

# Embedded Formative Assessment 2<sup>nd</sup> Edition (2017) by Dylan William



## Planning Summary by Helen Reynolds @itslearningcurve.education

| Content   | Do This/Remember This                               |
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| <p><b>Introduction:</b> Two purposes for book: the changes (including over 50 practical techniques and the framework within which they sit) that teachers can make, the evidence that those changes improve learners' outcomes in secondary &amp; Higher Ed.</p>  | <ul style="list-style-type: none"> <li>•</li> </ul> |
| <p><b>Ch 1. Why Educational Achievement Matters:</b> Education has <b>never been more important</b>: linked to <b>better</b> pay/health/longevity, benefits society, more highly skilled population. Nature of <b>work changing (automation)</b>, need <b>ability to develop new skills</b> = education. There will be jobs; education = <b>good</b> job. How to <b>raise attainment</b>: <b>ineffective</b> = change <b>structure</b> (e.g. school size), <b>governance</b> (e.g. charters, for profit), <b>difficult</b> = change <b>curriculum</b> (<i>intended</i> → <i>implemented</i> + <i>achieved</i> (maybe not as intended)), use tech (works in narrow range). <b>Research:</b> School effectiveness: originally → 92% variability <b>not</b> to do with school, now → <b>biggest factor</b> = <b>teacher quality</b> = strong <b>links to attainment/ rate of learning/ equality of outcomes/ impact on low achievers</b> <i>but hard to predict</i> who will be good, bonuses <b>ineffective</b>. Could find/remove least effective = time consuming, <b>better to invest in existing teachers</b>.</p>  | <ul style="list-style-type: none"> <li>•</li> </ul> |
| <p><b>Ch 2. The Case for Formative Assessment:</b> Teacher PD: necessary <b>because teaching complex/difficult, all teachers can improve</b> <i>but</i> PD can focus on hours <b>not</b> learning. <b>Focus has been (to little effect)</b>: learning styles (debunked), neuromyths (e.g. left/right brain), content knowledge + often 'one-shot deals'. <b>Research: formative assessment (FA)</b> history: originally 'formative evaluation' (1967, Scriven) = on-going improvement of curriculum, ditto Bloom (1969) = improving teaching-learning process, many studies showed benefit of integrating assessment and teaching. <b>Definition of FA:</b> William/ Black: <b>activities (during instruction) → info → feedback → modify instruction = process</b> not thing (category error). <b>Definition issues:</b> 'formative' open to interpretation/ over-simplification, needs to cover a wide range of practices involving teachers, student, peers, <b>collecting evidence → decisions re. next steps in instruction → action. Working back from decision → better</b> evidence. Teaching = <b>3 processes</b>: where are they/where they are going/how to get them there for <b>3 types of individual</b>: S/T/peer. <b>Not</b> meaningful/helpful = dividing teaching and learning or 'facilitating'. Teaching is <b>contingent</b>; students <b>do not necessarily learn</b> what we teach → need short/medium/long term FA.</p> | <ul style="list-style-type: none"> <li>•</li> </ul> |
| <p><b>Ch 3. Clarifying, Sharing, and Understanding Learning Intentions and Success Criteria:</b> <b>Sharing</b> learning intentions <b>relatively recent</b> phenomenon, need to distinguish <b>learning intentions (LI), context of the learning, success criteria (SC)</b>. <b>When/what to use:</b> care - 'wallpaper objectives' ≠ clarifying, sharing, understanding LI/SC, however <b>not always helpful/useful</b> to share, co-construction with S <b>not</b> democratic, LI/SC should <b>help students apply knowledge</b>. SC via <b>rubrics have strengths/ weaknesses</b>: task-oriented vs. generic, product vs. process goals, official vs. student language. <b>Issues w/rubrics:</b> novices <b>interpret them differently</b> from experts, words <b>don't convey quality</b>, can focus more on grading/only small subset of aspects of quality. <b>Practical Techniques:</b> <b>Strengths and weaknesses discussion</b> (critique other students' work), <b>model papers</b> (can be discouraging – use a variety), <b>What Not To Write</b> (provide correct/incorrect, they make list), <b>immediate and delayed post-tests, test-item design</b> (S designed questions very revealing for T), <b>daily sign-in</b> (good for young S), <b>choose-swap-choose</b> (do work, peers select best, discuss), <b>WALT, WILF, TIB</b> (useful for younger Ss, We Are Learning To, What I'm Looking For, This Is Because...).</p> | <ul style="list-style-type: none"> <li>•</li> </ul> |
| <p><b>Ch 4. Eliciting Evidence of Learners' Achievement:</b> Ausubel (1968) 'Most important factor influencing learning is <b>what the learner already knows</b>'. Finding out what they know: is <b>tricky</b>; we assume correct answers = heading in the right direction – may not be true, a misconception <b>could be good conception</b> in the wrong place, good qs to find out where they are <b>may not look like regular test qs</b>. Better to <b>find out in class</b> if there are gaps/misconceptions than later when grading. Most T time spent: in US - grading alone, in other countries - devising learning activities. Teacher-led discussion typically <b>Initiation-Response-Evaluation (IRE)</b>. <b>Only 2 good reasons for qs:</b> 1. To <b>cause thinking</b> 2. To <b>provide info</b> for T as to what to do next. <b>Practical Techniques: Individuals: Student engagement</b> (random selection not hands up (cold calling), changes classroom contract, needs sensitivity, establish low stakes), <b>wait time</b> (should be longer! Evaluation time between ans./T response also important, or use think-pair-share), <b>eval/interpret listening</b> (saying 'almost'/'correct' is evaluative, better to be interpretive – what does it tell me about their thinking), <b>question shells</b> (change 'what' to 'why'), <b>hot-seat questioning</b> (then ask them to summarize). <b>Whole class: all-</b></p> | <ul style="list-style-type: none"> <li>•</li> </ul> |

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| <p>student response systems (thumbs, fist, clickers), <b>ABCD cards</b> (use for one ans/more than one/opinions), <b>mini-whiteboards (MWB)</b> (=slates! Easy for whole class feedback, could use clickers in higher ed.), <b>exit passes</b> (best when there's a natural break = time to read), <b>discussion vs diagnostic qs</b> (discussion should elicit info about reasons for choice, diagnostic e.g. hinge-qs tells T if they know, should be short, multiple-choice, distractor driven), <b>alternatives to qs</b> (statements to discuss/agree/disagree/justify).</p>   |   |
| <p><b>Ch 5. Providing Feedback That Moves Learning Forward</b> Providing effective feedback (FB) is <b>really hard</b>. Definition of FB (forgotten) - info on <b>current state</b> of system <b>informs future state</b>. <b>Research</b>: giving comments and grades = giving grades only, giving comments only improves learning. <b>Ss response</b> to FB can be <b>ego-related</b> (relating to others) or <b>task-related</b> (effort means improvement), <b>timing critical</b> →sooner or later can work depending, oral vs. written less important than <b>having in time in class</b> to respond. <b>FB should improve the learner</b>. <b>Hard to predict S attribution</b> of success/failure: internal/external, stable/transient, specific/global. <b>How memory works</b>: <b>retrieval vs storage</b> strength, Bjork's '<b>theory of disuse</b>' (delay-retention effect – often counter-intuitive), <b>always</b> distinguish 'performance' from 'learning'.<br/> <b>Practical Techniques</b>: <b>Minus, equals, plus</b> (add -/=/+ to compare this work with previous), <b>FB for future action</b> (give time in class to act on FB = fairer), <b>three qs</b> (written at end of work they have to respond to), <b>techniques for utilizing FB</b>, <b>grading practices that support learning</b> (give as infrequently as possible: K-5 never, 6-8 annually, HS once per marking period, grading for learning system – see p.147-150).</p>  | <ul style="list-style-type: none"> <li>•</li> </ul> |
| <p><b>Ch 6. Activating Students as Instructional Resources for One Another: Cooperative vs. collaborative</b> – little <b>consensus</b> on definition of CL (either C), <b>who</b> sets the goals is <b>irrelevant</b> to FA. <b>Research</b>: great <b>success</b> story, <b>4 main factors</b>: motivation, social cohesion, personalization, cognitive elaboration. <b>Interplay</b> – focusing on <b>only one</b> has <b>little effect</b>. Explaining <b>why</b> answers right /wrong = <b>elaboration</b> = <b>more beneficial</b> than giving answers. <b>Peer tutoring</b> can be as (or <b>more</b>) <b>effective</b> as T tutoring. CL <b>particularly effective</b> (for all ability Ss) <b>when</b>: <b>a clear group goal</b> + <b>individual accountability</b> (one Ss failure to work affects group - hard), accountability even <b>harder</b> with <b>more complex criteria</b> e.g. open-ended tasks, multiple tasks, multiple roles.<br/> <b>Practical Techniques</b>: <b>C3B4ME</b> (talk to 3 peers before asking T), <b>peer improvement of homework</b>, <b>homework help board</b>, <b>two stars and a wish</b> (peer feeds back by highlighting 2 good things + 1 improvement), <b>end-of-topic qs</b> (groups come up with questions, sort to elicit patterns), <b>error classification</b> (T circles errors, Ss classify them), <b>student reporter</b> (appoint a S, they summarize lesson, ask/answer qs), <b>preflight checklist</b> (buddy up to ensure work to be submitted meets requirements), <b>I-you-we checklist</b> (each S reflects on own/peer/group performance), <b>reporter at random</b>, <b>group-based test preparation</b> (assign parts of learning to each member of a group, next day they present, feedback), <b>If you've learned it help someone who hasn't</b> (framed positively as practicing communication).</p> | <ul style="list-style-type: none"> <li>•</li> </ul> |
| <p><b>Ch 7. Activating Students as Owners of Their Own Learning: Learners create learning</b>, not teachers. Student <b>self-assessment (SSA)</b>: <b>not</b> summative assessment, about <b>insights into their learning to improve it</b>. <b>Research</b>: one study shows SSA nearly <b>doubles rate of learning</b>, <b>3 techniques moderately good</b> = elaboration interrogation/self-explanation/interleaving, <b>2 techniques very good</b> = practice testing (good because of hyper correction effect) /distributed practice. <b>Self-regulated learning</b>: <b>metacognitive</b> (knowledge/skills/experience), <b>motivation</b> (emerges when match between capability+ challenge). Student <b>decision (whether to try)</b> depends on <b>6 things</b>: perception of task/previous experience/ beliefs about ability in subject/ beliefs about role of effort/interest in subject/ costs + benefits→ <b>2 outcomes</b>: <b>preserve</b> well-being or <b>growth</b> but decision-making is <b>dynamic</b>.<br/> <b>Practical Techniques</b>: <b>traffic lights</b> (R/O/G confidence level – reframe G to 'ready to teach someone else'/they use when reviewing), <b>red or green disks</b> (double sided discs on the desk, students flip to red if T is going too fast), <b>colored cups</b> (R/O/G cups, O = T too fast, R = have a q, but T selects other O/G S to answer at front of class), <b>learning portfolios</b> (not performance portfolio of best work, better work shows effort produces improvement), <b>learning logs</b> (provide selection of prompts, they choose 3 + respond at end of lesson).</p>   | <ul style="list-style-type: none"> <li>•</li> </ul> |
| <p><b>Epilogue</b>: Very different this time, education 1910-1940 v. successful because it did NOT try to predict the future; more, <b>better general education</b> incl. <b>improving teacher quality</b> = <b>thriving students</b> and a <b>prosperous future</b> for the US.</p>  | <ul style="list-style-type: none"> <li>•</li> </ul> |