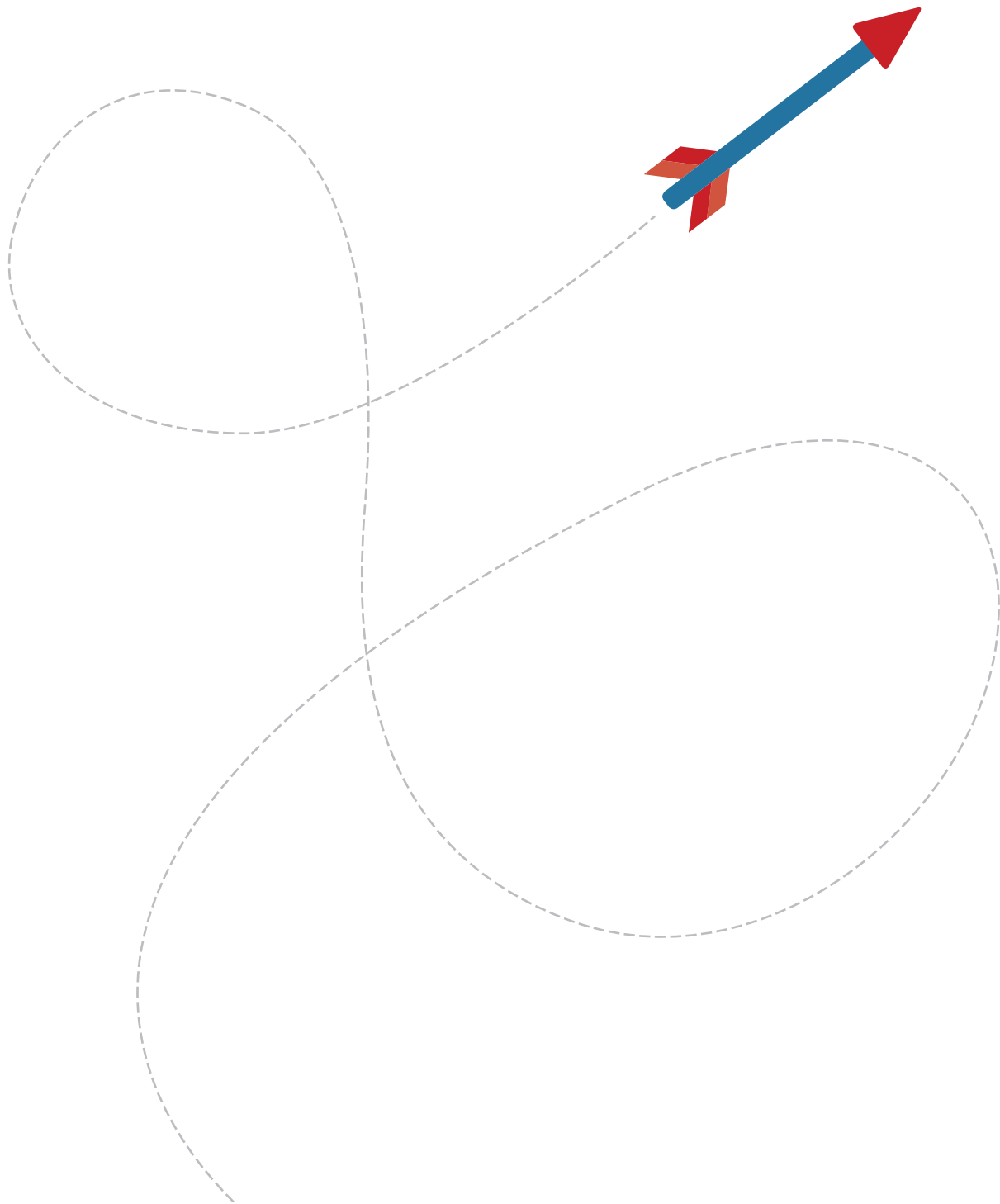




# PART I

# INTRODUCTION



Copyright Corwin 2018





# Introduction

Welcome to an exploration of visible learning research to support the development of assessment-capable visible learners. Thank you for your commitment to ensuring your learners can own their own learning and be their own teacher! This manual will serve as a guide to take your students through lessons that introduce them to tools and strategies necessary to become assessment-capable visible learners.

In the *Becoming an Assessment-Capable Visible Learner Learner's Notebook* and this accompanying *Teacher's Guide*, you will find resources to help you along your professional learning journey, at whatever stage you find yourself. Whether this is an individual journey or a district or school initiative, working to use visible learning research to guide your teaching and student learning is a commitment well worth the effort. In doing so, you are committing to improving students' learning outcomes by equipping learners with the skills they need to engage more fully in their own learning and increase their growth and achievement.

## What Is Visible Learning?

Visible learning is a compass for education. In 2009, when John Hattie first published *Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Student Achievement*, it was deemed the “holy grail” of education. His work included a synthesis of research conducted by researchers all over the world, which included more than 50,000 individual studies including over 250 million students. It has been claimed to be the most comprehensive review of literature ever conducted. And the thing is, it's still going on. By 2016, the database included 1,200 meta-analyses, with over 70,000 studies and 300 million students (Fisher, Frey, & Hattie, 2016). That's a lot of data, right? The goal of a meta-analysis is to synthesize what is currently known about a topic. The result, as in the case of visible learning, can be strong recommendations about the impact or effect of a specific practice (Fisher et al., 2016).

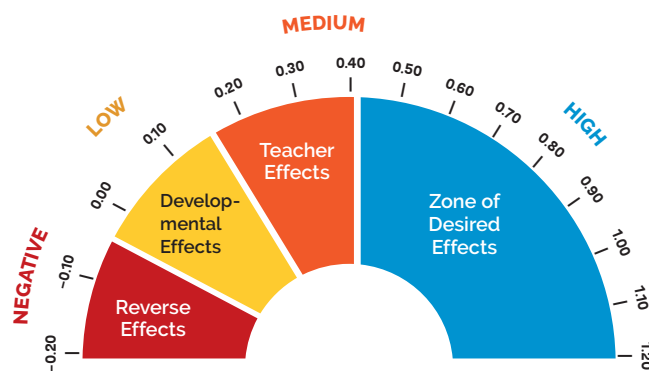
Visible learning is the understanding and “implementing [of] practices that work best to accelerate student learning” (Fisher et al., 2016). When well implemented, all stakeholders, and especially students, can see learning taking place—it becomes visible to them. Measured and ranked by effect size, the practices measured incorporate those used by the teacher, the student, the school, and other factors. Visible learning seeks to implement those strategies scientifically shown to have the greatest impact on student achievement. The *Learner's Notebook* helps to develop strategies over which the student is the primary influencer.

## Effect Size

Effect size refers to the magnitude of the effect of a given approach, strategy, intervention, or influence. Hattie identified 0.40 as the hinge point, the *average* of all the influences studied. In other words, it is associated with a typical year's growth for a year's worth of school. Fisher, Frey, and Hattie caution that this does not mean

that influences that fall beneath that 0.40 hinge point should be discarded. Any influence or strategy may be more or less beneficial in different stages of learning, which Hattie identifies as surface, deep, and transfer. If a strategy is frequently implemented poorly, it can result in a lower effect size. See the appendix for a complete list of effect sizes.

The influence barometer is used by John Hattie in his visible learning research to show the effect size that varying influences in education have on student achievement. Influences having an effect size of 0.40 or higher fall into the zone of desired effects; 0.40 is the hinge point indicating a year's worth of progress for a year's input. Influences with an effect size greater than 0.40 have potential to make an even greater impact on student achievement.



**Influence Barometer**

Source: Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to student achievement* (Figure 2.4, p. 19). New York, NY: Routledge. Used with permission.

Throughout the *Teacher's Guide*, the effect sizes for given influences are provided. However, simply doing an activity with a high effect size does not guarantee student learning. How, and in what phase of learning, a practice is implemented will impact its effectiveness in your classroom (for more on the surface, deep, and transfer phases of learning, see Fisher et al., 2016).

Creating assessment-capable visible learners is a way of being in the classroom that requires, for some educators, a paradigm shift. Each of the activities listed in this guide is intended to become a habit for students that reshapes the learning climate in the classroom or the school, placing the students at the center and in the driver's seat when it comes to their own learning. Though the effect sizes of influences are provided, it is up to you to transform what you implement into meaningful practice. This *Teacher's Guide* and the *Learner's Notebook* are designed to support you as you support your students so that maximum learning can be achieved.

## Practices for Success

The following are some practices that will help you succeed in creating assessment-capable visible learners in your classroom:

1. **Document modeled and practiced strategies.** As you introduce new procedures and strategies, make these permanently visible to students in the form of anchor charts posted around the room. These charts provide students with a tool to remember individual choices they can make for their own learning. They also allow students to see that learning choices have a name and are legitimate practices that they can choose to use. Making these tools visible reinforces that learning is deliberate rather than something that happens by chance and that they can choose to use the tools that help them advance.
2. **Provide regular feedback to students.** Effective feedback is accurate, timely, actionable, helpful, and descriptive. It provides students with information about their strengths, areas for improvement, and, when formative, suggestions for how to improve.

3. **Engage students in regular progress monitoring.** In addition to students self-assessing against success criteria for daily learning, engage students in a more formal analysis of their progress against the standards, or the broader learning intentions, so they can see growth over time. This may include pre-assessments, quizzes, informal assessments, mid-unit/module assessments, and end-of-unit/module assessments, as well as final exams.

For some students, these expectations might diverge from what they have been required to do in the past. Just as it is a shift for some teachers, it can also be for students. In settings where these strategies are not the norm, teachers can expect reluctance on the part of some learners, especially at the beginning. They have probably never been asked to become their own teacher. They may be asked to think about school and their role in school differently. Some may even resist at first. Change can be hard. However, over time, and if implemented not as another task to check-off and get through, but as regular, integrated processes, it will become the norm. It can become the way students view school.

## How to Hook Reluctant Learners

As with most things in the classroom, students buy in when the following things happen:

1. **Teachers demonstrate clarity in their instruction.** This includes using learning intentions and success criteria, developing well-articulated and coherent lessons, clearly delivering instruction, and setting clear expectations for behaviors, task instructions, and learning outcomes. The effect size of teacher clarity is 0.75, which means that done well, students whose teachers demonstrate clarity can accomplish nearly twice as much learning in a given year as they would in the absence of these things.
2. **Students view the teacher as credible.** “Teacher credibility is a constellation of characteristics, including trust, competence, dynamism, and immediacy. Students evaluate each of these factors to determine if their teacher is credible, and if they are going to choose to learn from that teacher. Teachers can compromise their credibility when they violate trust, make a lot of errors, sit in the back of the room, or lack a sense of urgency. They compromise their credibility particularly if they are not seen to be fair” (Fisher et al., 2016, pp. 11–12). Teacher credibility is accomplished by building trusting relationships, engaging students in relevant and challenging learning tasks, and developing and implementing coherent teaching and assessment. The effect size of teacher credibility is 0.90.
3. **Teachers develop genuine relationships with students.** Demonstrate compassion, respect, and genuine caring for students’ academic, social-emotional, and personal well-being. Genuine teachers are ones who understand they teach students first and their content second. As Fisher et al. (2016) say, “Students don’t learn from people they don’t like” (p. 13). The effect size for teacher-student relationships is 0.52.
4. **Strategies are regularly and meaningfully embedded into learning.** Strategies are routinely utilized, and the purposes of the strategies are frequently discussed with students.
5. **Teachers are flexible in their strategy use and responsive to the students in front of them.** Visible learning is not a lockstep program. In the

beginning, select a few strategies to develop throughout the year, based on the needs of your students. Continually monitor the effectiveness of the strategies and your use of the strategies, and modify as needed. This *Teacher's Guide* is not all-encompassing, but it is a starting point. Use the contents as they fit the needs of your students.

6. **Students see the benefits.** Students will be much more likely to buy in if the results of this work are visible and tangible. Regular self-monitoring of progress, self-grading, and self-assessment of learning make achievement visible. A primary goal of the *Learner's Notebook* is that students become capable of assessing their own work and their own progress toward learning goals. You can work to connect empowerment of learning to current and future aspirations. The effect size of self-report grades is 1.33.
7. **Teachers tailor the work to their students.** If a lesson doesn't seem like a good fit for your students, modify it. Pay attention to how students are responding and progressing, and use formative assessment frequently to help determine that. Your individual students are just that—individuals. The more you build student–teacher relationships, the more they will be willing to take risks in their learning, because they know you will be there to support them. Listen to their feedback, and tailor this work to their needs.

## Teacher Clarity: Learning Intentions and Success Criteria

Imagine being given a bow and arrow and told your evaluation would depend on whether you hit the target. The catch: you don't know what the target looks like or even where it is. It is invisible to you. It is very unlikely you will hit it. You may become angry and frustrated at your evaluators. You may even give up on trying. All too often, this is the experience of our students. Good daily learning intentions make the purpose and the target of the day's lesson visible to students. The relevance is clear, and so are the criteria for success. Good learning intentions and success criteria demystify the learning for students, thus providing a clear pathway toward success. In the development of assessment-capable visible learners, nearly every characteristic depends on teacher clarity. Therefore, learning intentions and success criteria take a prominent role in the *Learner's Notebook* and here in this *Teacher's Guide* as well.

When engaging in quality planning, teachers consider essential questions central to their content. They consult locally created curriculum guides and pacing charts derived by aligning district-required teacher materials with state or local standards. These standards clearly state what students should know and be able to do. Standards guide instruction as teachers determine *how* students will demonstrate skill and concept acquisition and apply learning in new and novel situations. Though they are specific, standards may embed a broad set of skills and concepts. These may need to be demonstrated and applied in a variety of contexts over time.

Learning intentions correspond to the academic standard. In the broadest sense, they *are* the standard written in a manner accessible to students in student-friendly language. Standards are typically developed over a sustained period of time through thoughtful consideration of learning progressions. Effective teachers begin with standards but break them down into smaller components, smaller chunks that can be practiced and attained within a given lesson or set of lessons. These chunks

correspond to the learning progression: what skills do my students need to develop to successfully master the standard? So developing learning intentions also entails understanding each standard well enough to identify the chunks of learning.

Lesson-specific learning intentions are just that: what it is the teacher intends for students to learn and practice through the course of the lesson or class period. Learning intentions, then, provide the purpose of the lesson to the students. Sounds easy and straightforward. As the idea swirls around in our brains, it is easy enough to grasp conceptually. However, once we begin writing learning intentions for our students, we may find that it takes much thought and deliberation to create well-articulated learning intentions, aligned to the performance task, in student-friendly language! The box below outlines the differences between a couple of sample standards, which are meant to be met over the course of a school year, and lesson-specific learning intentions.

STANDARD	LEARNING INTENTION
Apply properties of operations as strategies to add and subtract rational numbers.	The purpose of today's lesson is to effectively use the commutative and associative properties to solve addition and subtraction problems with positive and negative rational numbers.
Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.	In the given passages, we will compare and contrast the points of view of Peter and Pax, from <i>Pax</i> by Sarah Pennypacker.  Pennypacker, S. (2016). <i>Pax</i> . New York, NY: HarperCollins Children's Books.

Learning intentions have a much more specific purpose than the broader standard and drill down deeper into how we develop the learning standard. As such, the teacher must bear in mind a multitude of purposes when constructing the learning intention, including, but not limited to, the standards, essential questions, and content-specific skills and thinking habits that students need to develop in order to meet the standard.

Learning intentions are the *what* of learning. The purpose. Success criteria are the *how*. How will students know when they are successful? How can students assess their progress toward the learning intention? They are a way for teachers and students to gauge progress toward the learning intention and, subsequently, learning standards. Success criteria can be developed by the teacher or jointly with the students and may include checklists and rubrics. When students know what they are supposed to learn, what it looks like when they get there and have a clear pathway forward, they are not only more likely to be successful, they are more likely to be motivated to do so.

Because success criteria play a crucial role in motivation, it is important for them to precisely and explicitly identify what the end goal looks like. Like identifying and naming learning intentions, identifying and writing quality success criteria takes deliberate practice.

Following is an example that takes a learning standard and uses it for development of learning intentions and success criteria. Quality success criteria need to be concrete and measurable through some form of assessment.

STANDARD	LEARNING INTENTION	SUCCESS CRITERIA
Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.	The purpose of today's lesson is to analyze how an author develops and contrasts points of view of multiple characters in a text.	<p>Identify the point of view of each character in the text about how they view the effects of war.</p> <p>Locate three pieces of evidence from the text that accurately support each character's point of view about how they view the effects of war.</p> <p>Identify ways in which the author shows how the characters are different in how they each view the effects of war.</p> <p>Write an analysis using evidence from the text that explains each character's point of view on the effects of war.</p>

For additional help creating well-articulated learning intentions aligned to performance tasks, see *The Teacher Clarity Playbook: A Hands-on Guide to Creating Learning Intentions and Success Criteria for Organized, Effective Instruction* (Fisher, Frey, Amador, & Assof, 2018).

## The Learner's Notebook

The exercises, accompanying reflections, and progress monitoring tools included in the *Learner's Notebook* provide teachers with resources to support an instructional shift in the classroom. Visible learning is a way of approaching teaching and learning. For some, it proposes an instructional approach that may vary from current practices. Most of the included strategies simultaneously boost teacher credibility, student–teacher relationships, and student motivation, which have some of the highest influences of all (more on these later). The result is a culture of genuine learning. Simply using the accompanying materials and checking off a list of items to complete will, more than likely, not yield the desired results. Teachers who wish to see the benefits of visible learning must expertly incorporate strategies into the body of their lessons and help students make those strategies and ways of thinking a habitual way of being.

The *Learner's Notebook* is designed to build the foundation for, and further support, visible learning in the classroom. For those just beginning with visible learning, and for teachers and students who have been implementing visible learning strategies already, the *Learner's Notebook* is designed to help and encourage students to use self-assessment to improve their learning and to determine whether they have achieved the intended outcomes. In other words, to help them become their own teacher. The goal of the *Learner's Notebook* is to establish the habits and dispositions of assessment-capable visible learners through consistent metacognitive, cognitive, and motivational practices.

Assessment-capable learners are students who:

- know where they are going,
- know how to choose the tools to get them there,
- monitor their progress,
- recognize when they are ready for the next step in their learning.

Students do not walk into the classroom automatically knowing how to do these things. Like any skill, the processes, behaviors, and skills must be deliberately taught—labeled, modeled, practiced, and reflected on. The contents of the *Learner's Notebook* provide students and teachers with the opportunity to do just that. The learning strategies are introduced with gentle scaffolding, and the practice is embedded in content. Students are frequently asked to reflect on their learning to encourage the formation of regular habits.

As noted previously, at the heart of visible learning and creating assessment-capable visible learners lies *teacher clarity*. Teachers in visible learning classrooms understand what students must learn (standards), design and present lessons in a coherent manner, help students see the *why* behind what they are learning (relevance), and understand where students are performing in relation to those standards. In the visible learning classroom, teachers also communicate this with their students. Teachers mark a clear pathway toward achievement of learning goals for students by

- setting clear learning intentions,
- developing success criteria for and with students,
- providing students with the opportunities to select and develop the tools to reach those goals,
- building in opportunities for students to check their own performance against the success criteria.

The research is clear: when students know the goal and have a clear pathway forward, they are more apt to be motivated in their learning and the likelihood of achievement is higher.

## How to Use the *Learner's Notebook*

This *Teacher's Guide* explicitly lays out how to use the *Learner's Notebook*. However, it also provides plenty of room for flexibility, and we encourage you to adapt the pacing to meet the needs of your classroom and students.





This guide includes focus lessons designed to introduce students to key concepts and strategies that will assist them in their journey to becoming assessment-capable visible learners. We highly suggest that you include learning intentions and success criteria in every lesson, no matter what the focus of the lesson. Regularly including them is a first step toward teacher clarity, the foundation of your work together.

The focus lessons do not need to be taught in any particular order. If you prefer to teach the success criteria focus lessons first, for example, that is fine. Teach them in an order that is best for you and your students. The box on the next page highlights the key features of the focus lessons.

Inside the *Learner's Notebook* you will find flexible templates, scaffolded reflection prompts, and progress monitoring tools designed for use with the specific scripted focus lessons in this *Teacher's Guide* but flexible enough to be used for teacher-generated purposes as well. The *Learner's Notebook* is broken into two distinct sections:

1. **Lessons.** In this section you will find templates with instruction designed to support students who are becoming assessment-capable visible learners.



OVERVIEW	—	Provides background information and helpful tips and reminders meant only for the teacher
TIME		The approximate length of time needed to implement the lesson
ASSOCIATED INFLUENCE AND EFFECT SIZE		The influence is what was measured for effect on student achievement, for example, cooperative learning or self-reported grades. Each lesson has one or two influences listed, but overlap can exist. For example, receiving quality feedback is its own influence. However, feedback can influence motivation, teacher credibility, and clarity. An effect size above 0.40 indicates the influence had a greater effect than what would be expected of a student who simply attended school every day for a year.
TEACHER PREPARATION	—	This includes things to think about before using the provided template as well as items to prepare in advance. Such items might include supplies, posters, prior class-created anchor charts, and other artifacts.
RELATED TOOLS AND RESOURCES		This section lists the relevant tools or resources embedded within the lesson. These tools appear in Part III, Tools and Resources.
LESSON PAGES FROM THE LEARNER'S NOTEBOOK		These are the pages the students will see in their notebooks, included at full size and on shaded pages for easy reference.
TEACHER TALK	<b>Highlight</b>	This is a script that you <i>may</i> follow verbatim or use as a springboard to tailor to meet the needs of your students. It includes explanations and directions for the student. <b><i>Teacher Talk is presented in bolded italics and is highlighted for greater visibility.</i></b>
STUDENT ACTION	—	These are the clearly defined steps students will take throughout the focus lesson.

2. **Tools and Resources.** In this section there are copies of templates and checklists that are used throughout the focus lessons. Deliberate practice using the tools and applying the strategies is imperative if students are going to internalize these behaviors. Each resource is repeated three times, so that the teacher can model it on multiple occasions. Here are the items that are included:

1. Conceptions of Learning Survey
2. Assessment-Capable Visible Learner Self-Assessment
3. Student Goal Setting Template
4. Learning Intentions and Success Criteria Self-Assessment
5. Co-constructing Success Criteria Template
6. Self-Assessing Your Progress Using Success Criteria Template
7. Learning Strategies Checklist
8. Study Skills Checklist
9. Is It Time for Feedback? Checklist

10. Feedback Question Cards
11. Reflecting on Errors as Opportunities to Learn Template
12. Using Self-Questioning to Guide Your Learning Template
13. Checklist for Peer Teaching with Think-Alouds
14. Student Sentence Starters for Reciprocal Teaching

## Lesson Linkage to *Developing Assessment-Capable Visible Learners*

The lessons below correspond to the chapters of *Developing Assessment-Capable Visible Learners* (Frey, Hattie, & Fisher, 2018). While there is an overlap among some of the tools and strategies students will use, lessons have been designed with a linkage to specific chapters in the *Developing Assessment-Capable Visible Learners* professional book. Even though the lessons support ideas in each chapter, there is no specific order in which the lessons need to be implemented. It is up to you as the teacher to determine how these lessons will best be implemented to meet the readiness levels of your students in helping them become assessment-capable visible learners.

Lesson (Page in <i>Teacher's Guide</i> )	Tools and Resources (Page in <i>Learner's Notebook</i> )	Chapter of <i>Developing Assessment-Capable Visible Learners</i>
<b>LESSON 1</b> What Is Learning? (PAGE 2)	Conceptions of Learning Survey (PAGE 68)	1. Defining Assessment-Capable Visible Learners and the Teachers Who Create Them
<b>LESSON 2</b> Becoming an Assessment-Capable Visible Learner (PAGE 13)	Assessment-Capable Visible Learner Self-Assessment (PAGE 77)	1. Defining Assessment-Capable Visible Learners and the Teachers Who Create Them
<b>LESSON 3</b> Setting Mastery Goals (PAGE 23)	Student Goal Setting Template (PAGE 83)	1. Defining Assessment-Capable Visible Learners and the Teachers Who Create Them
<b>LESSON 4</b> Learning Intentions and Success Criteria: What? So What? Self-Assess! (PAGE 35)	Learning Intentions and Success Criteria Self-Assessment (PAGE 95)	2. Assessment-Capable Visible Learners... Know Their Current Level of Understanding
<b>LESSON 5</b> What Does Success Look Like? (PAGE 43)	Co-constructing Success Criteria Template (PAGE 104)	2. Assessment-Capable Visible Learners... Know Their Current Level of Understanding
<b>LESSON 6</b> Using Success Criteria to Monitor Your Progress (PAGE 47)	Self-Assessing Your Progress Using Success Criteria Template (PAGE 107)	3. Assessment-Capable Visible Learners... Understand Where They're Going and Have the Confidence to Take on the Challenge
<b>LESSON 7</b> Taking on the Challenge of Learning (PAGE 52)	—	3. Assessment-Capable Visible Learners... Understand Where They're Going and Have the Confidence to Take on the Challenge

(continued)

Lesson (Page in <i>Teacher's Guide</i> )	Tools and Resources (Page in <i>Learner's Notebook</i> )	Chapter of <i>Developing Assessment-Capable Visible Learners</i>
<b>LESSON 8</b> Selecting the Right Strategies to Help You Learn (PAGE 58)	Learning Strategies Checklist (PAGE 113)	4. Assessment-Capable Visible Learners... Select Tools to Guide Their Learning
<b>LESSON 9</b> Learning How to Learn (PAGE 64)	Study Skills Checklist (PAGE 119)	4. Assessment-Capable Visible Learners... Select Tools to Guide Their Learning
<b>LESSON 10</b> Is it Time for Feedback? (PAGE 68)	Is It Time for Feedback? Checklist (PAGE 122)	5. Assessment-Capable Visible Learners... Seek Feedback and Recognize That Errors Are Opportunities to Learn
<b>LESSON 11</b> Asking the Right Questions to Get the Feedback You Need (PAGE 73)	Feedback Question Cards (PAGE 129)	5. Assessment-Capable Visible Learners... Seek Feedback and Recognize That Errors Are Opportunities to Learn
<b>LESSON 12</b> Seeing Errors as Opportunities to Learn (PAGE 79)	Reflecting on Errors as Opportunities to Learn Template (PAGE 141)	5. Assessment-Capable Visible Learners... Seek Feedback and Recognize That Errors Are Opportunities to Learn
<b>LESSON 13</b> Using Self-Questioning to Guide Your Learning (PAGE 85)	Using Self-Questioning to Guide Your Learning Template (PAGE 150)	6. Assessment-Capable Visible Learners... Monitor Progress and Adjust Their Learning
<b>LESSON 14</b> Peer Teaching with Think-Alouds (PAGE 90)	Checklist for Peer Teaching with Think-Alouds (PAGE 159)	7. Assessment-Capable Visible Learners... Recognize Their Learning and Teach Others
<b>LESSON 15</b> Peer Teaching with Reciprocal Teaching (PAGE 95)	Student Sentence Starters for Reciprocal Teaching (PAGE 165)	7. Assessment-Capable Visible Learners... Recognize Their Learning and Teach Others

## Suggestions for Implementation in Secondary Schools

Individual educational settings vary in climate, priorities, offerings, structures, and a multitude of other factors contributing to the identity of the school. Visible learning classrooms share the common belief that student ownership of learning is essential for optimal student growth and achievement. Visible learning classrooms put the student at the center. The structures that individual educational settings choose to put in place to support visible learning depend on the identity, resources, and readiness of each setting. Here are some possible implementations:

- individual teacher use
- implementation within a department
- implementation within grade-level teams

- whole-school implementation: teaching focus lessons in advisory, homeroom, study block, or school-within-a-school teams; incorporating with learning management system or online portfolios

Although the focus lessons are introduced in a specific order, they are flexible enough to use in a teacher-preferred order. Like most skills, the behaviors and habits in the *Learner's Notebook* should be identified, labeled, modeled, and practiced with students, thus scaffolding for a gradual release of responsibility and daily habit formation.

To become assessment-capable learners, students need explicit teaching and regular practice of cognitive, metacognitive, motivational, and management strategies (Fisher et al., 2016).

- **Cognitive strategies** are used to deepen students' understanding of the content.
- **Metacognitive strategies** help students become aware of what they know and don't know. Metacognitive strategies involve knowing when to use certain strategies in the learning process; they include planning, monitoring, and assessing one's learning and readiness as well as regulating the learning process.
- **Motivational strategies** are the strategies students develop to focus and stay engaged in learning.
- **Management strategies** help students locate, navigate through, and evaluate resources.

The focus lessons contained in this guide strive to develop metacognitive and motivational strategies to support the effective implementation of cognitive strategies. The focus lessons are not meant as a be-all, end-all for developing assessment-capable visible learners; rather they are a starting point for teachers and students. It is encouraged and expected that teachers will want to implement specific focus lessons in response to student needs as they arise. In fact, it will be necessary to incorporate focus lessons on content-specific cognitive and management strategies so that students can then use and continue to select these strategies to help them become their own teacher.