

FAILING TO
PLAN
IS
PLANNING
TO FAIL



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Goals

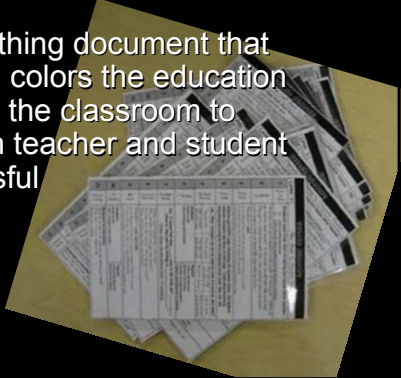
Upon completion the participant will

- explain the need for creating and using lesson plans.
- state the typical components of a lesson plan.
- design instruction that promotes higher-order thinking, understanding, critical reasoning & enduring learning.

What is a lesson plan?

A living, breathing document that shapes and colors the education delivered in the classroom to ensure both teacher and student are successful

Heather Davis



Why aren't they used?

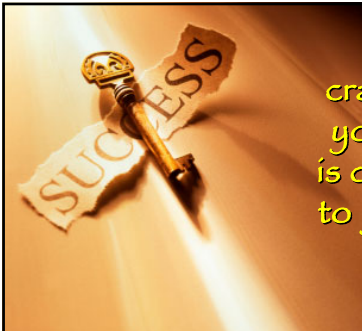
Didn't know they existed
Never taught how
Don't need 'em
I've gotten along fine for years w/o them
Boring; time consuming
More useless paperwork
No one around here uses 'em
Too restrictive; stifles spontaneity



Why needed?

What is to be learned is clear and explicit
Content is aligned to standards
High yield strategies are planned to keep students engaged
Students learn higher order thinking, can reason critically, and understanding is checked and affirmed





The craftsmanship of your lesson plan is directly related to your students' success
(Davis, 2010)

Killing us softly... Isolation, inviolability of teacher choices, and buffering from external scrutiny has institutionalized mediocrity in teaching (Schmoker, 2006)

Gentle observation...

If you've taught or learned the same content the same way for 20 years, perhaps it's time for a change...

I know...

"The laws of gravity, inertia, and motion haven't changed much over the years..."



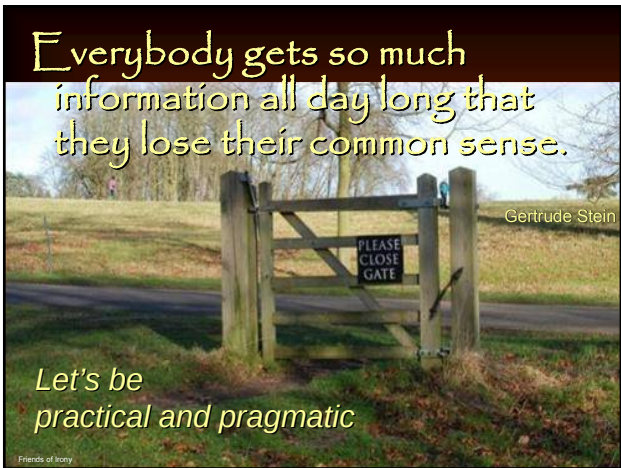
So, what 3 things reflect best practice in this photo?



Everybody gets so much information all day long that they lose their common sense.

Gertrude Stein

Let's be practical and pragmatic



Overview of tools used for creating lesson plans

Madeline Hunter Model for Lesson Plan Construction

Blooms Taxonomy - higher order thinking & critical reasoning

Multiple Intelligences (Howard Gardner)

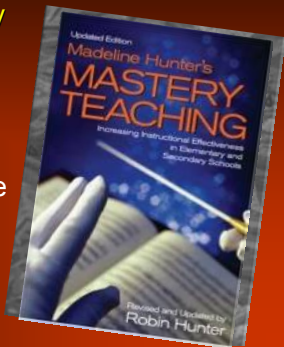
Instructional Scaffolding (Bruner, Lange and Applebee)

Madeline Hunter teacher "decision-making" model

ITIP: Instructional Theory Into Practice

Closely aligned with behaviorist/cognitivist instructional design models – Gagne's Nine events of instruction

Incorporates mastery learning concepts



Instructional design model

- A: Analysis
- D: Design
- D: Development
- I: Implementation
- E: Evaluation



1st step: Needs assessment

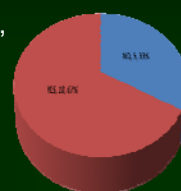
Who are the learners?
Base understanding - *Where* are they now?
What do they need to know;
in what order do they need it?
Prior independent study before class?
At what level?
Basic knowledge
Basic understanding
Applied understanding
Real world discovery
Global integration



Needs assessment for CE

QI results? What areas require improvement?
Survey System administrators & stakeholders
Survey participants while at classes
Seek input from EMS MD, educators
Review literature for new trends
Survey customers: pts, ED RNs, MDs, special interest groups

15/20 runs needed OLMC per NWC policy
Results for those 15 runs:
Should be 100%



What are the standards?

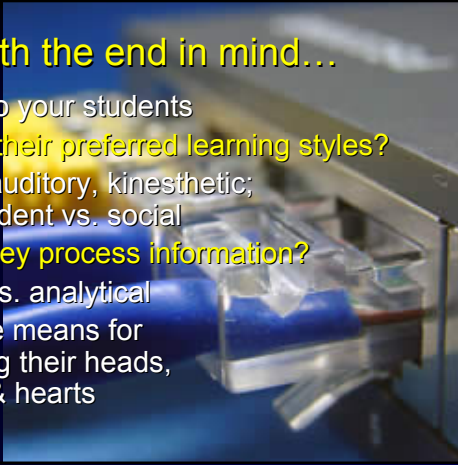
Frequently, instruction is not adequately aligned with assessments and standards – creates an achievement gap
Curriculum guides become well-intended fiction as instructor (guest faculty) freelance on what they cover
Discrepancy between intended curriculum and implemented curriculum causes *curricular chaos*



What are *our* standards? Where do they come from”?

Start with the end in mind...

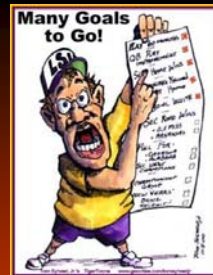
“Plug in” to your students
What are their preferred learning styles?
Visual, auditory, kinesthetic;
Independent vs. social
How do they process information?
Global vs. analytical
Create the means for engaging their heads, hands, & hearts



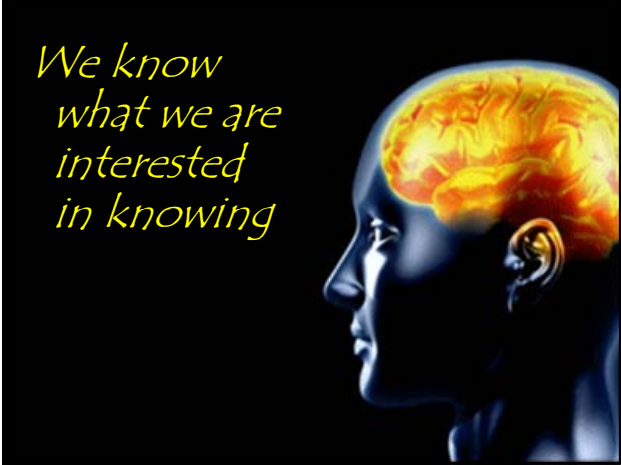
Hunter template

Primary goal of instruction
Objectives: What should the student be able to do, understand, or care about as a result of the class?

Use Bloom's Taxonomy to design objectives at an appropriate level of difficulty & complexity in all 3 domains of learning based on learning needs (task analysis)



Bloom's Taxonomy		
Objective level guides teaching & testing methods		
Cognitive	Psychomotor	Affective
Evaluation	(What they can do)	(How they behave)
Synthesis	Naturalization	Characterization
Analysis	Articulation	Organization
Application	Precision	Valuing
Comprehension	Manipulation	Responding
Knowledge	Imitation	Receiving



A silhouette of a human head against a blue sky with clouds. Inside the head, there is a glowing yellow door, symbolizing the concept of an 'Anticipatory set'.

Anticipatory set

Organizing framework for ideas, principles, or information to follow ("advance organizers")

Extends understanding & application of abstract ideas through use of examples or analogies... use any time a different activity or new concept is to be introduced

Anticipatory set

Hook/sponge: Attention grabber

Motivates them to pay attention

Establishes why they should care to learn content

A photograph of a red apple being sliced by a metal slicer on a wooden cutting board. A yellow sticky note is attached to the board.



What else can be used?

- Compelling dispatch tape
- Patient testimonial or personal story
- News article
- Visually impressive photo
- Mock call or scenario; role play
- Slides on auto advance
- Posed problem
- Music

The text "Other ideas?" is written in a large, 3D, orange-yellow font with a shadow, slanted upwards to the right.



Teaching input

Determine instructional design based on goals & objectives, nature of content, & preferred learning styles

Outline declarative content for lecture

Create examples/activities to illustrate concepts

Depth, activities & delivery methods determined by needs assessment



Food for thought

Instructors tend to teach in their comfort zone and for their convenience rather than for the students' understanding and learning

Consider the learning needs of the students... then develop the design



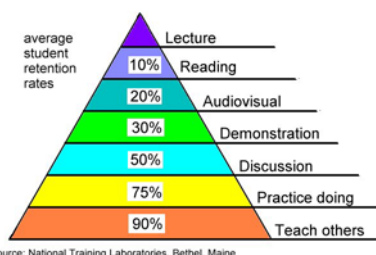
Teaching is not reading the book or slides to the students!

We should breathe life into the book!

"Tell me and I forget, show me and I remember, involve me and I understand".

Benjamin Franklin

Learning Pyramid



Method	Average student retention rates
Lecture	10%
Reading	20%
Audiovisual	30%
Demonstration	50%
Discussion	75%
Practice doing	90%
Teach others	90%

Source: National Training Laboratories, Bethel, Maine

Chunk teaching methods – q. 20 min

Introductory lecture; discussion

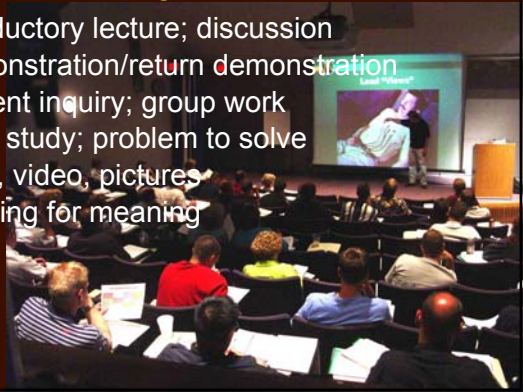
Demonstration/return demonstration

Student inquiry; group work

Case study; problem to solve

Tape, video, pictures

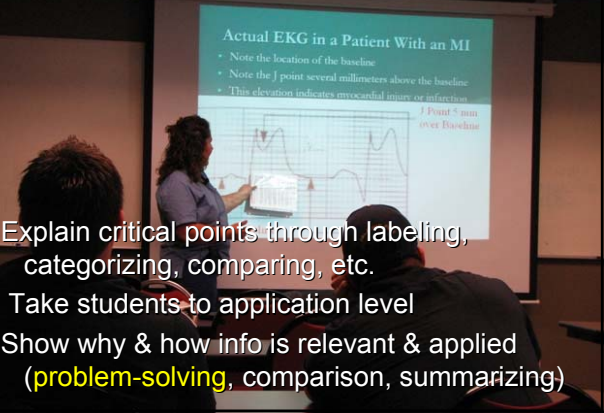
Reading for meaning



Explain critical points through labeling, categorizing, comparing, etc.

Take students to application level

Show why & how info is relevant & applied (**problem-solving**, comparison, summarizing)



Student-centered learning

Promotes higher-order thinking,
understanding, & enduring learning
Students must be able to
adjust to the
unpredictable
Flip the classroom!
Add complexity



Student-centered methods

Reading for meaning w/ discussion
Writing assignments – develop sophisticated
thought leading to authentic literacy and
student's critical capacities
Case studies; Scenarios;
simulations,
problem-based learning
Student discovery;
lab experiments,
field observations



Collaborative learning

Group learning activities – Teamwork critical
Examples
■ Worksheets
■ Case studies
w/ questions
■ Role playing



Sharing/Comparing class notes

Pair & share: instruct them to share notes
After 15 min, ask if there were any
discrepancies
Ask students to
explain differences
Immediately correct
any errors

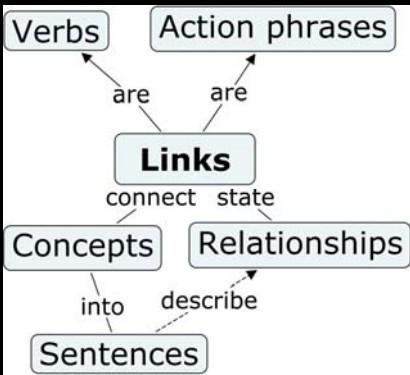


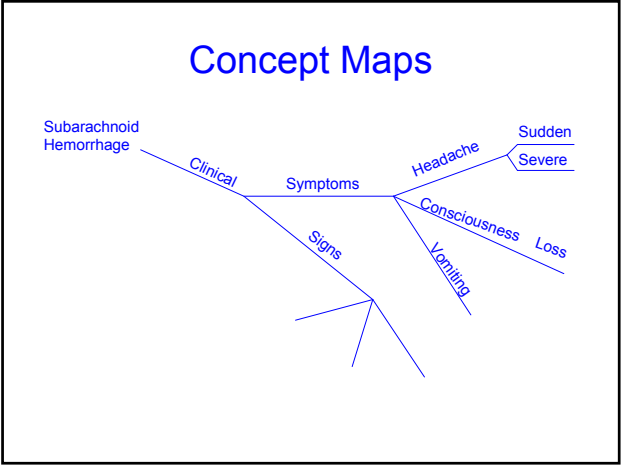
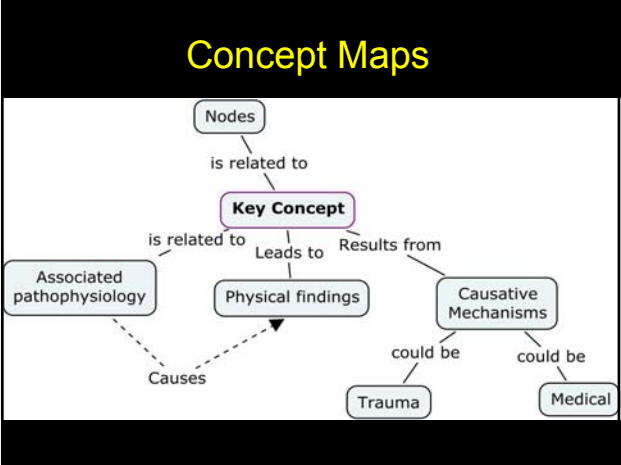
Concept Maps/Mind Maps

Develop understanding of intersecting
relationships
Use prior knowledge
Gather new knowledge
& information
Share knowledge &
information generated
Problem solving options



Concept Map





Concept Map Rubric

Clarity	Breadth	Complete-ness	Depth	Accuracy	Points
All relationships are clearly defined	Greatly exceeds min req for nodes	Each node has 4 or more links	All major headings have ≥ 4 layers of nodes	No content or relationship errors	4
Most relationships are clearly defined	Moderately exceeds min req for nodes	Each node has 3 links	All major headings have 3 layers of nodes	Has few content or relationship errors	3
Some relationships are clearly defined	Slightly exceeds min req for nodes	Each node has 2 links	All major headings have at least 2 layers of nodes	Has some content or relationship errors	2
Relationships are not clearly defined	Meets min requirement for nodes	Each node has 1 link	Major headings have 1 layer of nodes	Has many content or relationship errors	1

Ashford, McKenna 2007

Problem Based Learning

Early 70's at Canada's McMaster University

- Case Western Reserve University
- Harvard Medical School (1977)

Instructional strategy where students, working in small groups, delve into and determine key issues, then solve a "real-world" problem under guidance of a facilitator

PBL: A variety of formats

Problem, Problem, Problem
Specific problem, specific problem, comprehensive problem
Level A, Level B, Level C problem

****Problem, lecture, problem, lecture**
****Case study, problem**

PBL: Issues to Address

Teacher role is facilitator

- Major role reversal
- Most teachers not taught how to facilitate

Amount of time needed

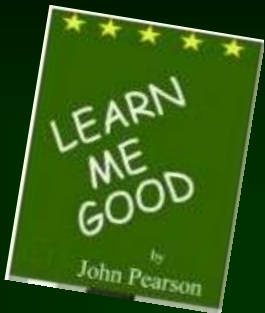
- Prepare course materials
- Develop problem
- Train other teachers
- Prepare evaluation rubric

Background knowledge probe

Purpose:	Used to collect specific information on student's prior learning; helps determine the starting point and level of instruction
How to:	Prepare questions, limit to approx. 10, to probe existing knowledge, stress this isn't a test; review at next class
For students:	Provides a preview of what is to come; what concepts will be important in class; & what they already know

Hunter - Guided practice

Each student demonstrates grasp of new learning by working through an activity or exercise under teacher's direct supervision



Engage students with activities and guided practice during session



Guided practice

The preceptor moves around the room to determine mastery & provide feedback or remediation as needed

What form could this take?



Build in checks for understanding

Determine if students are “getting” material
Confused or lost students disengage
Allow for “in-flight corrections”
Students must understand before practicing
If any doubt, re-teach concept/skill before practice begins



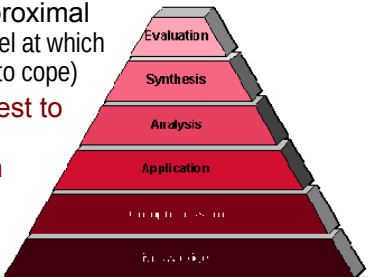
Check for understanding

Design questions that are hierarchical and cumulative to probe for understanding

Ensures memory network binding and transfer

Target to level of proximal development (level at which student is prepared to cope)

Progress from lowest to highest levels in cognitive domain



Check for understanding

How can this be done?

Signaled responses
"Clickers"



One Minute Paper

Examples:

What is the most important thing you learned during this class?



Minute paper

Purpose:	Quickly determine how well students are learning or what areas of lesson they are having the most difficulty understanding.
How to:	Decide what you want to focus on and when to use it. Set aside 5-10 minutes
For students:	Helps student reflect on learning; gives opportunity to ask question they may not feel comfortable asking in class

O₂ is a drug and must be given to specific pts based indications/contraindications and in correct doses by an appropriate route - being vigilant for adverse reactions

Which patients can be harmed by hyperoxia and need careful titration of oxygen?



Harmed by hyperoxia

- Uncomplicated Acute MI
- Post-cardiac arrest
- Acute exacerbations of COPD
- Stroke
- Neonatal resuscitation

Why?

Give O₂ to these pts only if evidence of hypoxia and titrate to dose that relieves hypoxemia without causing hyperoxia (SpO₂ 94%)

Iscor, S. et al. (2011) Supplementary oxygen for nonhypoxemic patients: O(2) much of a good thing? Crit Care, 15(3), 305

Fill in a Memory matrix

Purpose:	Assesses student's recall of course content and their skill at organizing that information. Works well with facts and principles.
How to:	Draw a simple matrix with row and column headings Provide to students & explain what you expect
For students:	Helps students understand the categorization and organization of concepts while aiding learning

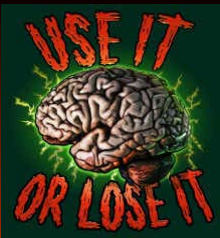
Hunter: Closure

NEVER flip up a slide that says summary!
Tie key points together into a coherent whole
"Any questions? No.
OK, let's move on."
is NOT closure



Purpose of closure

Cue arrival at important point
Organize learning
Form a coherent picture,
consolidate concepts,
eliminate confusion
Do a "go round"
Ask students to reinforce major points...help
establish a network of thought relationships
that provide cues for retrieval



Hunter: Independent practice

Must provide for reinforcement/practice
Design so students
apply concepts after class
Should review on a repeating schedule
so learning is not forgotten



Hunter: Independent practice

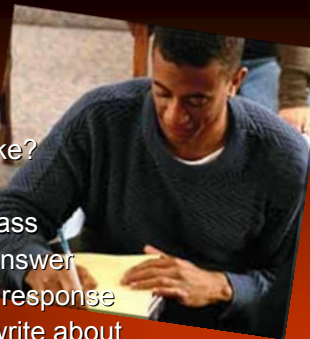
Provide for **decontextualization**:
Plan practice in enough different
contexts so skill/concept may be applied
to any relevant situation... not only the
one in which it was originally presented
Failure to do this is responsible for most
student inability to apply concepts
learned



Independent practice

What form can this take?

- Home work
- Individual work in class
- Post-test banks to answer
- Podcast requiring a response
- Article to read and write about
- Reflective journaling



Must have homework and must be meaningful and not busy work!



Hunter - Resources & classroom materials

Text _____ pages _____
Handouts
Other reading materials
On-line resources
AV aids

Duration: Amount of time needed to complete each portion of the lesson



Equipment needed



Steps are somewhat flexible

Consider each, but actual requirements are determined by you unless set by your institution

How can you get started?

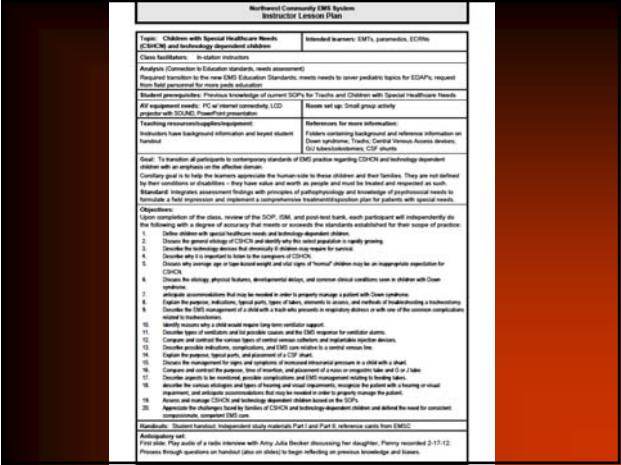
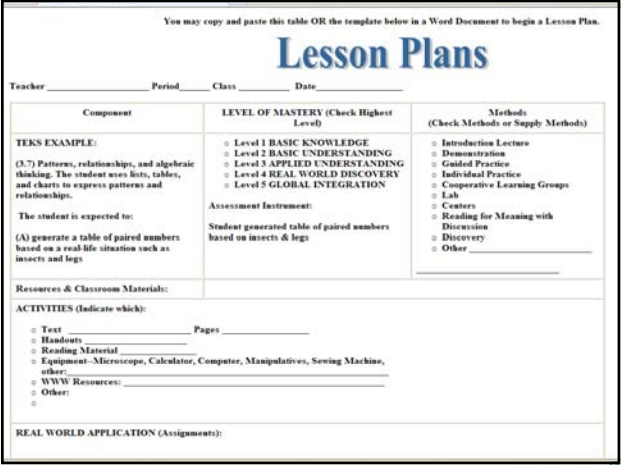
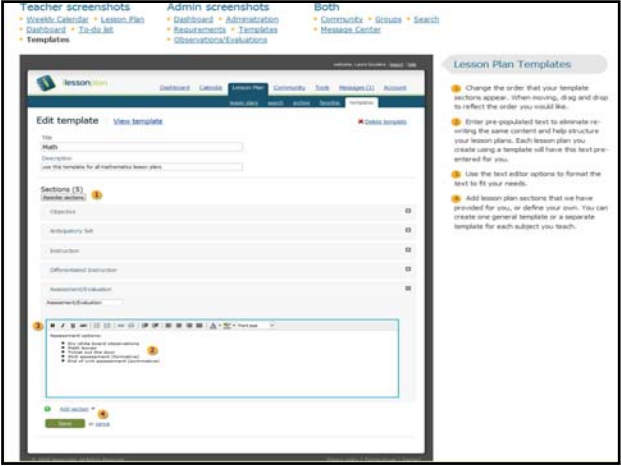
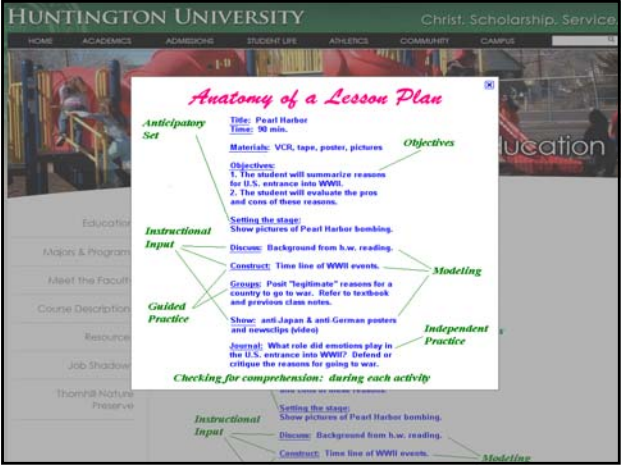
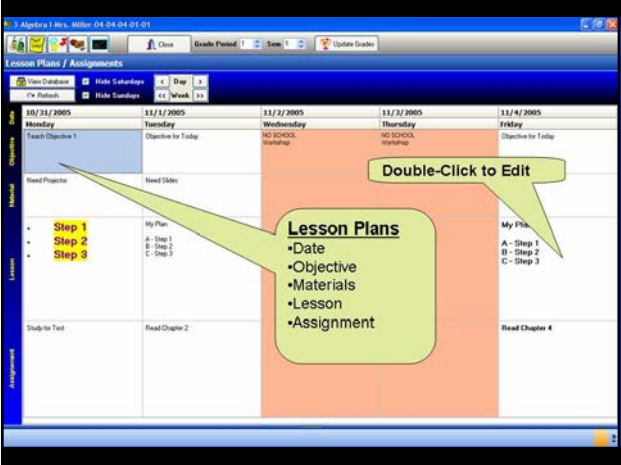


Lesson Plan Template

- Description - content areas
- * Learning target pick list
- Assessment
- Student Activities
- * Supplies
- * Grade
- * Duration (unit-pick list, 72)
- Differentiation Prior knowledge
- Content Objective
- Language Objective
- * Goal/objective
- * Lesson map includes activities
- * Resources # of files, links, Title - Part 2, Image



Lesson planning -
Connie J. Mattera, MS, RN, EMT-P



I have produced an e-narrative. Declarative material is very limited. First few slides only on definitions of CSMHCs and technology-dependent children and general assessment scenarios. Give brief explanation of the slides that show the levels of learning and activities shown by research to result in enduring learning. Divide class into 6 groups. They can select their preference of topic or you can assign them: 2 will work on tracks (one group do the first page of questions, the 2nd to do the second page and present those areas); (1) Down syndrome; (1) CDF; (1) Central venous access lines; and (1) CUI tubes. Each group has a folder of reference materials that they can use, but not keep. It must be turned back in to the educator for the next class. Each group should review their assigned topic in the student handout & the background references in the topic folder for your group. Fill in the missing information re their topic in the student handout that should serve as a template for what they need to present. I have reasons as to prepare a 10 minute presentation on their topic to give to the class – they should perceive what they think is important for them to know based on the new education standards and the objectives. I have – each group will work 3 multiple choice questions (check for understanding) in form of an educator. These may serve as the basis of the post-test bank. ■ Indications for the technology or definition/ etiology of the condition. ■ Elements to assess/ common complications experienced by pts with that condition/ technology. ■ Scenario: when/ why/ what/ if it equipment malfunction or a complication occurs. Pass out sheets on which the questions are to be written. Circulate through the class to be available to answer any questions a group may have. When 10 mins (or each group is finished preparing), click to the next slide. Remind them it is a place slide to alert the group that they are up – sometimes it is a video to introduce the topic. Have each group present for 10 min. Collect student created posttest questions and class evaluations; document CPE hrs.	teaching methods: 1 lecture student-centered group work 30 min 10 min 30 min presentations 60 minutes Student presentations
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Application: Bridge the learning - Ask questions that will foster understanding, inquiry and transfer of learning of each group. Checks for understanding - questions created by students will serve as the basis of the post-test bank. Closure: Go-round – slide will prompt this. Guided practice (classroom activity – most of class is guided practice in preparing the mini-lectures). Independent practice: Students will need to review independent study materials to answer post-test bank. Evaluation tool(s) based on objectives: questions created by students will serve as the basis of the post-test bank. Distribute and collect student class evaluations and forward to Susie.
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backward design template	
Identify Desired Results	
What overarching understandings are desired?	What are the overarching "essential" questions?
↑ ↓	↑ ↓
What will students understand as a result of this unit?	What "essential" and "unit" questions will focus this unit?

Template with design questions for educators	
Stage 1 – Desired Results	
Established goals What relevant goals (e.g., content standards, course or program objectives, learning outcomes) will this design address?	
Understandings: Students will understand that... ■ What are the big ideas? ■ What specific understandings about them are desired? ■ What misunderstandings are predictable?	Essential questions ■ What provocative questions will foster inquiry, understanding, and transfer of learning?
Students will know... and students will be able to... List specific measurable objectives. ■ What key knowledge and skills will students acquire as a result of this unit? ■ What should they eventually be able to do as a result of such knowledge and skills?	

Stage 1: To what extent does the design focus on the big ideas of targeted content?

Consider: Are...

- the targeted understandings enduring, based on transferable, big ideas at the heart of the discipline and in need of uncoverage?
- the targeted understandings framed by questions that spark meaningful connections, provoke, genuine inquiry and deep thought, and encourage transfer?

Stage 1 cont.

Are...

- The essential questions provocative, arguable, and likely to generate inquiry around the central ideas (rather than a "pat" answer)?
- appropriate goals (content standards, benchmarks, curriculum obj.) identified?
- valid and unit-relevant knowledge and skills identified?

Stage 2 – Assessment evidence

Performance tasks

- Through what authentic performance tasks will students demonstrate the desired understandings? What will students develop, create, share, submit, etc.?
- By what criteria will performances of understanding be judged?

Other evidence:

- Through what other evidence (e.g. quizzes, tests, academic prompts (study questions), observations, homework, journals) will students demonstrate achievement of the desired results?
- How will students reflect upon and self-assess their learning?

Stage 2 – To what extent do assessments provide fair, valid, reliable, & sufficient measures of desired results?

Consider: Are...

- ❑ students asked to exhibit their understanding through authentic performance tasks?
- ❑ appropriate criterion-based scoring tools used to evaluate student products and performances?



Stage 2 – Assessment & evaluation cont.

Are...

- ❑ various appropriate assessment formats used to provide additional evidence of learning?
- ❑ assessments used as feedback for students and teachers, as well as for evaluation?
- ❑ students encouraged to self-assess?

Stage 3 Learning Plan – WHERE TO?



What learning experiences and instruction will enable students to achieve the desired results?

How will the design...

- W** Help students know **W**here the unit is going and **W**hat to expect?
Help the instructor know **W**here students are coming from (prior knowledge, interests)?
- H** **H**ook all the students & **H**old their interest?
- E** **E**quip students, help them **E**xperience the key ideas and **E**xplore the issues?
- R** Provide opportunities to **R**ethink and **R**evise their understandings and work?
- E** Allow students to **E**valuate their work & its implications?

Wiggins & McTighe

How will the design cont.

- T** be **T**ailored (personalized) to the different needs, interests and abilities of the learners?
- O** be **O**rganized to maximize initial and sustained engagement as well as effective learning?

Wiggins & McTighe



Stage 3 – To what extent is the learning plan effective and engaging?

Consider: Will the students...

Know where they're going (learning goals), why the material is important, and what is required of them (unit goal, performance requirements, evaluative criteria)?

Be hooked-engaged in digging into the big ideas (through inquiry, research, problem solving, & experimentation)?

Stage 3 – **Will the students...**

Have adequate opportunities to rethink, rehearse, revise and refine their work based on timely feedback?

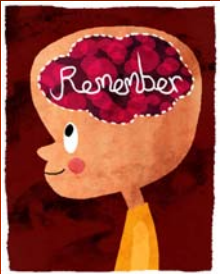
Have an opportunity to evaluate their work, reflect on their learning, and set goals?



Consider: Is the learning plan...

Tailored and flexible to address the interests and learning styles of all students?

Organized and sequenced to maximize engagement and effectiveness?



Education is about teaching students to *think* - not about what they know, but about what they *understand*



Question starters based on the 6 facets of understanding
Explanation

- Who? What? When? How? Why?
- What is the key concept/idea in...?
- What are examples of...?
- What are the characteristics/parts of...?
- Why is this so?
- How might we prove/confirm/justify...?
- How is _____ connected to _____?
- What might happen if _____?
- What are common misconceptions about ___?

Interpretation

- What is the meaning of _____?
- What does _____ reveal about _____?
- How is ____ like ____ (analogy/metaphor)?
- How does _____ relate to me/us?
- So what? Why does it matter?



Application

How and when can we use this (knowledge/ process)?
How is _____ applied in the care of pts?
How could we use _____
to overcome _____
(obstacle, constraint, challenge)?



Perspective

What are different points of view about __?
How might this look from ____'s perspective?
How is __ similar to/different from ____?
What are other possible reactions to ____?
What are the strengths/weaknesses of __?
What are the limits of ____?
What is the evidence for ____?
Is the evidence reliable? Sufficient?

Empathy

What would it be like to walk in ____'s shoes?
How might _____ feel about _____?
How might we reach an understanding about _____?
What was ____ trying
to make us feel/see?



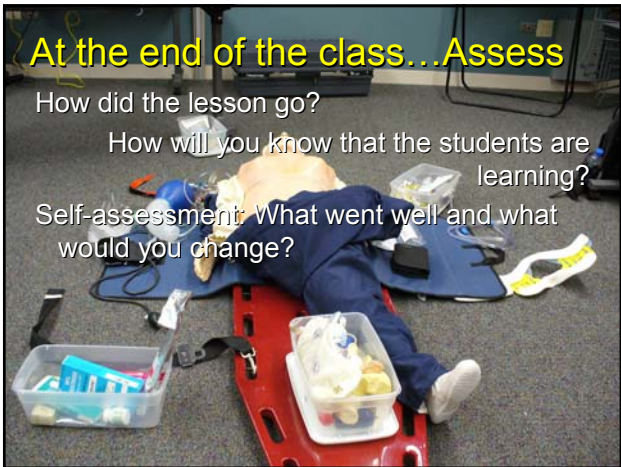
Self-knowledge

How do I know _____?
What are the limits of my knowledge about ____?
What are my "blind spots" about _____?
How can I best show _____?
How are my views about ____ shaped by ____
(experiences, assumptions, habits, prejudices, style)?
What are my strengths and weaknesses in ____?

Wiggins & McTighe, p. 120

At the end of the class...Assess

How did the lesson go?
How will you know that the students are learning?
Self-assessment: What went well and what would you change?



Collect student created post-test questions and class evaluations; document CE Nrs.			
Application: Bridge the learning. Ask questions that will foster understanding, inquiry and transfer of learning of each group.			
Checks for understanding - questions created by students will serve as the basis of the post-test bank.			
Closure: Go-round - slide will prompt this.			
Guided practice (classroom activity - most of class is guided practice in preparing the mini-lectures).			
Independent practice: Students will need to review independent study materials to answer post-test bank.			
Evaluation tool(s) based on objectives: questions created by students will serve as the basis of the post-test bank. Distribute and collect student class evaluations and forward to Susie.			
Reflection/notes (what went well, what should be changed?) At the beginning of each class, I reinforced that we are transitioning to new national EMS education standards. Most seemed aware of new standards but still could not articulate what that meant for them in terms of expanded depth and breadth of knowledge. I spent a few moments explaining that and set up why and how this month would be conducted as a student-centered learning activity. The radio interview did not play unless the computer used in class had internet connectivity. Future classes will need to ensure that all audio and visuals used in a presentation are embedded in the slides. The groups were divided into based on the total number of participants. If small numbers of participants, assign three topics: trachs, shunts, and central venous catheters in that order. Omit the Down Syndrome group and potentially the feeding tube group. That is explained in their Independent Study Materials (ISM) and the educator can do a quick recap.			
during the reporting out. It is more important that they work in groups of at least two to gain the advantage of the team concept. Explain in some detail what they have in the reference folders. Naturally, there was a bit of fumbling with the paperwork to determine what was there. Remind them that most of the content is taken from current EMS texts or courses. None of the critical content is taken from non-EMS sources; however some is included to give them broader insight into what is out there relative to the topic. Highlight the most important documents (ISMs I and II, Aahert text, reference card). Remind them that they have SOPs for trachs and Special Needs Children that can also be used. Provide background that the National course on CCHCs is over 6 hours and we basically get 90 minutes to cover the same material. We can only hit the high points in class and trust that they will read the content of the ISMs to gain a fuller understanding. I gave a brief explanation of what group work is all about in terms of student centered learning and this is a method of conducting class that keys off of their participation to aid enduring learning. Clearly explain their task - to provide what			

Updating lesson plans

Need to update with each class

Educators & students are comfortable or complacent with familiar material & methods

Must include new references, articles, research, video clips, etc.

In-flight corrections based on evaluations

- Student evals of teacher/lesson
- Exam or post-test results

Tricks are
great but
work best in
the hands of
a skilled
magician!



Our true priorities are revealed
to others, not by what we say,
but by what we do and by the
passion with which we do it."

Roy Lessin

