NUMURKAH SECONDARY COLLEGE: Unpacking the instructional model.

Hook in … a 'do now' task is an effective use of time and creates a settled start.

L Learning Intention	E Explicit Teaching	A Application	R Review	N Now What?
STAFF ARE …				
Presenting the purpose of the learning. Connecting learning to prior knowledge and real world experiences. Establishing success criteria.	Explicitly introducing - concepts, skills, strategies. Providing examples. Introducing new vocabulary. Modelling.	Challenging students with understanding and application of concepts and skills. Investigating need for feedback and individual support for achievements. Conferencing with focus students.	Reinforcing the major points of lesson. Asking students for feedback on what and how they've learned. Addressing success criteria.	Evaluating the success of the session – reflecting on what worked and on what could be improved for the future. Planning for future learning. Promoting curiosity for further learning.
STUDENTS ARE …				
Recording the Learning Intention / Success Criteria. Actively listening. Thinking about what they know already and predicting what the success criteria will look like.	Engaging, questioning, and clarifying. Taking notes.	Comparing, classifying, solving, analysing, constructing, generating, writing, making, reading, drawing, doing, saying and planning. Asking for assistance as needed. Re-practising tasks following teacher feedback.	Asking clarifying questions. Paraphrasing. Reflecting. Sharing. Giving feedback to teachers.	Developing home study goals based on areas needing improvement in learning. Completing set homework tasks Making connections between their learning.
High impact teaching strategies being employed …				
Setting Goals Feedback Explicit Teaching	Explicit Teaching Worked Examples Questioning Metacognitive Strategies	Multiple Exposures Differentiated teaching Collaborative Learning Worked Examples Metacognitive Strategies Explicit Teaching Feedback Questioning	Multiple Exposures Differentiated teaching Worked Examples Metacognitive Strategies Feedback Questioning	Setting Goals Questioning Feedback Explicit Teaching

Hook in … a 'do now' task is an effective use of time and creates a settled start.

Definition: The routine for entering the room sets the tone for the class. Students should know where to sit, what to do with homework, have a Do Now in the same location, and pick up any packet of activities from a table, not from you.

EXAMPLES OF BEST PRACTICE
• Plan activities to personalize students' entry into your room (e.g. be at the door, welcome letter). • Classroom set up: arrange materials in a predictable manner that are easy for students to access. • Organise and label all materials. Labelling is essential for students who are learning a second language and are in the preproduction or early prediction stages. • Make the classroom feel like home (for example have students work displayed on the walls). • Give students specific jobs and responsibilities to make it a student centred classroom. • Design the classroom so that there are areas for both social interaction and quiet areas not associated with punishment. • Create a positive environment by regularly using classroom awards to promote motivation. • Create a seating plan if required.

RESOURCES:

Teach like a Champion: Entry Routine
https://www.youtube.com/watch?v=zw6m3-fnahw

Learning Intentions:

The purpose of a learning intention *("We are learning to….")* is to make the intent, purpose and aim of the lesson explicit to the students. The learning intention for the lesson forms the basis for all planning, where the context and the activity of the lesson are planned after the learning intention is established. The learning intention of the lesson is shared with students at the start of the lesson and is separate from the explanation of the activity. The learning intention is revisited when appropriate throughout the lesson. The learning intention provides the focus for the teacher to evaluate the extent to which the lesson has met its aims.

Learning intentions of lessons need to be as clear as possible. Research referred to by Shirley Clarke (2011) has shown that students are more motivated and task oriented if they know the learning intention of the task and are able to make better decisions about how to go about the task.

Robust learning intentions are expressed in terms of knowledge, understanding and skills, and link directly with the teachers 'big picture' curriculum planning documentation.

The design of learning intentions starts with the answers to these questions.

- What do I want students to know?
- What do I want students to understand?
- What do I want students to be able to do?

Learning intentions should focus on the knowledge, skills and understanding students will explore.

Learning intentions that focus on knowledge:

Thinking about the different kinds of knowledge, and being specific about the kind of knowledge that is required in a particular situation, will help teachers design their learning intentions.

Consider, for instance:

- knowledge *about* a particular topic
  (know about different types of energy)
- knowledge of *how* something is done, of the steps involved in producing something
  (know how to construct a pie graph)
- knowledge of *why* something happens
  (know why rabbits are an ecological disaster)
- knowledge of *what* causes something to happen
  (know what causes thunderstorms)

Learning intentions that focus on skills:

Learning intentions that focus on skills always start with the words 'to be able to' followed by a verb. For example,

- *to be able to write a recount*
- *to be able to solve a problem using more than one strategy*
- *to be able to work as part of a team*
- *to be able to identify persuasive strategies used by the author or an argument*
- *to be able to experiment with a variety of media in order to achieve a stated effect*

Often learning intentions that focus on skills will also imply the acquisition of certain knowledge or understandings. For instance, to be able to write a recount, students must have a knowledge of the structures and features of a recount.

Learning intentions that focus on understanding:

Understanding builds on knowledge and requires some kind of processing.

For instance, a student might be able to list the causes of an historical event - thereby showing knowledge of them - but understanding requires analysis and, perhaps, interpretation.

Understanding, then, is of a higher cognitive order than knowledge and, in designing learning intentions, teachers ensure that students are exposed to learning which makes those higher demands as well as demands of a lesser nature.

- *understand the causes of an historical event*
- *understand the effects of diet on health*
- *understand how persuasive language can position the reader to agree with the author*
- *understand how the internet can be used for research purposes*
- *understand what happens when our bodies consume carbohydrates*
- *understand why X causes Y.*

After sharing with students *what* they are going to learn, it makes sense to give them a reason for learning it.

That is, teachers answer the question, 'Why are we learning this?'

Explicit Teaching:

Definition:
When teachers adopt explicit teaching practices they clearly show students what to do and how to do it. The teacher decides on learning intentions and success criteria, makes them transparent to students, and demonstrates them by modelling. The teacher checks for understanding, and at the end of each lesson revisits what was covered and ties it all together (Hattie, 2009).

EXAMPLES OF BEST PRACTICE
- Shared learning intentions   - Relevant content and activities   - New content is explicitly introduced and explored   - Teacher models application of knowledge and skills   - Worked examples support independent practice   - Practice and feedback loops uncover and address misunderstandings   - Reinforces the main points at the end of the lesson.

RESOURCES:

Explicit instruction
http://www.aitsl.edu.au/australian-professional-standards-for-teachers/illustrations-of-practice/detail?id=IOP00299

https://legacy.aitsl.edu.au/australian-professional-standards-for-teachers/illustrations-of-practice/detail?id=IOP00299

https://www.aitsl.edu.au/teach/standards

https://www.alea.edu.au/documents/

Direct Instruction
Definition:
Direct instruction is the use of straightforward, explicit teaching techniques, usually to teach a specific skill. It is a teacher-directed method, meaning that the teacher stands in front of a classroom and presents the information. It might be a lesson in which the teacher very clearly outlines the order of all the planets in the solar system, or it might be a simple explanation and some examples of the double ff-ll-ss-zz spelling rule.

EXAMPLES OF BEST PRACTICE
- Teachers match the type of instruction to the task, teaching directly when it suits the skill being taught.   - Direct instruction is only used to teach a specific skill and is only one tool that can be used for explicit teaching.   - Direct instruction should only comprise of 10% of the explicit teaching.   - Pace and Narrative are considered and planned for prior to direct instruction.

RESOURCES:

8 Strategies Robert Marzano & John Hattie Agree On:
http://www.evidencebasedteaching.org.au/robert-marzano-vs-john-hattie/

Application:

Time for the students to begin purposeful practice of the skills and understandings to be developed though the session.

Application time may include:

- Independent Practice
- Collaborative Learning
- Break it down tasks
- Differentiated learning
- Checking for understanding
- Mastery Learning
- Worked examples
- Teaching Metacognitive Skills

Independent Practice

Definition:
Students work independently or collaboratively on the differentiated tasks set by the teacher during the explicit teaching component of the lesson.

EXAMPLES OF BEST PRACTICE

- Plan and prepare practice activities that reflect the instructional purpose of the lesson. Differentiated activities are recommended.
- Make sure materials are ready for use.
- If students are intended to work together, establish grouping arrangements and time for completing the task.
- Give complete and specific instructions. Include examples and models of products and/or work samples if necessary.
- Communicate how their work will be evaluated; share the rubric or scoring guide if applicable.
- Introduce a nonverbal signal that will be used at the end of the Independent Practice to indicate that it is time for everyone to regroup.
- Allow students to get into working groups if applicable.
- Provide practice at appropriate levels of difficulty. Circulate the classroom to ensure that students are completing tasks correctly.
- Provide considerable feedback; redirect, reteach and extend assistance to those who need it.
- Offer alternative activities for students who complete tasks ahead of the others. They may also be asked to help and give feedback to other students/groups.

RESOURCES:

Independent Practice Tips:
https://www.thoughtco.com/lesson-plan-step-6-independent-practice-2081854

Collaborative Learning

Definition:
Collaborative learning occurs when students work in small groups and everyone participates in a learning task. There are many collaborative learning approaches. Each uses varying forms of organisation and tasks. Collaborative learning is supported by designing meaningful tasks. It involves students actively participating in negotiating roles, responsibilities and outcomes.

EXAMPLES OF BEST PRACTICE

- Students work together to apply previously acquired knowledge
- Students cooperatively solve problems using previously acquired knowledge and skills
- Students work in groups that foster peer learning
- Groups of students compete against each other
- Regularly sets group tasks and establishes ground rules about how groups operate
- Explicitly teaches students to work as a team by assigning different roles within groups so that students take responsibility for particular aspects of tasks
- Differentiates learning by assigning group content based on student readiness
- Designs tasks that require sharing expertise and ensuring each student's contribution is valued by other students
- Promotes interactions by organising students in flexible groupings in which group membership varies and may be based, for example, on friendship, mixed academic ability or common interests.

RESOURCES:

Related resources:
https://www.aitsl.edu.au/teach/standards

http://www.readwritethink.org/professional-development/strategy-guides/

Break it down

Definition:
When students don't understand, break down the material into its parts to focus on the problematic area. Champion teachers don't simply repeat the question, they think about the part of the material that most likely caused the confusion and ask smaller, simpler questions about this part. The goal is to provide the smallest hint possible and do it quickly. This is a challenging technique and it is best to prepare for this during planning by considering possible wrong answers and cues to use for those errors. There are many ways to break down the material, such as the suggestions below:

EXAMPLES OF BEST PRACTICE

- **Provide an example.** If asking for the definition of a prime number, provide an example, "7 is one, but 8 is not."
- **Provide context.** To help a student who does not understand *ancient*, "I hope nobody ever calls me ancient."
- **Provide the missing (or first) step.** "What do we always do when the numerator is larger than the denominator?"
- **Eliminate false choices.** "If it were a verb, it would be an action. Is *owner* an action?"

RESOURCES:
Effective Classroom Practice: Tasks/Assignments
https://www.education.com/reference/article/effective-classroom-practice-tasks/

Differentiation

Definition:
Differentiated teaching are methods teachers use to extend the knowledge and skills of every student in every class, regardless of their starting point. The objective is to lift the performance of all students, including those who are falling behind and those ahead of year level expectations. To ensure all students master objectives, effective teachers plan lessons that incorporate adjustments for content, process, and product.

EXAMPLES OF BEST PRACTICE

- High quality, evidence based group instruction
- Regular supplemental instruction
- Individualised interventions
- Design lessons based on students' learning styles.
- Group students by shared interest, topic, or ability for assignments.
- Assess students' learning using formative assessment.
- Manage the classroom to create a safe and supportive environment.
- Continually assess and adjust lesson content to meet students' needs.

RESOURCES:

20 Differentiated Instruction Strategies and Examples [+ Downloadable List]:
https://www.prodigygame.com/blog/differentiated-instruction-strategies-examples-download/

Basis Differentiation:
https://www.youtube.com/watch?v=ufSiKnskey4

What is Differentiated Instruction?
https://www.youtube.com/watch?v=YAWKxpCv1Fw

HITS
http://www.education.vic.gov.au/Pages/PageNotFoundError.aspx?requestUrl=http://www.education.vic.gov.au/school/teachers/teachingresources/diversity/pages/ables.aspx

http://www.insight.vic.edu.au/

https://legacy.aitsl.edu.au/australian-professional-standards-for-teachers/illustrations-of-practice/detail?id=IOP00125

https://legacy.aitsl.edu.au/australian-professional-standards-for-teachers/illustrations-of-practice/detail?id=IOP00249

Checking for Understanding

Definition:
Good drivers check their mirrors every five seconds. It would be far too costly to wait for an accident to learn what they are doing wrong. Teachers also need to check for student understanding frequently *while* they are teaching to avoid the costly result of waiting until a final assessment. First you need to gather the data, then you need to respond to that data to insure learning occurs.

EXAMPLES OF BEST PRACTICE

Planning Strategy: <u>Standardise the format.</u>
Create a system/routine within the classroom which offers strategies for checking for understanding more frequently throughout the class period so that you are able to give real time feedback and correct misunderstandings in the moment before that final exit ticket and the bell rings. For example, a Do First or Warm-up, right at the beginning of class!

Gathering Data Strategy: <u>Tracking, Not Watching.</u>
Once you have a plan in place for what students need to accomplish, the next step is being intentional about how you observe and check students' work and gather data to know whether students "got it." Rather than scanning to monitor behavior, you are scanning to fix misconceptions in the moment! There are two pieces to Tracking, Not Watching: Decide what you want to focus on. What do I want to ensure that 100% of students understand during this next chunk of time? Track these questions specifically and ignore other items or distractions.

What does this look like in action?
In the Do First, if you have a set of basic skills and spiral review problems, choose one problem that you "really care about" and want to check for mastery. Then circulate and only focus on that one problem as you check-in with students and work to fix any misconception you see pertaining to that one problem.
And beyond the Do First, this strategy can be applied to any sort of independent work students are engaged in.

Fixing Misconceptions Strategy: <u>Act on the Data.</u>
Acting on the data means having those quick individual conferences where you immediately intervene and have students explain their thinking. This can also be done with the whole class if you see a common error that everyone is making and it is something that you need to address. I think the most difficult piece of acting on the data, whether or not it is individual or whole group, is to focus on student thinking rather than simply on the student output. Consider how you can ask questions that get students to explain their thought process and reasoning strategies so you can work with students to fix their misconception rather than simply pointing out that the answer is wrong and giving the correct "step" or solution.

RESOURCES:
Teach Like a Champion Videos:
http://teachlikeachampion.com/blog/freedom-preps-jasmine-howard-checks-understanding/
http://teachlikeachampion.com/blog/check-understanding-natalie-hubers-master-clip-shows/
https://www.youtube.com/watch?v=4eiuM7PKTPs
http://teachlikeachampion.com/blog/dani-quinn-uses-show-check-understanding/

Mastery Learning

Definition:
A system of tests and retests of easy material with a high pass mark, if a student does not pass they must do extra work and then take a retest on the material they were weak at. **Mastery learning focusses on mastering a topic before you move on to a more advanced one.**

EXAMPLES OF BEST PRACTICE
- Mastery learning breaks subject matter and learning content into units with clearly specified objectives which are pursued until they are achieved.
- Learners work through each block of content in a series of sequential steps.
- Students must demonstrate a high level of success on tests, typically at about the 80% level, before progressing to new content (the tests are aimed at their learning level).
- Teachers seek to avoid unnecessary repetition by regularly assessing knowledge and skills. Those who do not reach the required level are provided with additional tuition, peer support, small group discussions, or homework so that they can reach the expected level.

RESOURCES:

Mastery Learning Model: Definition, Theory & Approach:
https://study.com/academy/lesson/mastery-learning-model-definition-theory-approach.html

Worked examples

Definition:

A worked example demonstrates the steps required to complete a task or solve a problem. By scaffolding the learning, worked examples support skill acquisition and reduce a learner's cognitive load. The teacher presents a worked example and explains each step. Later, students can use worked examples during independent practice, and to review and embed new knowledge.

EXAMPLES OF BEST PRACTICE
- Teacher clarifies the learning objective, then demonstrates what students need to do to acquire new knowledge and master new skills.   - Teacher presents steps required to arrive at the solution so students' cognitive load is reduced and they can focus on the process.   - Students practice independently using the worked example as a model   - Scaffolds the acquisition of new knowledge and skills by presenting students with a clear, step-by-step example.   - Designs worked examples that are accessible to students (self-explanatory) and unpacks the learning process, highlighting options available to arrive at the correct solution.   - Monitors student learning and supports students to move towards more independent practice.

RESOURCES:

HITS resources:
https://www.aitsl.edu.au/teach/standards

TEACHING METACOGNITIVE SKILLS

Metacognitive strategies teach students to think about their own thinking. When students become aware of the learning process, they gain control over their learning. Metacognition extends to self-regulation, or managing one's own motivation toward learning. Metacognitive activities can include planning how to approach learning tasks, evaluating progress, and monitoring comprehension.

EXAMPLES OF BEST PRACTICE
- Provides students with specific strategies to set goals, and monitor and evaluate their learning progress.   - Assists students to identify and use strategies that support them to achieve learning goals.   - Demonstrates how to use a particular metacognitive strategy in ways that make content knowledge more accessible, malleable and intriguing.   - Uses a variety of learning and assessment strategies to scaffold and personalise the learning process.   - Provides support and scaffolding for tasks through checklists, self-questioning, student-teacher conferences and self-assessment.   - Uses ICT to increase student choice and flexible learning.

RESOURCES:
HITS Strategies:

https://www.aitsl.edu.au/teach/standards/illustrations-of-practice

http://fuse.education.vic.gov.au/Resource/

REVIEW:

Definition:

Feedback informs a student and/or teacher about the student's performance relative to learning goals. Feedback redirects or refocuses teacher and student actions so the student can align effort and activity with a clear outcome that leads to achieving a learning goal. Teachers and peers can provide formal or informal feedback. It can be oral, written, formative or summative. Whatever its form, it comprises specific advice a student can use to improve performance.

EXAMPLES OF BEST PRACTICE

- Precise, timely, specific, accurate and actionable.
- Questioning and assessment is feedback on teaching practice.
- Use student voice to enable student feedback about teaching.
- Provides feedback on tasks that challenges students to review, reflect on and refine their understandings at various points in a learning sequence
- Gives timely feedback, acknowledging areas well-handled and suggesting areas for improvement
- Structures feedback to support further learning
- Organises a variety of audiences to provide feedback
- Uses student assessment data as a source of feedback on the effectiveness of their teaching practice.

RESOURCES:

HITS Resources:

http://www.insight.vic.edu.au/Pages/PageNotFoundError.aspx?requestUrl=http://www.insight.vic.edu.au/feedback-and-reporting%E2%80%A2

http://www.ascd.org/ASCD/pdf/journals/ed_lead/el201209_takeaways.pdf

https://www.aitsl.edu.au/teach/improve-practice/feedback

https://www.aitsl.edu.au/teach/standards

https://www.aitsl.edu.au/teach/standards/illustrations-of-practice

NOW WHAT:

Definition:

Lessons have clear learning intentions with goals that clarify what success looks like. Lesson goals always explain what students need to understand, and what they must be able to do. This helps the teacher to plan learning activities, and helps students understand what is required.

EXAMPLES OF BEST PRACTICE
• Goals are based on assessed student needs.   • Goals are presented clearly so students know what they are intended to learn.   • Goals can focus on surface and/or deep learning.   • Goals challenges students relative to their current mastery of the topic.   • Goals link to explicit assessment criteria.

RESOURCES:

Best practice examples:

https://www.aitsl.edu.au/teach/standards

http://www.assessmentforlearning.edu.au/404.asp

http://www.insight.vic.edu.au/

https://www.marzanoresearch.com/resources/proficiency-scale-bank