Learning in the Fast Lane-Suzy Pepper Rollins

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Chapter 1. Acceleration: Jump Starting Students who are Behind

- -81. What students know prior to school is the greatest predictor of their learning success (Merzano, 2004)
 - -120. Prior knowledge can determine whether a 50th percentile student rises to 75th or sinks to 25th (Merzano, 2004)
 - -132. A significant chunk of this 'prior knowledge' relates to vocabulary, so a key acceleration step relates to vocab
- -83. When students link learning to prior knowledge retention and inference is stronger (Vacca and Vacca, 2002)
- -83. Prior knowledge about a topic speeds up learning as it frees up space in working memory (Hirsch, 2003)
- -87. In short, students with background topic knowledge will grasp knowledge (for that topic) more quickly and well (Merzano, 2004)
- -95. A great paragraph that displays a 'schema', the background knowledge/terminology required to understand info (surfing, betsy)
- -102. Remediation is based on the false assumption that for students to learn new info they must know everything previously
- -147. Fear of peer reaction to an incorrect answer is a driving force in student's level of class participation
- -148. Spikes in self-efficacy (self belief) lead students to engage more, work harder and exhibit grit (Pajares, 2006)
- -184. The Six components of LITFL
 - -186: 1) Generate Thinking, Purpose, Relevance and Curiosity.
 - -213: 2) Clearly Articulate Learning Goal and Expectations
 - -223. Willis, 2006, says that linking new learning to prior knowledge increases brain cell activity→ better long-term memory/retrieval
 - 3) Scaffold and Practice Essential Pre-requisite skills: "Students could master this if they just knew..."
 - -247:4) Introduce New Vocabulary and Review Prior Vocabulary
 - -257: It takes 6 exposures to a word for students to internalise it. Stein, and Wysocki (1984)
 - -258: 5) Dip into the new concept: Get hands dirty and do some work with the new concept!
 - 274: 6) Conduct Formative Assessment Frequently
 - -300: "I'm not worried about what you've already learned; I'm worried about what you're going to"
- -316: Checklist for acceleration.

Chapter 2. Standards Walls: Transforming Standards in to Clear Learning Goals

- -354: Standards walls answer the question "What are we learning?" in a clear, concise format
- -363: Develop standards walls with your peers (other teachers).
- -366: Useful steps for creating standards walls
 - -367: Begin by creating a concept map
 - -370: Identify the learning goals from the standard that would move students toward deep comprehension of the long-term goal in the center
- -374: Place a sticky arrow or other symbol at the starting point—that is, the initial learning goal that the unit will address.
- -375: Collaboratively create a list of essential academic vocabulary words related to the standard.
- -378: Either before or after the lesson opener, identify for students the lesson's learning goal on the standards wall
- -384: The three vital components of standards walls
 - $-386: Component \ 1: Concept \ Map \ (See \ this \ article \ on \ how \ to \ make \ and \ use \ concept \ maps \ effectively: \ http://tiny.cc/concept maps-ol)$
 - -388: Advance organizers can yield 20% gains in student achievement, Marzano, Pickering, and Pollock (2001),
 - -393: Concept maps includes two important parts:
 - $\hbox{-}394{:}\ 1.\ The\ unit's\ over arching\ enduring\ understanding\ or\ essential\ question.$
 - -395: 2. Explicit learning that are clear to students
 - -419: You can assign the role of moving the little figurine to a student.
 - -420: Each learning goal may be expressed as a question or an "I can" statement.
 - -449: Component 2: TIP Chart
 - -441: During middle school, for example, the typical student will encounter almost 1,000 new words in science, math, social studies, and language arts (Marzano, 2004).
 - -451: It's beneficial to students to hear new words in speech before asked to use them themselves (Tankersley, 2005)
 - -Component 3: Student Work, ie: Post some of the student's work onto the standards walls!
- -497: Checklist for standards walls:

Chapter 3. Success Starters: Sparking Student Success Right Away

- -532: Students remember most what's taught at start and finish of a class (Sousa, 2008)
 - -This phenomenon is referred to as the primacy-recency effect
- -550: Info deemed unimportant by the brain is retained on average for 30 seconds (Sousa, 2008)
- -553: Hands on activities lead to better retention (Willis, 2006)
- -558: Motivation is related to a student's perception of task relevance (Jensen, 2005)
- $\hbox{-}566\hbox{: Learning success greatly depends on linking new information to prior knowledge (Jense, 2005)}\\$
- -567: Linking new info to old knowledge puts it into long term brain storage (Willis, 2006)
- -587: Success starters should :Connect to prior knowledge. Hold high interest, real-world relevance, and value. Be explicitly tied to the standard being taught. Engage every learner. Answer the question "What's this got to do with me?" Be fast-paced and time-conscious. Set up the lesson, including the purpose for any assigned reading. When appropriate, employ concrete representations before abstract concepts.
- -592: Strategies for Effective Success Starters
 - -596: Role-Playing
 - -633: Surveys
 - -652: Prediction
 - -655: Sorts, eg: 672: Anticipation guide. In this example, students predict which items are sources of electromagnetic radiation and consider which would have the lowest and highest amounts (see Figure 3.4)
 - -676: Questioning

- -683: Question sun.
- -695: Question starter cards.
- -708: Brainstorming
 - -713: Splash-sort-label.
 - -726: Alpha brainstorming.
- -740: Concrete Representations
- -751: In addition, find some ways to provide students with feedback about homework without sacrificing new learning. Eg:
 - -762: Identify which HW questions were hardest for students, focus on
 - -766: Make the middle of class a co-working period where students work on what they need to (inc homework)
 - -767: In co-taught class, get one teacher to collect up HW and provide feedback at opportune times
- -771: GIVE STUDENTS A PENCIL! (don't berate them for forgetting supplies)
- -788: "If we want students to stay in the fast lane, they need to realize right away that (a) this is interesting, (b) this matters to me, and (c) I think I can do this!"
- -793: "Checklist for success starters: \square Students' intellectual curiosity is piqued in the opening minutes of class. \square The activity makes real-world connections and is relevant to students. \square The activity fosters higher-order thinking. \square The activity enables all students to achieve success in the opening minutes. \square The activity is tightly linked to the lesson's learning goal."

Chapter 4. Formative Assessment and Feedback: Checking Student Understanding Minute by Minute

- -818: Low grades can actually perpetuate failure by providing concrete "proof" of students' academic losing streak.
- -828: "Black and Wiliam (1998) explain that students in classrooms with formative assessment can learn a year's content in 6 mth
- -829: Formative assessment can be as effective as one-on-one tutoring (Stiggins, 2004)
- -830: Formative assessment gains are long lasting and also map to standardised tests (Leahy et al., 2005).
- -832: When the frequency of descriptive feedback goes up and evaluative feedback goes down, students learn more (Davies, 2007)
- -833: Feedback, especially outlining how to work more effectively, can be very effective (Hattie and Timperley, 2007)
- -835: Formative assessments are particularly effective for low-performing students (Stiggins, 2004)
- -837: Formative assessments lead to student's better understanding of their progress→more perserverance (Stiggins, 2004)
- -844: Artificial or undeserved praise should be avoided (Pajares, 2006).
- -847: rewards/punishments are one of the least effective ways to increase student achievement (Hattie & Timperley, 2007)
- -849: feedback focused on the person rather than the task can actually cause a decline in performance, (Clymer and Wiliam, 2007
- -850: Correct/Incorrect feedback can have a negative effect, Students need explicit how-to feedback (Marzano et al, 2001)
- -854: Teacher attention can make some students defensive/embarrassed as it can highlight struggling (Hattie & Timperley, 2007)
- -857: Siz principles on feedback
 - -859: Principle 1: Establish clear, specific learning goals at the onset of the lesson.
 - -864: I advocate creating a concept map with clearly stated learning goals leading to a central understanding
 - -867: Principle 2: Provide feedback that demonstrates explicitly how students can achieve the learning goal.
 - -870: Straying into feedback on handwriting, grammatical errors, or tardiness can derail the feedback process
 - -875: Principle 3: Involve all learners in the feedback process.
 - -880: self-evaluation can lead to increased interest in actual learning and less focus on grades (Shepard, 2002)
 - -881: Students who engage in self-assessment...provides them with..."story of their success" (Stiggins, 2004)
 - -883: Peers helping one another ... also moves learning forward (Leahy et al., 2005).
 - -884: By incorporating peer feedback, teachers can multiply the impact of feedback (Davies, 2007).
 - -Principle 4: Deliver feedback as immediately and frequently as possible
 - -892: positive correlation between the frequency of formative assessment and achievement (Marzano, 2007).
 - -895: Immediate error correction results in faster knowledge acquisition (Hattie & Timperley, 2007).
 - -Principle 5: Link academic progress to controllable factors, such as hard work and tenacity.
 - -902: Mendler (2000) observes that successful students tend to believe that hard work is the key to
 - -905: some struggling students believe needing to work hard=low ability/inadequacy, (Margolis & McCabe, 2006)
 - -907: studentswork harder when they believe that they control their academic prowess (Protheroe, 2010).
 - -912: Principle 6: Be as encouraging as is genuinely possible
 - $\hbox{-}918: Students\ must\ see\ conversations\ with\ teachers\ as\ a\ safe\ and\ productive\ way\ to\ learn.$
 - -920: Preface constructive criticism with a compliment, 922: "It is evident that you understand how to properly line up decimals. Now let's look at how you arrived at your answer."
- -940: Although definitions for formative assessment abound, I like Popham's (2008) description of it as: "a process conducted during instruction that yields feedback enabling teachers and students to make adjustments that improve student achievement.
- -927: Formative Assessment Strategies
 - -950: Sticky notes
 - -979: Sticky notes can also be used on a larger scale. For example, a school could assign each department a day of the week to collect sticky-note data on students' understanding of the day's learning goal. For example, English language arts teachers could collect data on Mondays, math teachers on Tuesdays, and so on. Then each department or grade level could collaboratively analyze these assessments to see the big picture of student progress. After examining the data, teachers could discuss the questions "What percentage of our students got it today? And what will we do differently tomorrow?"
 - -983Cubes
 - -987: Whichever side comes up is the topic the group must discuss. (groups of 2 or 3)
 - **-101**: Bow Ties
 - -1029: Sorts

- -1041: Student Whiteboards
 - -1046: Struggling students respond to well goals and a clear learning process (Sousa, 2008).
- -1051: Carousels
- -1065: Communication Devices
 - -1077: "If we had time to discuss just one homework question, which one would you like it to be?"
 - -1089: Peaks and valleys.:
- -1112: Rather than asking, "Any questions?" it's time to start saying, "Everybody grab a sticky note!"
- -1113: Checklist for formative assessment and feedback:

 Assessments are explicitly linked to the learning goal.

 Assessments are multiple and distributed throughout the learning session.

 Feedback is timely.

 Feedback explicitly focuses on student attainment of the learning goal.

 Feedback opportunities are tiered and include the teacher, students themselves, and their peers.

 Throughout the learning session, instructional decisions are based on observable evidence of student learning.

Chapter 5. Vocabulary Development: Implementing a Strategic Plan

- -1157: 3-year-olds from welfare families typically have 70% of the vocab of children living in working-class, Hart and Risley (1995) homes.
- -1159: children from families on welfare possessed just 45 percent of the vocab of kids with middle class/professional parents. ibid
- -1164: kids in grades 4-12 who score at the 50th percentile know 6,000 more words than 25th percentilers. (Nagy & Herman) 1984)
- -1175: Figure 5.1, shows the number of new vocabulary words students are exposed to by grade bands. (Marzano, 2004)
- -1184: need multiple exposures—typically, six—to new words to be able to grasp, retain, and use them (Jenkins et al, 1984)
- -1188: high, middle and low-achievers learn about 19, 12 and 8% of new words encountered. (Swanborn and de Glopper's, 1999)
- -1194: there is a strong correlation between vocabulary (Vacca & Vacca, 2002) knowledge and reading comprehension.
- -1197: "The Matthew effect": weak readers get weaker while the strong readers get stronger. (Stanovich, 1986)
- -1204: students have just a 7 percent chance of understanding new words from dense text (Swanborn & de Glopper, 1999)
- -1207: Students usually do not understand formal definitions. Provide definitions in everyday language (Beck et al., 2002).
- $-1218:50 ^{\rm th}\% ile \ students + direct \ vocab \ instruction \ , on \ average, \ as \ well \ as \ 83 ^{\rm rd}\% ile \ in \ comprehension. \ (Stahl \ and \ Fairbanks, 1986)$
- -1220: all students who received direct vocab instruction outperformed those who didn't. (Nagy and Townsend, 2012)
- -1225: Vocab instruction principles that powerfully affect vocab development
 - -1227: Principle 1: Multiple exposures are necessary to build true mastery.
 - -1230: Principle 2: The V in vocabulary is for visual.
 - -1231: learning with pics is 37%>solely definitions. And pics is 21%>definition+use in sentence. (Powell, 1980)
 - -1235: Principle 3: High-impact vocabulary instruction engages learners in interactions with words.
 - -1238: Principle 4: Effective instruction focuses on words students need to know now.
 - -1241: Principle 5: Incidental vocabulary is important, too.
- -1244: Strategies to Develop Strong Vocabularies
 - -1262: TIP: teacher introduces word with fanfare, has students say it, provides student-friendly definition, creates a pic.
 - -1279: Word art: The goal of word art is to make a word's meaning clear by making art out of the actual text of the word.
 - -1290: Quirky Comparisons: (e.g., "A ______ is like _____ because ____."). Use a stock word + 2 from TIP
 - -1301: Action!: Just like "Scharades" but with TIP words.
 - -1309: Which One Doesn't Belong?: Get students to decide on an odd word out, and discuss their points
 - -1322: Instant Etch A Sketch: Use salt and a cotton bud to draw
 - -1330: Word Detective: Get students to fill in blanks
 - -1339: Vocabulary Cubes
 - -1346: Vocabulary Sorts: Get students to sort words into categories and discuss justifications (small groups, same words)
- -1367: "Here's how a vocabulary plan may look in action in a hypothetical classroom: on its first encounter with a word, the class says it aloud and adds it to the TIP, along with a student-friendly definition and a class-generated illustration. Students may construct a word art to reinforce their understanding of the new term. After the teacher adds a second term to the TIP, students compare and contrast the two words. By mid-unit, five terms are on the TIP, and students generate definitions and examples using a carousel approach. Toward the end of the unit, just before the summative assessment, students create sorts to review all seven terms they have learned.
- -1383: Checklist for vocabulary development:

 Students practice and use vocabulary words multiple times in varied ways.

 Teachers and students use TIP charts.

 Vocabulary instruction integrates visual representations.

 Vocabulary is taught in context.

 Vocabulary instruction is hands-on and engaging to students.

 The vocabulary plan includes the critical words that students need to know.

 Incidental vocabulary development is ongoing.

 Dictionaries and glossaries are used as tools, not as strategies.

Chapter 6. Student Work Sessions: Giving Students Greater Responsibility with Valuable Work

- -1437: two essential conditions for cooperative learning: individual accountability and an important group goal. (Slavin, 1988)
- -1438: each student's performance must be readily visible and quantifiable to the team. lbid
- -1441:in four out of four tasks, students working cooperatively outperformed those working alone. (Johnson, Skon, & Johnson, 1980)
- -1442: students working together toward a common academic goal, they tend to exhibit higher-level problem-solving skills. Ibid
- -1444: cooperative learning's effect size is a substantial 0.78. (Johnson, Maruyama, Johnson, Nelson, and Skon, 1981)
- -1457: cooperative learning is most beneficial to lowest-achieving students. (Kagan & Kagan, 2009)
- -1472: FIGURE 6.1. Guidelines for Duration of Direct Instruction based on year level. (12-15 mins for yrs 9-12)
- -1476: working memory hits its capacity at around four items. (Sousa and Tomlinson, 2011)
- -1491: "Leaving Tracks": Good readers connect to the words on a page, relate to prior experiences. (Harvey and Goudvis, 2007)
- -1499: The following four strategies have clear benefits for cooperative as well as individual learning.

- -1506: VIP ("very important point"): Get students to add a sticky note with a note on it to any important pt in reading
- -1521: Highwriting: Every passage you highlight you also have to summaries in your own words
- -1526: Coding: Create a code for eg: Potential energy, 'P.E' then get students to write P.E when they identify it in text
- -1531Strategies for Effective, Differentiated Student Work Sessions
 - -1550: Anchor Chart: A chart with gaps for the pieces of information that you want to know
 - -1545: Paired Reading: One person is reader, one is note taker. Note taker can call "pause" to give time to write anwer
 - -1558: Periodically, the partners lift their sticky notes from the and stick onto the anchor chart.
 - -1588: Walk the Line: ie: Spectrums
 - -1598: Cooperative Learning Quadrants: Each student given specific task (number cruncher, engineer, economist, biographer). They fill in ¼ of a sheet of butchers paper with their research/info, then compile onto a sheet together
 - -1620: Jigsaws: Break down topic into pieces, different students examine different pieces, bring it all together
 - -1635: Learning Stations: movement gives students more energy and brainpower to perform academically.(Jensen, 2005)
 - -1637: students are more likely to exhibit on-task behavior while working at learning stations (Day & Drake, 1986)
 - -1669: Menus: Some control over their learning choice is an essential key to student motivation (Bomia et al., 1997)
 - -1695: 2-5-8 Menu: Students can choose a combo of tasks that are worth 2, 5, or 8 points (as per difficulty) adding to 10
- -1638: The brain increases its focus when it engages in novel/novelty activities (Sousa & Tomlinson, 2011).
- -1705: The following practices, although widely used, warrant scrutiny. Ie: THE FOLLOWING EXERCISES ARE NOT VERY EFFECTIVE
 - -1708: Assign and Tell: "read this textbook passage and complete the questions at the end"
 - -1714: Round Robin Reading: Go around class with each student reading a passage each
 - -1716: Shared reading is more effective than round robbin reading (Eldredge, Reutzel, & Hollingsworth, 1996)
 - -1718: In round robin, inc questions, students read only about a page apiece (Pearson and Gallagher, 1983)
 - -1720: each student typically read no more than a paragraph during round robin. (Armbruster et al, 1991) Add a note
 - 1726: Popcorn Reading"The popcorn popper continues, readers burn out one by one, and comprehension breaks down for everyone in the room" (Miller, 2009, p. 147).
 - -1734: Never-Ending Tasks: Teach in time bound segments. 15- to 20-minute segments for secondary (Sousa, 2008)
- -1755: Checklist for student work sessions: \square Students demonstrate their thinking. \square Instruction and texts are differentiated for varying reading levels. \square Students play active roles in the learning process. \square Conversations about the standard are robust. \square Learning integrates new vocabulary. \square Cooperative learning is structured. \square Tasks provide choice for students. \square Work and conversations are supported by evidence of learning. \square Grouping is strategic and effective \square Feedback is immediate and moves work upward. \square Work strictly adheres to the standard or learning goal.

Chapter 7. Student Motivation: Creating Engaging Tasks and a Positive Learning Environment

- -1778: when value and confidence are both high, learners are likely to be engaged and motivated. (Hansen, 1989)
- -1779: students seek tasks with positive outcomes, avoid tasks with negative outcomes. (Schunk & Meece, 2006)
- -1800: Students either: Engage, Dissemble, Evade or Reject tasks based on their perceived ability to succeed. (Hansen, 1989)
- -1804: FIGURE 7.1. Behavioral Tactics Students Use. Ibid .
- -1814: Self-efficacy: individuals' judgments about their capabilities to perform at a certain level (Bandura, 1984)
- -1817: Self-efficacious individuals tend to persist longer, participate more readily, and work harder (Schunk & Meece, 2006).
- -1819: self-efficacy is a significant predictor of academic achievement in all students (Usher & Pajares, 2008).
- -1820: 25 percent of the variance in the prediction of academic performance relates to self-efficacy (Pajares, 2006)
- -1823: students who perceive themselves as incapable avoid situations in which they may fail & give up more easily Brophy (2010)
- -1825: they (from 1823) even have an increased propensity toward pessimism, stress, and depression (Pajares, 2006)
- -1826: Academic declines are especially evident around 7th grade, difficult transition from elementary (Schunk & Meece, 2006).
- -1835: students can mistake their own apprehension in class for a lack of competence in the content (Usher & Pajares, 2008)
- -1838: anxiety blocks info from higher thinking parts of the brain, information is unlikely to be processed/stored (Willis, 2006)
- -1840: high anxiety in math→ more errors in mental addition, reaction time, smaller working memory (Ashcraft & Kirk, 2001)
- -1845: low stress→better memory, more fun, better learning. And release of feel-good endorphins (Sousa and Tomlinson, 2011) -1845: (re: above) Creativity, problem solving, patience, and social behaviors improve as well (Willis, 2006)
- -1857: The following guidelines will help you ensure that the tasks you give build students' motivation and confidence.
 - -1858: Make it relevant and interesting.:
 - -1862: higher-performing students can usually perform tasks in the last few mins of class (Hansen, 1989)
 - -1866: projects of personal benefit and practical applications → more engagement. (Bomia et al, 1997)
 - $\hbox{-}1871 Provide an appropriate level of difficulty}.\\$
 - -1876: Incorporate choice and social interaction.
 - -1881: offering small choices throughout lessons increases students' motivation (Ames, 1992)
 - -1882: Choices also encourage students to take greater responsibility for their learning (Stipek & Weisz, 1981)
 - -1886: well designed cooperative learning→ academic achievement and productivity. (Johnson et al., 1981)
 - -1888: Assigning specific group contributions → higher responsibility and motivation (Johnson & Johnson, 2009)
 - -1889: Don't forget openers!
 - -1889: Small, frequent successes increase students' self-efficacy (Bomia et al., 1997).
- -1905: The following strategies will encourage academic achievement and self-confidence and build intrinsic motivatin
 - -1906: Make a positive connection with students at the beginning of class .
 - -1912: Model mistakes as a positive step toward learning.
 - -1914: To avoid embarrassment, students may prefer to skip a challenging task (Sousa & Tomlinson, 2011)
 - -1920: Group students thoughtfully.
 - -1921: teacher help may signal low ability to some students, but peer assistance doesn't (Schunk & Meece, 2006)

- -1923: Students gain confidence by observing other students being successful at a task (Usher & Pajares, 2008)
- -1924: grouping two struggling students can have reverse effect ("No one can do this!") and reduce self-efficacy.
- -1927: As a rule, I do not group students at the highest level of mastery with lowest, ; that gap is just too wide.
- -1929: Struggling students benefit from seeing others/peers implement stress coping strategies (Brophy, 2010)
- -1931: Communicate that students control their own academic destinies
 - -1931: perceptions of success/failure causes could b as important as actual success/failure. (Stipek & Weisz,1981)
 - -1934: Praising for being "smart" can signal that intelligence is fixed and thus success out of control (Pajares, 2006)
 - -1937: Construct a success scenario for students, to show that effort → improvement (Brophy, 2010)
- -1939: Establish short-term goals
 - -1939: students benefit from having short-term goals, which build self-efficacy (Pajares, 2006)
 - -1941: Forward thinking/planning abilities: Primary (3 days), middle (2 weeks), high (1 month). (Mendler, 2000)
- -1945: Provide positive feedback.
- -1949: Elicit feedback from students.
 - -1952: (a) This part of the lesson worked well for me: _____. (b) This would help me learn better: ____.
- -1955: Provide evenhanded responses to classroom situations.
 - -1957: Overreacting, catching students off guard, favoritism, reduces motivation, increases stress(Brophy, 2010)
 - -1959: reliable routines and fairness foster students' trust and prime them for learning.
- -1960: Nurture your own self-efficacy.
 - -1962: teachers with a high degree of self-efficacy are more persistent and work harder (Hoy and Davis, 2006)
 - -1971: rewards/incentives usually have the opposite of their intended effect. (Deci, Koestner, and Ryan, 2001)
 - -1979: The one reward that has been proven to work is verbal praise, more effective than rewards, *Ibid*.

1996: Checklist for student motivation:

- -1998: Task construction: Tasks have high relevance and value. Tasks have an appropriate level of challenge: achievable without sacrificing rigor. Tasks are differentiated when appropriate. Tasks incorporate social interactions. Tasks are of appropriate duration.
- -2001: Learning environment: □ Student recognition is genuine and deserved. □ Mistakes are considered part of learning, not cause for embarrassment. □ Teacher sets short-term goals for students. □ Grouping is strategic and cultivates success for all. □ Supplies are made available without shame. □ Teacher reactions are dependable and calm. □ Students have appropriate autonomy over learning. □ Feedback is ongoing and productive. □ Teacher makes routine personal connections with students.

Chapter 8. Scaffolding: Providing What's Missing Just in Time

- -2026: scaffolding: a process to help learners perform tasks too difficult otherwise. Pioneers: (Wood, Bruner, and Ross (1976),)
- -2038: students have two "levels." One is present capability for independent work, second level is their potential (Vygotsky, 1978)
- -2041: Scaffolding helps students in all content areas. Effect size of .53 (Belland, Walker, Olsen, and Leary, 2012)
- -2043: Reading scaffolding→speed, oral profixiency, reduced anxiety (Magno, 2010)
- -2066: Reduce scaffolding on a case-by-case basis rather than on a fixed schedule (Belland et al. 2012)
- -2073: FIGURE 8.1. Scaffolding: Devices and Strategies
- -2075: Scaffolding Devices
 - -2077: Bookmarks.
 - -2084: Steps.
 - -2092: Flowcharts.
 - -2098: Cheat sheets.
 - -2106: FIGURE 8.3. Integer Cheat Sheet (+ x +, vs + x -... etc)
 - -2113: Annotation: Encourage students to annotate, not just read
 - -2123: "Almost there" writing: Give students a started essay, or piece with missing words/phrases for a head start
 - -2135: Checklists and timelines: Help students to construct there
 - -2142: Samples.
 - -2143: Sometimes, the most effective scaffolding is a sample of completed work.
- 2148: Scaffolding Strategies
 - -2151: Thinking aloud: can help students monitor and improve specific reading comprehension skills (Davey, 1983)
 - -213: Teacher strategically models thoughts that good readers tend to have. Eg: "I bet this part will be about...."
 - -2162: Reciprocal teaching: Teacher models a strategy, then hands it over to students to implement
 - -2165: reciprocal teaching & teaching explicit cognitive strategies → big benefits(Rosenshine and Meister, 1994)
 - -2168: Reciprocal activities: generating questions, summarizing, forming predictions, and clarifying confusing
 - -2171: Annotation.
 - -2174: Visible thinking.
- -2186: Scaffolding ship analogy: it is our job to fix the holes while the ship continues to sail forward
- -2198: Checklist for scaffolding: \square Scaffolding is based on ongoing observation and analysis. \square Prerequisite skills are identified prior to the lesson, and scaffolding is planned in advance. \square Scaffolding enables students to access the rigor of the standard. \square Scaffolding is tactically faded based on ongoing observation, formative assessment, and dialogue with students. \square Scaffolding is incorporated as a natural part of the learning process.

Chapter 9. Why Are Some Students Still Failing, and What Can We Do About It?

- -2230: The following sections go into these problems in depth and provide guidance on how teachers can overcome persistent challenges and reverse students' downward trajectory.
- -2232: Problem 1: Homework Challenges

- -2249: clear positive correlation between homework and achievement (high school). Study: two groups of HS students received the same instruction, one group did homework, other didn't. Homeworkers outperformed 69 percent of non-doers (Cooper, 1989)
- -2254: homework can have positive effect on academic success. Data from 1987 & 200 (Cooper, Robinson, and Patall, 2006)
- -2256: Homework effect size from 0.21 to 0.88→ achievement gains from 8 to 31 %ile pts. (Marzano and Pickering, 2007)
- -2267: The following are some guidelines schools may want to incorporate into their homework plans:
 - -2268: Homework's purpose and value will be clear, and it will help students master current standards. Teachers will publicly post assignments and include clear instructions using the school's communication channels (e.g., hotlines and websites). Homework will never be used as punishment (e.g., for behavior infractions). Students' grade level multiplied by 10 yields the maximum number of minutes that students should spend on homework each night (e.g., 7th graders will get no more than 70 minutes of homework). This is in keeping with recommendations from Cooper (1989). Students will be able to complete homework with minimal assistance from parents.
 - -2277: Lunch and Learn: those who didn't do assigned homework must come. Support, not punishment
 - -2283: "Opportunity Room": Struggling students were assigned to go there, although any student could come voluntarily to work on homework. "I was always surprised by the number of volunteer students, including athletes who wanted to get homework taken care of before a game."
 - -2295: Learning lab: held for an hour after school every day except Friday. The Learning Lab, administrators emphasized, was not punitive, but a place for learning. Staffed by teachers, administrators, and parents, the lab provided a place for students to get help on homework. (Garbe & Guy, 2006).
- -2302: Problem 2: Zeros for Missing WorkRead more at location 2302
 - -2311: only: grades should signal students' level of mastery of the standards, not assignments.
- -Problem 3: Lack of Ongoing Assessment and Intervention
 - -2328: The National Dropout Prevention Center's (2013) policy statement on student grade retention (www.dropoutprevention.org/retention-policy) has six recommendations for grade retention, half of which relate to the urgency of ongoing assessment, intervention, and parent communication. A summary of these is as follows:
 - -All students must be periodically assessed to determine their progress.
 - -Students' schedules should allow for daily curricular interventions to meet their needs.
 - -Parents must be informed throughout the assessment and intervention process.
 - -2342: Keep projects from being too large-scale and long-term (Reeves, 2008)
- -2347: Problem 4: Low Student Motivation
 - -2356: Surveys can be used to simply and quickly assess a lesson's interest or difficulty level—for example
 - -2370: Study of 695 students (to age 24): extracurricular → lower drop out, better behaived, less arrested! (Mahoney, 2000)
 - -2373: Not just any extracurricular though: Needs (1) structure; (2) regular meetings; (3) skill-building to reach common goals; and (4) competent adult leadership.
 - -2375: "two-by-ten intervention": 2minutes each day for 10 days in row, a teacher talks with an unmotivated student about anything except the student's poor academic situation. Mendler claims that by the end of the 10th interaction, student work completion increases. Mendler (2000)
 - -2380: TLC (Tender Loving Care). Any teacher can signal a TLC. All givestudent a little extra positive attention
- -2390: Problem 5: Weak Skills or Knowledge Gaps
 - -2390: out-of-school time (OST) deliver meaningful results for students. (Lauer et al, 2006),
 - -2396: Slavin, Karweit, and Waski (1992) also found one-on-one tutoring to be effective in reading
 - -2397: early reading problems can lead to sustained negative consequences. ibid
 - -2398: Improving reading is easier early but teens can also improve their reading with intervention (Wanzek et al., 2013)
 - -2438: grade retention (holding students back a year) is one of the most prevalent predictors of dropout. Further, retaining students had no more +ve academic impact than promoting them to the next grade. (Jimerson, Anderson & Whipple, 2002)
 - -2441: More data: holding students back, grade retention, is ineffective (Silberglitt, Jimerson, Burns, and Appleton, 2006)
 - -2443: research stands so solidly against retention: intervention is better than (attempted) cure! (Jimerson, 2001)
- Chapter 1. Acceleration: Jump Starting Students who are Behind
- Chapter 2. Standards Walls: Transforming Standards in to Clear Learning Goals
- Chapter 3. Success Starters: Sparking Student Success Right Away
- Chapter 4. Formative Assessment and Feedback: Checking Student Understanding Minute by Minute
- Chapter 5. Vocabulary Development: Implementing a Strategic Plan
- Chapter 6. Student Work Sessions: Giving Students Greater Responsibility with Valuable Work
- Chapter 7. Student Motivation: Creating Engaging Tasks and a Positive Learning Environment
- Chapter 8. Scaffolding: Providing What's Missing Just in Time
- Chapter 9. Why Are Some Students Still Failing, and What Can We Do About It?