



Will be helpful to:

- Have an entry test that covers critical skills;
- Build, in time, prior-knowledge tutorials;
- Create early tasks that use these tutorials;



"Noise" due to Human Factors

External factors



Research Engagement

Academic Service Non-academic Life

Extra-curricular Activities

Academic Service Non-academic Life



Classroom Communication Plan for Unexpected

For you as Instructor...

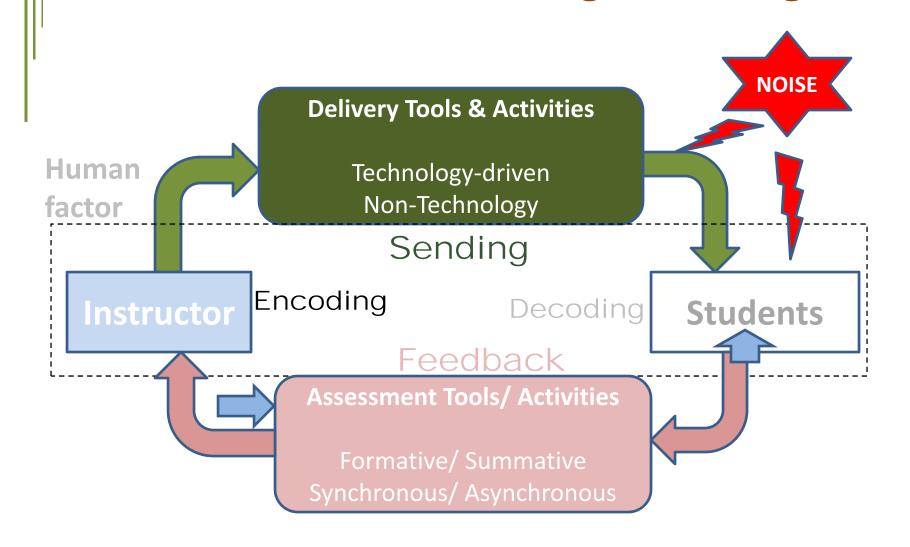
- Have at least one "throw-out" lecture;
- Learn how to use "distance teaching" technology available;

For your students...

- Clearly state what a reasonable requests is;
- Offer "opt-out" homework and quizzes;
- Offer extra-points problems in your exams;



"Noise" due to Encoding & Sending



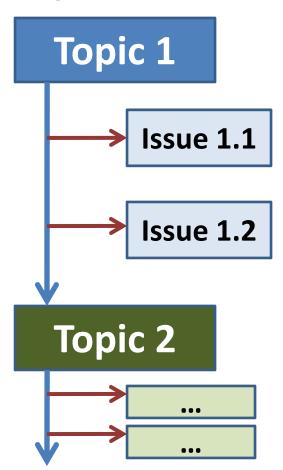


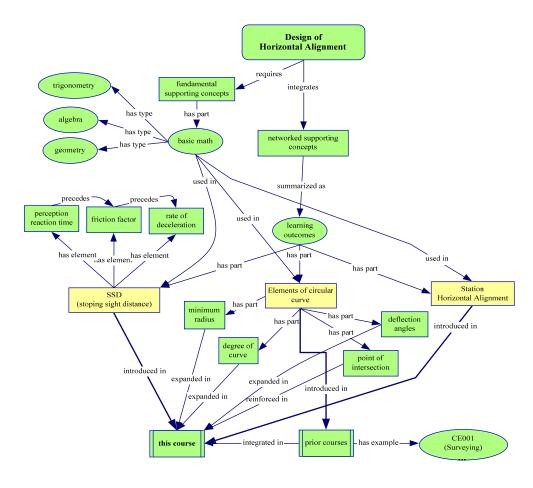


"Noise" due to Encoding Traits: Linearity

...you do this

...you expect that









Strategies to compensate for Linearity

Continuity of Concepts & Ideas

- Revisit concepts taught previously;
- Use different contextual application (e.g. lecture, homework, project) of same/similar concept(s);

Summarize and Integrate

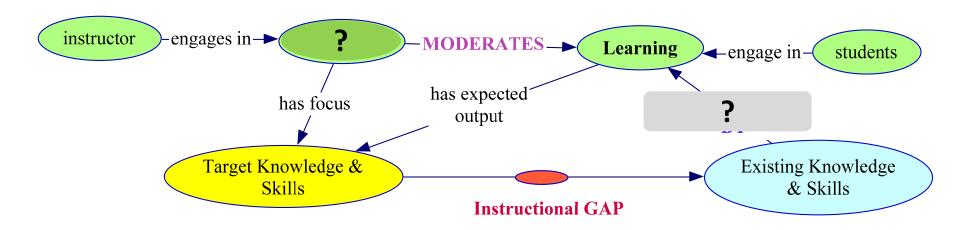
- Provide/ask for summary of major groups of concepts (e.g. outlines, diagrams);
- Provide explicit representations of related groups of concepts (e.g. concept maps)





Concept Mapping Strategies

Use concept maps to show, build and assess structural knowledge (Why?)



Be creative...use engaging contexts (e.g. games, puzzle) to make these tools more appealing.



Use of one Presentation Tools

Excessive use of PowerPoint Slides or [White/ Black/Digital] Board is:

- Boring;
- Disengaging;
- Waste of classroom time;



Presentation Strategies

Balance the information on the slide and board

- Use outline slides to support not replace you;
 use the board to add details
- Use slides that have complementary graphics;
 - when technical possible draw on the slide;
- Use slides that summarize and synthesize;



Address the Diversity of Classroom

Various Cognitive Styles

- Visualizer
 - image oriented;
 - manipulate and transform images
- Verbalizer
 - word oriented;
 - manipulate and transforms symbols



Address the Diversity of Classroom

Various Cognitive Controls

- Field Dependent (FD)
 - global;
 - externally directed
 - factually oriented
- Field Independent (FI)
 - analytic;
 - internally directed;
 - conceptually oriented;

FD Students taught by FI Teachers

achieved more

than when taught by FD teachers



Don't Forget the Affective Learning

Teacher Nonverbal Immediacy Student Affective Learning (mediator)

Student Cognitive Learning

Affective Learning:

state of motivation value preferences commitment epistemic beliefs

Cognitive Learning:

various levels of learning outcomes (e.g. Bloom)



Examples of nonverbal immediacy:

- Eye contact;
- Vocal expressiveness;
 (Tone of voice variation/ Raising and lowering voice)
- Gestures, dynamics of delivery;
 (Body Language/ Energy level passion for subject/job)
- Movement in the classroom;
 (Walks around the room to show interest/ Proximity - where instructor located)



How to Increase Instructor Immediacy

Select a combination of two to three immediacy strategies you feel comfortable implementing

Start to implement them and be persistent (typically the impact on your students is slow);

Develop a set of questions regarding the immediacy strategies and administer them at midterm



Contact Information

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