The Knowledge Base on Teaching

Key Concepts
- Areas of Performance
- Repertoire
- Matching

Foundation of Essential Beliefs
Overarching Objectives
Curriculum Design
Objectives
Planning
Assessment
Learning Experiences
Personal Relationship Building
Class Climate
Expectations
Clarity
Principles of Learning
Models of Teaching
Space
Time
Routines
Attention
Momentum
Discipline
Foundation of Essential Beliefs
Instructional Strategies
Motivation
Management
The Skillful Teacher shows the relationship of classroom order and psychological safety in the following quote:

"Children do not always know what is safe for them or for others," said Dorothy. "Discipline and limits are a way we create a circle of safety for those not yet ready to do this for themselves. Picture these limits as a big hug—our strong arms encircling the child with comfort and safety."

Once we see discipline as an act of love and containment, we can be creative and responsive to the style and degree of discipline needed with a particular child or group. . . . When we distinguish respect from fear and provide limits to prevent children from harming each other, we are not defending our power as teachers; we are helping group members create the safety to be vulnerable and authentic with one another [p. 121].

I. FRAMING THE LEARNING

1. Framing the Big Picture by ensuring that students understand the following:
   - Objectives
   - Itinerary
   - Big idea/essential question
   - Reason it's worthwhile
   - Reason for activity
   - Criteria for success

2. Getting Ready for Instruction
   - Activating students' current knowledge
   - Preassessing
   - Anticipating confusions and misconceptions

II. PRESENTING INFORMATION

3. Presenting Information through well-chosen Explanatory Devices:
   - Simple cues
   - Progressive minimal cues
   - Highlighting important info
   - Analogies
   - Diagrams
   - Translation into simpler language
   - Pictures or pictographs
   - Charts, whiteboards, Smartboards
   - Document camera or transparency
   - Audio and video recordings
   - Computer presentation software
   - Models
   - Mental imagery
   - Modeling thinking aloud
   - Graphic organizer

4. Speech
   - Avoiding "mazes" or "vagueness" terms
   - Matching to setting and student culture

III. CREATING MENTAL ENGAGEMENT

5. Explicitness: Making explicit and not leaving to chance the following:
   - Intention of cues
   - Focus of questions
   - Necessary steps in directions
   - Meaning of references

6. Making Cognitive Connections: By teacher for student or by student at invitation of teacher:
   - Showing resemblance to student experience or something already learned
   - Asking students to compare and contrast
   - Extending to implications and future actions
   - Making transitions between ideas
   - Signaling shift in activity, pace, or level
   - Foreshadowing

IV. GETTING INSIDE STUDENTS’ HEADS (COGNITIVE EMPATHY)

7. Checking for Understanding

8. Unscrambling Confusions

9. Making Students’ Thinking Visible

V. CONSOLIDATING AND ANCHORING THE LEARNING

10. Summarizing

Verbal Behaviors in a Class That Let Kids Get Smart

Teacher starts by asking a good open-ended question that gets them thinking. Then...
1. asks students to explain the thinking behind their answers whether they’re right or wrong.
2. asks students if they agree or disagree with a student answer.
3. asks students to comment or add on to a student’s response or idea.
4. creates and then facilitates dialog between students about their ideas
5. asks follow-up questions that are similar to ones just discussed to see if student really understands
6. asks students to make connections to something another student said or something else they know
7. credits meaning to student comments, even obscure ones, and probes for the student’s thinking. …does the same with incorrect answers.
8. uses wait-time…allows students to struggle and dwells with the student’s thinking, sticking with them
9. comes back to a student you moved away from to now check and clarify what their thinking is, given the comments of other students
10. asks questions to surface discrepancies between what student says and the information in front of them “How can that be? What’s going on there?”

Students:
11. do the majority of the talking
12. are expected to explain their thinking
13. show they are listening to one another
14. willingly to openly admit confusion or not knowing
15. challenge each other’s thinking non-judgmentally
16. take initiative to explain another student’s thinking, including how they might have made an error
17. students who get it quickly take responsibility for helping those who don’t

Other teacher observables:
18. provides a clear visual display of the idea
19. gives encouragement
20. praises good thinking
21. validates students who acknowledge confusion
22. expresses confidence in kids explicitly

Figure 9.7. Purposes of Questions

Source: Adapted from Bellon, Bellon, and Blank (1992).

Principles of Learning

### Climate of High Achievement for All Students

**Figure 14.2. Climate of High Achievement for All Students**

<table>
<thead>
<tr>
<th>COMMUNITY AND MUTUAL SUPPORT</th>
<th>CONFIDENCE AND RISK TAKING</th>
<th>INFLUENCE AND CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowing others</td>
<td>Believing That . . .</td>
<td>Empowering students to influence the pace of the class</td>
</tr>
<tr>
<td>Greeting, acknowledging,</td>
<td>Mistakes help vs.</td>
<td>Negotiating the rules of the “classroom game”</td>
</tr>
<tr>
<td>listening, responding,</td>
<td>Mistakes = sign of weakness</td>
<td></td>
</tr>
<tr>
<td>and affirming</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group identity, responsibility, and interdependence</td>
<td>Care, perseverance, and craftsmanship count vs. Speed counts Faster = smarter</td>
<td></td>
</tr>
<tr>
<td>Cooperative learning, social skills, class meetings, group dynamics</td>
<td>Good students solicit help and lots of feedback vs. Good students do it by themselves</td>
<td>Teaching students to use the principles of learning and other learning strategies</td>
</tr>
<tr>
<td>Problem solving and conflict resolution</td>
<td>Effort and effective strategies . . . main determinants of success vs. Inborn intelligence = main determinant of success</td>
<td>Students using knowledge of learning style and making choices</td>
</tr>
<tr>
<td></td>
<td>Everyone is capable of high achievement vs. Only the few bright can achieve at a high level</td>
<td>Students and their communities as sources of knowledge</td>
</tr>
</tbody>
</table>

Lesson Objectives

Exhibit 16.1. Lesson Objectives

Mastery and thinking objectives should be appropriate:
- Linked to the agreed-on curricular standards (national, state, local)
- Worth knowing
- Matched to the students: challenging and attainable
- Able to be assessed

The language of a mastery objective:
- Is specific in terms of curricular knowledge: declarative or procedural
- Names an active performance (observable behavior) that demonstrates mastery
- Avoids using mental action words that do not inform students about what they will have to do to demonstrate mastery, such as:
  - understand
  - know
  - see that
- Begins with “Students (or you) will be able to...” indicating development of capacity vs. completion of an activity
- Includes strong clues about assessment
- May include a level of performance or be accompanied by criteria for success
- Is “kid friendly”

A thinking skill objective:
- Names a specific mental action verb
- Is “kid friendly”

Criteria for Success

Exhibit 16.2. Criteria for Success

Definition

Criteria for success are the qualities the must be present for performance and products to meet the standards and be deemed successful. “What are the criteria?” means:

- “What should we look for in examining students’ products or performances to know if they were successful?”
- “What attributes should we use to judge the effectiveness of the product or performance?”
- “What counts?”

A list of criteria (and exemplars) enable students to assess their current performances in light of the target performance. Criteria for success do not state what the teacher will do. They do not state what the student will do. Criteria for success name or describe the characteristics of the product performance, so the subject of the criteria should be the product or performance.

Examples of some criteria for products

1. The lab report
   - lists all the steps for the process of ________
   - explains your observations
   - explains your conclusions about the relationship between ______
   - uses technical terms correctly

2. Your learning log
   - summarizes the major events in the chapter
   - identifies the central conflict and progress toward its resolution
   - includes your own reflections on the decision that the protagonist is making in her attempt to deal with and solve her problem

Examples of some criteria for a performance

1. Your oral presentation
   - clearly states your position on the topic
   - presents the arguments supporting your position
   - supports all arguments with reason and evidence
   - responds to arguments opposing your position
   - is accompanied by visuals (e.g., charts, overheads, chalkboard, handouts)
   - is loud enough for everyone in the room to hear easily
   - may be spoken with notes but not read
   - is fluent in delivery and confident in tone (which means you practiced!)

2. Your sharing of your independent reading tells
   - the title and author of your book
   - the most interesting part so far
   - at least one vocabulary word that is new or interesting to you
   - a prediction of what will happen next

The Skillful Teacher

Key Questions in Lesson Planning

Thinking Behind Objectives

THINKING SKILLS OBJECTIVES
What thinking skills do I want students to be able to use?
How will I know if they can do it?

MASTERY OBJECTIVES
What do I want students to know or be able to do when the lesson is over?
How will I know if they know it or can do it?

IN VOLVEMENT
How can I get students really engaged?

ACTIVITIES
What activities could students do to gain understanding or to develop these skills?

COVERAGE
What knowledge, skill, or concept am I teaching?

### Exhibit 17.1. Relationships Between PLANNING, CLARITY, and EXPECTATIONS

<table>
<thead>
<tr>
<th>Planning Decisions</th>
<th>Clarity Move</th>
<th>Expectations Arena</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recall big idea</td>
<td>Framing the big picture</td>
<td></td>
</tr>
<tr>
<td>2. Articulate mastery objective for today</td>
<td>Communicating objective</td>
<td></td>
</tr>
<tr>
<td>3. Plan how to communicate objective</td>
<td>Criteria for success</td>
<td></td>
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<tr>
<td>4. Envision evidence you’ll take as sign of achievement of mastery of objective</td>
<td></td>
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<tr>
<td>5. Analyze evidence from recent student work</td>
<td></td>
<td>Grouping and “reteaching loop”</td>
</tr>
<tr>
<td>6. Plan pace and subgrouping</td>
<td></td>
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<tr>
<td>7. Pick materials</td>
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<td></td>
</tr>
<tr>
<td>8. Anticipate confusions</td>
<td>Anticipating confusion</td>
<td></td>
</tr>
<tr>
<td>9. Identify presentation strategy and student tasks</td>
<td>Explanatory devices</td>
<td></td>
</tr>
<tr>
<td>10. Check match of student task with objective</td>
<td>Checking understanding</td>
<td>Calling on and responding to students</td>
</tr>
<tr>
<td>11. Plan how and when to gather evidence of student learning</td>
<td></td>
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</tr>
<tr>
<td>12. Plan how students will make their thinking public</td>
<td>Making thinking visible</td>
<td></td>
</tr>
<tr>
<td>13. Plan how to get students to summarize</td>
<td>Summarizing</td>
<td></td>
</tr>
<tr>
<td>14. Decide how to get students’ minds in gear</td>
<td>Activating knowledge</td>
<td></td>
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<tr>
<td>15. Plan space, time, routines</td>
<td></td>
<td></td>
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<tr>
<td>16. Plan effective effort strategies</td>
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<tr>
<td>17. Plan interactive moves (cues, questions)</td>
<td>Explicitness-questioning</td>
<td>Feedback and grading structures</td>
</tr>
<tr>
<td>18. Plan how to diversify</td>
<td></td>
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<tr>
<td>19. Plan student assistance</td>
<td></td>
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<tr>
<td>20. Plan extensions and challenges</td>
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</tr>
</tbody>
</table>

24 Hour Cycle of Teaching and Learning

Figure 19.1. The Twenty-Four-Hour Cycle of Teaching and Learning

Arenas for Communicating Key Messages and Doing Attribution Retraining

1. When we call on students
   • avoiding the Pygmalion behaviors
   • using wait time

2. When we respond to student answers

3. When students don’t answer

4. When we give help
   • responding when students ask for help
   • giving unsolicited help

5. When we give feedback on student performance
   • responding to unmet expectations
   • responding when students do well
   • noting significant change in performance

6. When we deal with errors

7. When we give grades

8. When students don’t “get it” yet

9. When we group students

10. When we give/negotiate tasks and assignments
Analyzing Lesson Challenge and Alignment

Does the teacher have an **intended objective** that is clearly stated or discernable as a “know/be able to do” about something worthwhile from the curriculum?

Yes. Obj is stated and T’s actions match and support the intended objective

Yes. The objective can be deduced from all the actions although it is never clearly stated to students

**Claim** that the teacher’s lesson was designed and carried out to support a mastery objective of *(give the objective)*

As evidenced by …..

E = Framing Moves

E = Expl. Devices

E = Checking

E = Lrng Exper.

No.

**Claim** that the teacher’s thinking and/or planning did not identify a clear mastery objective but stopped instead at coverage, activities, or involvement.

E = quotes from pre-conf, or documents

E = quotes that show what the teacher said instead of communicating a mastery objective

E = use of time and focus of activities and questions

E = missed opportunities to provide practice, check for understanding, assess; or acute need to unscramble, data re student performance

Yes but his/her actions do not match and support the intended objective

**Claim** that the teacher’s demonstrated focus *(name it)* was not the same as the intended objective *(give the objective)*

Lack or—or mismatch of

E = Framing Moves

E = Expl. Devices

E = Checking

E = Lrng Exper.

E = Stand + Expect