

Beginning with the End in Mind



Students can hit any target that they know about and that holds still for them. "

Rick Stiggins

When golfers swing their golf clubs, they know where to aim – toward the flag marking the next hole. Pilots file flight plans before getting permission to leave the ground. Successful gardeners plan for a new season, knowing what they want their garden to look like. Life coaches ask us to follow a similar process when they suggest we begin with the end in mind. It seems obvious that reaching a destination is easier if you know where or what it is. That's the point Tyler (1949) was making over 50 years ago, when he said that the first question a teacher needs to answer is: What do I want my students to learn? Answering that question has been harder than we thought.

In North America, education standards refer to that which students are expected to learn (that by which they will be judged). In some parts of Canada, the term 'learning outcomes' is used to refer to a similar body of knowledge, skills and attitudes. Standards and learning outcomes provide both opportunity as well as challenge. They are a guide for teaching and student learning. When teachers and students know where they are going, they are more likely to achieve success. When teachers know what needs to be learned and what students already know, they can plan a variety of learning pathways for students. Furthermore, students can provide a variety of evidence of having met the standard or achieved the learning outcome. Standards pose a challenge when quality expectations are unclear, when students arrive

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in class with differing levels of expertise, or if test results are all that matter.

Challenges can become opportunities, with careful planning and thought.

When quality expectations are unclear

If we have the standard or outcome, but we don't understand the level of quality that is expected, then we won't know when our students have reached it. What is the opportunity here? Some jurisdictions are working to develop exemplars or samples to show what learning can look like over time. When we are able to access and use samples that show what the steps toward quality look like, the learning destination becomes clearer.

When students arrive in class with differing levels of expertise

Lists of standards or learning outcomes seem to assume that all students start in the same place, at the same time, and proceed to learn in the same way. This has never been true. Today, teachers find out what students already know, can do, and can articulate, and then they teach. The result is that teachers must learn more and more ways to teach to an ever-increasing range of student needs. One part of this challenge is having a comprehensive understanding of one's subject matter, in order to help students learn. The second challenge is learning how to teach small groups within the class rather than always teaching to the large group of students.

When test results are all that matter

Sometimes standards are expressed in a way that seems to assume the learning will be shown in a certain form. Or, in some cases, the only measure of success is an external examination. This is a problem, since the more we limit the *form* evidence (or proof of learning) will take, the more some students will be unable to show what they know. When external assessments are balanced by high quality classroom level assessment, students have the time and experiences needed to learn, as well as a variety of ways to show what they know.

Sometimes classrooms are places where the only person who knows what needs to be learned is the teacher. This is a mistake. If students don't know what they are to learn and what it can look like, they are handicapped and

dependent on the teacher to tell them what to do next. As a result, their success is at risk. The time has passed when it is acceptable for students to turn up in classrooms and try to do their best without knowing what they need to learn. Students need their learning destination clearly stated – then it can be their flag, their flight plan, or simply a vision of success. It is true that not all students need this. Some students seem to know intuitively what they need to learn; others don't. This is typically a problem for those who struggle academically in our classrooms.

Researchers reporting brain-based research (Langer 1997; Pinker 1997; Pert 1999; and Restak 2003) say that when we know what we're going to be doing, we mentally prepare ourselves and activate more of our brain by doing so. Once students know what they are supposed to be learning, they can self-monitor, make adjustments, and learn more. From the teacher's point of view, there are three steps to this process:

- 1. Describe what students need to learn using language that students and parents will understand.
- 2. Share the description with students and explain how it relates to success in life outside of school.
- 3. Use the description to guide instruction, assessment, and evaluation.

The focus of this chapter is on how to develop a clear description of the learning destination.

Describing What Needs to Be Learned

Teachers find that a description of what needs to be learned helps students learn more. While an educational system may define the learning in broad terms throughout its documents, teachers must translate and summarize the hundreds of statements into language that students and parents can understand.

Teachers develop descriptions by analyzing curriculum standards documents, grade-level expectations, descriptions of standards and expectations, and professional standards documents, such as NCTM Mathematics Standards. To this they add their personal reflections on their own professional experience.

For most people, writing descriptions of learning goals is harder than it looks. Teachers can start small by following three steps:

- 1. Choose one subject area or one unit of study for a focus.
- 2. Summarize the outcomes or goals in simple, clear language that corresponds to how the learning needs to be reported
- 3. Read and review the curriculum expectations for your subject and grade level, checking back to the documents to see if there is anything you missed.

Profile of a 7th grade Math Student

- ·has mostered basic operations
- ·produces quality work
- -can communicate mathematical ideas effectively
- is able to solve problems
- can represent mathematical situations in multiple ways
- ·gives logical arguments defending their answers
- ·makes connections within and outside of mathematics
- · Knows when to use appropriate tools in math
- · is able to design experiments & surveys to collect, organize and analyze data

French 7

Learning Outcomes

- Owillingly participates in all activities (esp. oral)
- **Q**willingly takes risks
- 3 positive attitude towards a 2nd language, culture
- Tshows practice of vocabulary and structures
- (3) works cooperatively with partner +/or small groups
- 6 shows independence in learning ie/uses resources ① can demonstrate learning visually, orally, and in writing
- ® makes connections outside of classroom + subject area

Hossible Evidence

- (1) checklist (abservation)
- 2 volunteers consistently (instead of being asked)
- O by observation
- (1) tests, quizzes, daily work
- (5) observation - product production - group evaluation
- To projects, assignments, presentations
- (B) observations & projects

The accompanying example shows one group's first draft of describing the learning for Grade 7 French. The left column is not a list of the actual learning outcomes from the curriculum document, but instead the teachers' initial summary. Even at this early stage, these teachers found it useful to think ahead and consider possible sources of evidence.

Using the Descriptions

Teachers have many diverse ways of designing their descriptions to make them easy to use during the year, and to align them with school and district reporting requirements. Descriptions vary from place to place because the context differs, and each jurisdiction has its own unique way to use terms. Only you know how to communicate best to colleagues, students, and parents in your school community.

Here are some examples of ways that teachers develop and use descriptions of learning:

Mrs. H has to prepare a narrative report card for her early primary class at the end of each term. As part of her assessment and evaluation process, she has reviewed all the documents related to reading and summarized them on an 11 by 17 inch sheet. At the start of the term, she shows this sheet to students and explains what it is. She also posts it for parents to see. This summary of what needs to be learned assists her in tracking her students' learning. Later, it is a valuable resource for the student-parent-teacher conference held at the end of the term and for the narrative report card she prepares for each student.

Mr. R teaches Grade 4. He has to report using a report card that includes a developmental continuum. He makes a copy of the report card and uses the developmental continuum as a summary guide of the elements that he needs to teach and assess. He shares this with students and parents so they all know what he is assessing.

Mr. M uses a three-way reporting process in his Grade 6 class. In this process, students do self-reports, the teacher does a report, and the parents review the evidence and are also invited to report. In order that students (and parents) are prepared to be a part of the reporting process, Mr. M has a description of what students will be learning in each mathematics strand. He posts the description at the beginning of each unit. Students also collect evidence related to each part of the description so they will be ready to show their parents the evidence during their conference. When Mr. M's class got laptops for every student, the same process continued to work, with students collecting and presenting their information and accompanying reflections in digital form.

GRADE 9 ENGLISH

DESTINATION

Students will, in a consistent, self-directed and independent manner.

- Produce quality pieces of writing
- Demonstrate understanding of the elements of narrative
- Develop English language skills
- Effectively communicate ideas and share products with others
- Effectively collaborate with peers in the learning process
 Collect evidence of learning in a portfolio
- Assess the work of self and others in a thoughtful and productive manner

SAMPLES/MODELS

- past student writing samples
- sample videotape of past student oral presentations
- past student samples of vocabulary notebooks
- in-class modeling of plot diagrams
- samples of past student reading responses
- samples of past student journals

EVIDENCE

- writing pieces: autobiographical short stories
- · reading responses
- · plot diagrams
- video/audio tape of oral storytelling
- · illustrations
- · journal entries
- self and peer assessments
- · large/small group participation
- · working independently
- · presenting work to others

EVALUATION

- produces quality written
- assignments that:
 meet set criteria
- show multiple drafts that are edited and revised for content, spelling, grammar and punctuation (product)
- produces reading assignments that
- show evidence of understanding the reading (product)
- consistently reflects upon work and learning in a thoughtful and directed manner (conversation)
- works cooperatively and independently in producing and presenting work (observation)

Ms. G teaches Grade 9 Engli Although she agrees w research showing that lett grades may get in the way learning (see page 22), sh is still required to give lette grades, and so she does. She tries to 'compensate for the compulsory' (see page 142) by being clear with students about what is expected and what success looks like. She drafts a description of what success looks like in Grade 9 English. This description is a series of statements describing what students are to know and be able to do. Students can use the outline to guide their own. learning process.

Mr. D teaches a university-level course. He wants students to value the learning so he shows them how he will evaluate it. He provides a detailed description of what students need to know, do and articulate, along with a list of possible evidence of learning. Students are told to collect all possible evidence as the course proceeds so they can submit what is needed to show proof of learning and quality.

The Development Cycle

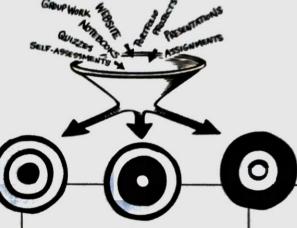
Teachers develop descriptions that take into account what needs to be learned and how the learning needs to be reported. Developing and using descriptions is part of the assessment-learning cycle. When students receive explanations of what they need to learn and their questions are answered, they gain a better understanding of what counts. When the descriptions of what needs to be learned are accompanied by samples that show what success looks like, students begin to be informed enough to make choices that help their learning. Then, when students know what the evidence can look like.

they become more able to show us what they know. As we use detailed descriptions, we find ways to express them more clearly – an ongoing process with each new group of students, parents and colleagues.



Mathematics

What is the Trend? What is the Pattern?



Student consistently and independently...

- Understands and applies mathematical concepts being studied (evidence includes work samples, discussions, conferences, tests, quizzes, class work and demonstrations)
- Articulates clear understanding of mathematical concepts and gives everyday examples of use (evidence includes performance tasks, self-assessments, reflections, journal entries and teacher observations)
- Works effectively by self and with others (see criteria and rubrics used)

Common assessment scores: 4

All tests and quizzes: 93% - 100%

Student

- Understands and usually applies mathematical concepts being studied (evidence includes work samples, discussions, conferences, tests, quizzes, class work and demonstrations)
- Needs support to articulate understanding of mathematical concepts and give everyday examples of use (evidence includes performance tasks, self-assessments, reflections, journal entries and teacher observations)
- Works effectively by self and with others most of the time (see criteria and rubrics used)

Common assessment scores: 3 or 4

All tests and quizzes: 85% - 92%

Student...

- Shows a growing understanding of mathematical concepts being studied and applies them with support (evidence includes work samples, discussions, conferences, tests, quizzes, class work and demonstrations)
- Articulates a growing understanding of mathematical concepts and is able to occasionally give everyday examples of use (evidence includes performance tasks, self-assessments, reflections, journal entries and teacher observations)
- Works effectively by self and with others with support (see criteria and rubrics used)

Common assessment scores: 2 or 3

All tests and guizzes: 72% - 84%

If you don't know where you are going, every road will get you nowhere."

Henry Kissinger

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Being a Leader

Indicators of Classroom Application

When teachers seek to ensure that all students learn, it isn't good enough to judge success by comparing to a standard that is based on high achievers' work Success is now defined by how well *all* students are doing, not just those who typically do well. As a lead learner, look for the following indicators:

- Descriptions of success learning destinations for each course of studyare posted in the classroom or handed out to students and parents. These descriptions reflect the standards or learning outcomes and express them in simple terms that everyone can understand.
- Students are able to answer the question 'What do you need to know
 to be successful?' by articulating the important ideas (or referring to
 a handout which does so) and describing how this knowledge or set of
 skills will be useful outside of school.
- Teachers are able to summarize the learning destination and explicitly describe how the activity, assignment, or range of activities and assignments help all students learn. Furthermore, teachers can show plans for how student evidence or proof of learning will account for all the standards or outcomes.
- In response to the question 'What does quality look like?' students will refer to models, exemplars, or criteria.

Supporting Classroom Teachers

In order to support the work of teachers and the learning of students, lead learners provide professional learning time and supportive structures so that everyone is engaged in work that makes a difference. Assessment for learning isn't just for students in classrooms – it's for all of us. There are three parts to 'beginning with the end in mind':

1. Unpack all the standards or learning outcomes.

It isn't enough to print off the latest list. Teachers need time to deconstruct the standards or learning outcomes and find ways to understand them more fully before being able to use them as a guide. Knowing the destination isn't enough preparation for a journey – you also need maps to guide you along the way. When teachers unpack the learning destination, they come to more fully understand how they can help students achieve the learning. After all, what matters most is not what teachers teach; it is what students learn.

Work across departments or grade levels to revisit syllabi, curriculum maps, and the learning pathways.

This process helps ensure that teachers are working towards the 'end,' rather than engaging students in an irrelevant collection of activities, assignments, assessment tasks, and tests. By collaborating with our colleagues in creating a definition of quality and illustrating it with selected samples of student work, we communicate a common vision to students and parents. This helps everyone work toward the same goals.

3. Analyze student work together.

Looking at student work allows us to come to an understanding of what level of quality is expected, and to recognize possible pathways students might take to achieve success. Analyzing student work also informs our professional judgment and helps us become clearer and more consistent about what we value. As a result, teachers can be more specific and descriptive in their formative assessment, providing learners with more helpful feedback.

Being a Lead Learner

As leaders, we also need to 'walk the talk.' This means modeling the very same actions we are asking of classroom teachers in our work as lead teacher. Here are some questions to keep ourselves on track to assessment for everyone's learning:

 How do I articulate the district and school vision and mission in language everyone will understand?