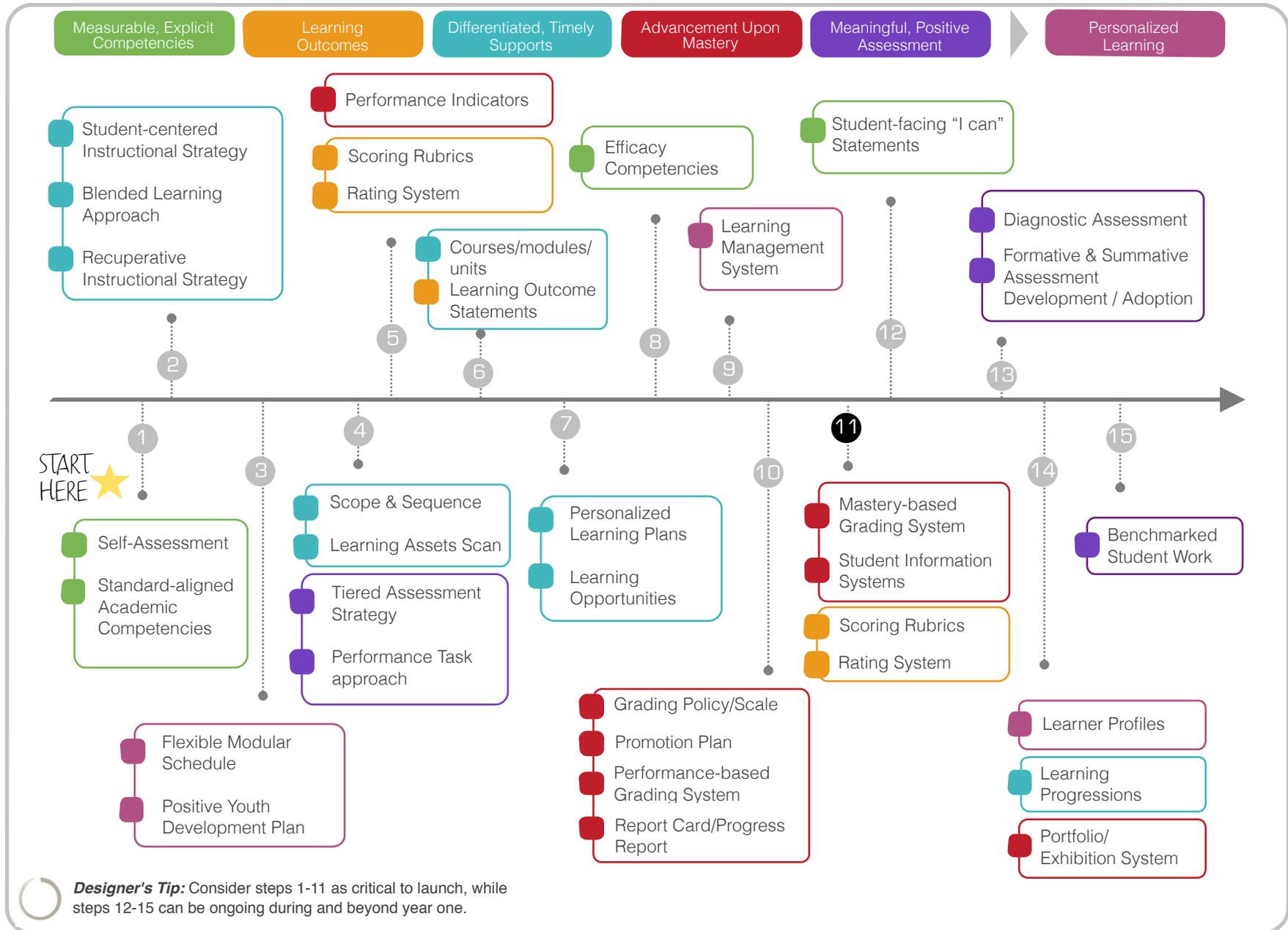


Making Mastery Accessible: Features of a Mastery Framework – Infographic



Making Mastery Accessible: Roadmap for Implementing Mastery Learning

Rationale

1 Why start with competencies?

The process of establishing academic competencies challenges you to articulate your vision for a graduate. Identifying these “anchor” learning targets is the first step toward enacting your vision, as it lays the foundation for your mastery learning system.

2 Next step: Instructional Vision & Strategy

What will learning actually look like and feel like in the classroom? What role will technology play? What is your approach to optimizing learning and growth for students with significant gaps? If competencies are the “why,” your instructional strategy is the critical “how.” At this stage, it is critically important to get down to the gritty details of instructional design and delivery, as it will inform decision-making as you move forward from here.

3 Scheduling, already?

Indeed. And not just any type of schedule — a type of schedule that is flexible enough to adjust to the needs of your students, and that carefully balances opportunities for self-paced learning with guaranteed time and space for students to engage in collaborative learning. This is one element of your mastery learning system that will absolutely make or break whether or not you truly achieve personalization in your school.

Designer's Tips

- **Try not to get hung up on creating the perfect set of competencies** — your competencies will inevitably evolve as you go. The goal is to get something “lean” in place to help you move forward with the body of work ahead.
- **Draw from models in the field as you build, and, with help, aim to develop a workable set of competencies within two or three weeks.** This timeframe assumes you have guidance from an expert in the field who can help shepherd you through the process.
- **Make evidence-based decisions about your instructional strategy, blended learning approach, and recuperative learning strategy.** This may seem obvious, but you’ll want to build upon models and strategies that have had success elsewhere — preferably in contexts similar to yours. What high-performing schools in the field that are serving similar populations have inspired your thinking and shown compelling results? How have learning sciences shaped your understanding of how people learn and what this means for your model?
- **The only way we've seen this work is to make the big shift from organizing students around traditional content-based classes to organizing students around a specific work product.** This requires a more modular and dynamic approach to scheduling where time allocations can be adjusted based on the scope of the performance task, whether three days or three weeks.
- **Just-in-time instruction is key to a schedule that supports personalization, so spend the needed time up front to think through the logistics of implementation.** How will you organize your personnel, their time and their roles? What systems need to be in place to support data-driven decision-making on a daily basis?

Rationale

4

On to the “what” of learning: Scope & Sequence, Learning Assets Scan

Now that a solid framework is in place — competencies, instructional strategy, and schedule — it is time to begin determining what your kids are going to learn, beginning with a Scope & Sequence (S&S): the sequence of content your students will engage in mastering.

The purpose of conducting the Learning Assets Scan at this stage is to familiarize your team with possible curricula options that you may consider purchasing now or down the road.

4

On to the “what” of learning: Tiered Assessment Strategy and approach to Performance Tasks

A Tiered Assessment Strategy defines your school’s assessment model at three levels: the classroom level, the department or team level (this depends on the design of your instructional model and how you organize your staff around it), and the school level. Minimally, your strategy will define the types, purposes, and frequency of different assessments at each level, and set clear expectations for your team around supporting the assessment model.

Articulating your approach to Performance Tasks will clarify for your team specific expectations around performance-based assessments. For example, will you require that all performance-based assessments be project-based, or will they be smaller in scope depending on the learning objectives? What criteria will be used during the sourcing or creation process to ensure the type of performance assessment? Clarifying your approach now will help ensure your team is ready and equipped to begin sourcing or designing tasks that are rigorous, engaging, and aligned.

Designer’s Tips

- **Build your S&S around smaller units of learning, such as a module, unit, or mastery challenge rather than traditional courses.** This structure will help you shift toward more personalized, asynchronous learning pathways for students.
- **Engage an expert to help you with the Learning Asset Scan and report back on latest developments in the field.** This is a sensible place to bring in support to help save your team much-needed time and get you to decision points quickly.
- **Consider one of two approaches to securing curricula: buy and hack, or build and supplement.** If you decide to build, remember that there the time investment is substantial and there are opportunity costs — something else in year one may need to be sacrificed. If you do buy, do hack! For example, your team may need to “remix” learning assets, build in additional scaffolds, or reformat learning assets to make sure they are student-facing and compatible with your LMS of choice.
- **Be entrepreneurial in your approach, regardless of whether you build or buy.** Take Bronx Arena High School’s “Curriculum Development Teams” (CDTs): interdisciplinary teams work together to design a module with mastery challenges including team members who are outside of the discipline and will not be teaching the module so they can provide critical feedback and an outside perspective. This strategy has become one of their strongest professional development vehicles: there’s a purpose and a product, and it’s public work, shared across the school. Consider creating a process and structure in place to support educators in high-quality curriculum design.
- **At this stage, you don’t yet need to focus on sourcing or creating performance tasks, but it is time to define your approach and communicate this to your team.** This will help provide clear direction for your team in the case that they are eager to get started with instructional planning.

Rationale

5 Defining the measure: Performance Indicators
Performance indicators — also called “performance level descriptors” — help us answer the question: What does mastery/proficiency look like at a particular grade level or performance level? Performance indicators bring transparency to learning for both educators and students, and also help calibrate teachers by providing a clear benchmark for each performance level. It is valuable to bring definition to these now because they establish the target for mastery, and you’ll want your team to make instructional and assessment design decisions based on these targets.

5 Scoring Rubrics & Rating System
Once your performance indicators are in place, you have the foundation for your scoring rubrics and rating system. Note that there are two key approaches to rubric design:

Option #1: your performance indicators *become* the exact language of your scoring rubric, and the rating system corresponds to your performance levels (see Philadelphia as an example).

Option #2: you will build rating language (e.g. emerging, developing, or proficient) that describes a range of performance levels *for each performance indicator* (see PARCC as an example).

6 It’s game time: content/modules/units, Learning Outcome Statements
All the critical precursors are now in place. Your team can begin curating content and creating or adapting units of study. The development of learning outcome statements should be embedded in the unit/module design process (See *Guide to Defining Learning Outcomes*). Note the Designer’s Tip in Step 4 about whether to buy or build. Note also that this work doesn’t live only in Step 6, but of course will be ongoing for months and years to come.

Designer’s Tips

- **Just like competencies, this is another key place where you can build on, or adopt, work that has already been done.** There is a growing body of exemplars to learn from and draw from.
- **If you fall into camp #1, go ahead and knock out your rubrics now.** In this case, building your scoring rubrics is simply a matter of dropping your performance indicators into a rubric template organized around your competencies, and deciding on your rating system (numerical? descriptive?). You won’t want to reinvent this wheel — check out exemplars from the field and source/adapt everything you can.
- **If you fall into camp #2, hold off on rubric development for now (until Step 11) if you plan to do this internally.** Rubric development is a major undertaking, requiring a significant time investment, and arguably a unique skill set. Unless you plan to bring in an expert to build your rubrics or adapt existing rubrics, allow your performance indicators to be your guide for now, and keep pushing forward with other critical elements of your Mastery Learning System.
- **If the long game is personalized, asynchronous learning, be sure to guide your team early on in standardizing their approach to building units/modules of study.** This is not only about quality control, it’s about systematically building a rich and well-organized bank of learning assets and experiences that eventually will be made available “just-in-time” for students who are independent and self-paced learners. Consider beginning with a simple set of design templates, along with an agreed-upon digital location and folder system for organizing materials, shared by your team.

Rationale

7 PLPs, Anytime/Anywhere Learning Opportunities

Personalized Learning Plans are the plans that students will create and use to track their progress. At this stage, it is helpful to come up with a basic prototype that can be tested in year one without requiring significant bandwidth from your teachers, or advanced technology skills on the part of your students.

Anytime/Anywhere Learning Opportunities live beyond the school walls and daily bell schedule. They may include online learning opportunities, real-world experiences such as internships, or areas of study defined and pursued by the learner.

8 Establishing Efficacy Competencies

College and career readiness research takes a firm stance here: efficacy competencies are equally as important to students' post-secondary success as academic competencies. Now is the time to define them. Efficacy competencies embody the key skill sets that are often described as "21st century skills" such as critical thinking, problem solving, communication, collaboration, and creativity. They also incorporate socio-emotional literacy; skill sets related to navigating new environments; and the skill sets that enable students to successfully make the transition to college and careers (Sturgis, 2010).

Designer's Tips

- **Start simple, folks — even a simple spreadsheet template will do — and add layers of complexity as you go.** Consider creating school-wide structures and routines to support the special role teacher-advisors can play in guiding students as they build their PLPs, such as dedicated time, clear protocols, and materials.
- **Leverage the PLP as a way to begin teaching key skills around goal-setting, and work and time management.** If you use a Google Sheet for the PLP, consider gradually layering in tools for students to use, such as Google Keep for to-do lists and Google Calendar for managing time, deadlines, and schedules.
- **Start the year with at least one outlet for Anytime/Anywhere Learning Opportunities, and make sure demonstrations of learning count even if they live outside the classroom.** This will give your students the opportunity to experience one of the really exciting ways that mastery-based learning breaks away from traditional "brick-and-mortar" learning and honors students' lives, efforts, and learning outside of school.
- **Once again, this is a key place to leverage experts and build on work already done in the field.** There are a number of great exemplar sets of efficacy competencies to draw from and adapt. See our Competency Adoption Guide for a step-by-step process.
- **Ensure your choices for efficacy competencies are not only research-based, but also aligned to your school's mission, vision, or theme.** Efficacy competencies are a great place to showcase what makes the focus of your particular school unique.
- **During the design phase, take time to think about how these competencies will come to life in your school.** Will they have the same weight as academic competencies? Will students be scored using a rating system? How will they be embedded to ensure students internalize their value?

Rationale

9 Learning Management System

The LMS is the technology product that manages course content and assessment tools, allowing content to be accessed, uploaded, modified, and then delivered to students as student-facing learning experiences. Selecting your LMS now means that your team can begin organizing its learning assets and units/modules in the system through which they will be delivered to students.

10 Grading Policy, Promotion Plan, Performance-Based Grading System, Report Card/Progress Report

This critical step includes building the policies and guidelines that codify your school's grading and promotion policy, the scales that will be used for assessment, the progress and report card content and form, and your school's reporting practices (frequency of reporting, stakeholders, specific data to be reported).

11 Student Information System

Your Student Information System manages all student data. If you're in a large school district or school network, this may already be decided for you. The challenge may be in working within certain constraints created by a SIS that was built for traditional school models.

Designer's Tips

- **Start by defining your priorities for an LMS.** Simplicity? Cost? Flexibility? An embedded formative assessment platform? There is no one perfect tool, so it is best to identify your highest-priority needs for year one before you begin exploring your options.
- **The ed tech landscape is changing quickly; consider engaging an expert to conduct a scan and share the latest tools available, along with an analysis of findings based on your priorities.** Setting up demos and seeing every possible product is likely not the best use of your time. If you can have someone help you narrow down your options to two or three before you begin investing lots of time in getting to know each product, this will greatly expedite the process.
- **Consider sourcing a few exemplar school policy documents or handbooks, and use them as a template that you can work from and build upon.** This will help you anticipate some of the details that need to be worked through while building a comprehensive grading and promotion policy (e.g. how will we handle grades for mid-year transfers?), and will definitely save you time.
- **Try to get in place even a simple draft version of a policy and reporting system by the start of the school year.** This will aid tremendously in building shared understanding among educators, students, and families for how the system works, and may also prevent confusion and even frustration during the year that may result from the lack of a clearly articulated process for understanding and handling grades, and reporting on progress. You'll want to get out in front of this one.
- **If you're part of a large district or school network with an existing SIS, reach out to someone in IT who can help you identify any possible issues and find work-arounds.** Be sure to ask early about compliance mandates as well (e.g. are you required to submit quarterly grades?). Finally, think about ways you can "push back" on the system, and build stakeholder understanding through specific requests for accommodations that are made with a strong rationale.

Rationale

11 Scoring Rubrics

If you've opted to build the rubrics described in "Option #2" of Step 5, it is now time to begin that work. Ideally, at least a working draft of scoring rubrics should be in place to support teachers and students in year one, bringing clarity to learning and performance expectations.

12 Student-facing "I can" Statements

It is time to "translate" your competencies or performance outcomes into student-facing language. Developing "I can" statements helps reinforce a user-centered approach to the design of your Mastery Learning System. "I can" statements can be pegged to specific performance levels, or to an overall description of mastery.

13 Diagnostic Assessment, Formative & Summative Assessment Development/Adoption

Selecting a set of diagnostic assessments — ideally for numeracy and literacy skills — will help you gather information on your learners' current skills, knowledge, and capacities.

Building on your progress in Step 4, this stage also involves beginning the work of developing and/or adopting both formative and summative assessments that will help you materialize your tiered assessment strategy.

Designer's Tips

- **Avoid building rubrics from scratch.** There are a number of quality open sources for scoring rubrics that have already been aligned to Common Core State Standards, Next Generation Science Standards, and other nationally valued standard sets.
- **Rubric development may not be the best task for your teachers,** although some might argue that your teaching team should lead this work. However, rubric-writing (and revising) requires a unique skill set and is very time-intensive. Avoid having your teachers lead this process, and instead build ownership by having them provide regular feedback to an external expert or guide who can manage the process and workload for you.
- **Once you've crafted your "I can" statements, consider formatting them in a simple, clean document that can be shared with students and families.** "I can" statements help build transparency and understanding — and they are something to celebrate! Take the extra step to drop them into a user-friendly document and/or feature them on large posters inside school hallways or classrooms.
- **Remember the human capital side of this equation, and consider how you will prioritize and support teacher skill-building in this area.** There are two key skill sets to consider: first, the selection and regular (ideally daily) use of aligned and appropriately challenging formative assessments to support data-gathering on student learning; and second, the analysis of that data and the strategic decision-making that follows to support high-impact next steps for both teachers and students. Having the bank of assessments to draw from is only one small part of this work.
- **Remember that in a mastery-based system, learning assets, including assessments, are available "just-in-time." Now is the time to start thinking about the infrastructure that will need to be put in place over time to make this a reality.** Where do these assets live? Do formative assessments "unlock" summative assessments? If so, how?

Rationale

14

Learner Profiles

Learner Profiles capture both qualitative and quantitative data about each student, and are an important component of a student's Personalized Learning Plan.

14

Learning Progressions

Learning Progressions represent the sequence of skill-oriented building blocks that students will master as part of the progression toward mastery of a larger curriculum goal. These are not essential to have in place in year one, but are important to keep in mind as something to build over time.

14

Portfolio/Exhibition System

Building a Portfolio/Exhibition System creates an opportunity to showcase the summative work students have completed while demonstrating proficiency/mastery.

15

Benchmarked Student Work

Over the course of year one, work with your team to gather samples of student performance tasks and peg the work to specific performance level indicators. This will provide teachers and students with a clear reference point for what work should look like at a particular grade level or performance level.

Designer's Tips

- **Keep it simple in year one, but recognize that a tech-based solution may have its benefits.** Take Philadelphia's Google-based PLP pilot as an example, which integrates Google Sheets, Google Forms, and some back-end scripting. The result was an efficient way of capturing individual and school-wide data.
- **Begin this development work in a focused way; consider starting with one subject area, or even one unit of study.** Having a small-scale exemplar that you can share with your teaching team will help make expectations clear and provide a small, measurable "unit" for goal-setting as a collective. Also consider utilizing a standard template or format for building/defining learning progressions.
- **Let your language lay the foundation for future years: speak in terms of student "portfolios of work" early on, even if the infrastructure isn't quite there.** If your aspiration is to build out a model over time where the "portfolio" is the primary structure for organizing students demonstrations of mastery, consider adopting this language in year one across your team. The term "portfolio" carries powerful and positive meaning in other fields, and may help build student understanding and engagement around performance-based assessments that involve authentic audiences.
- **Leverage teachers who are already using a portfolio or exhibition system — give them the space and support to pilot a model that might be rolled out school-wide in coming years.** It's likely that at least one of your teachers has already adopted the idea of a student work portfolio, or of exhibiting student work in authentic settings. Celebrate this, study it, and invite these teachers to play a lead role in building the system for future years.
- **Build a structure to support this work all year long - such as coupling it with a calibration protocol.** For example, have teachers submit several samples of student work on a monthly basis. Have teachers score the work together as a calibration exercise on a monthly or cyclical basis, all while building your bank of benchmarked work.