

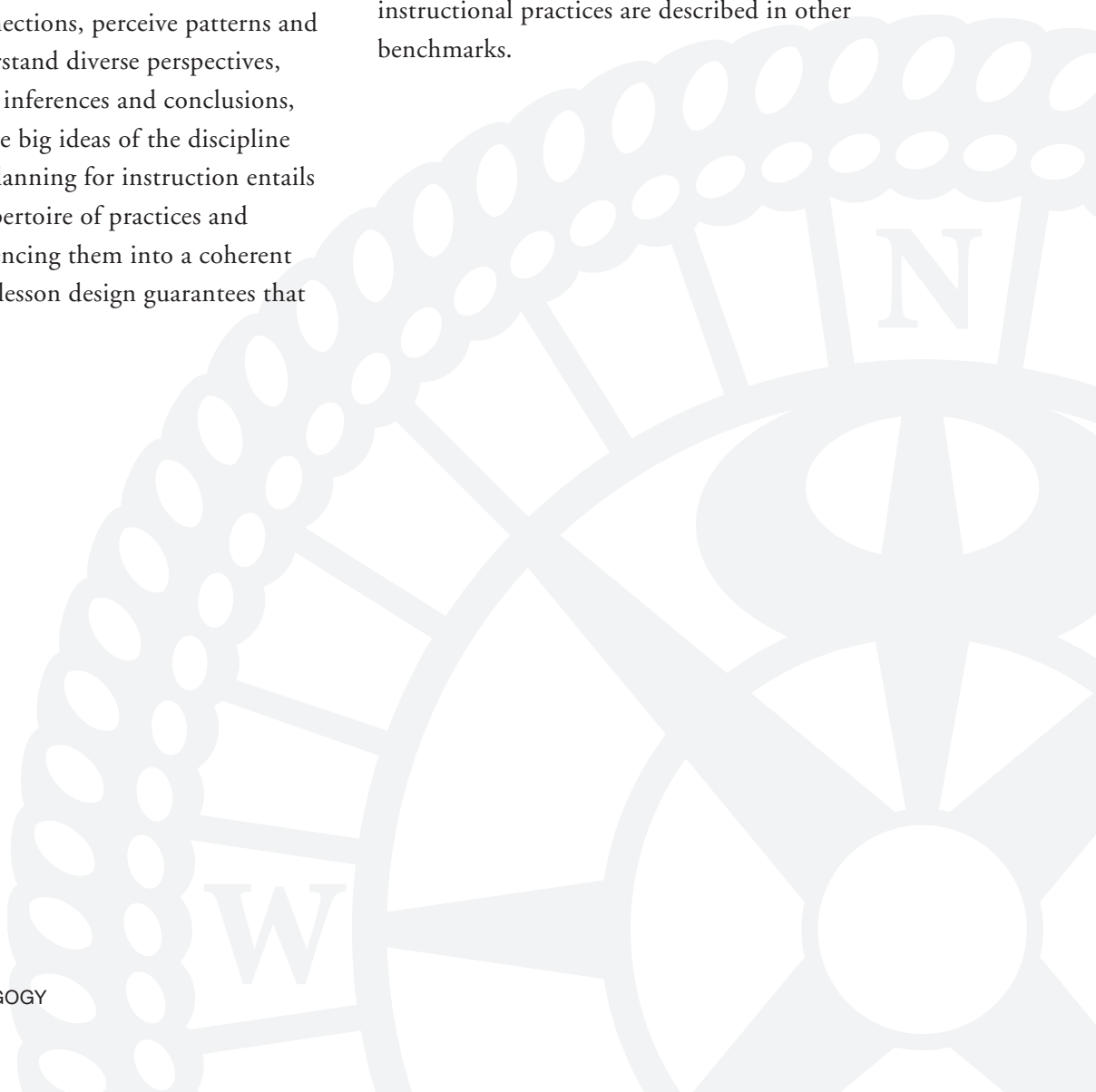
Active Pedagogy: Using Effective Instructional Practices Schoolwide

Overview

Teaching and learning are active and engaging in Expeditionary Learning classrooms. Effective instructional practices promote equity and high expectations: they make the content of expeditions come alive, ensure that all students think and participate, and allow the teacher to know all students and their thinking well. Good practices foster character by inspiring each student to develop craftsmanship, perseverance, collaborative skills, and responsibility for learning. They promote critical thinking by asking that students make connections, perceive patterns and relationships, understand diverse perspectives, supply evidence for inferences and conclusions, and generalize to the big ideas of the discipline studied. Effective planning for instruction entails choosing from a repertoire of practices and protocols and sequencing them into a coherent lesson. Thoughtful lesson design guarantees that

lessons are paced well, all students engage in productive work throughout the class period, teachers have time to confer with students, classroom management is smooth, and teachers are aware of each student's level of understanding and participation. Knowledge of each student's level of understanding and participation leads teachers to differentiate instruction.

These categories of instructional practice may be used in all subject areas; more discipline-specific instructional practices are described in other benchmarks.



BENCHMARK 1:

USING EFFECTIVE INSTRUCTIONAL PRACTICES SCHOOLWIDE

A. Lesson Design

1. Instructional practices are selected and sequenced strategically within and across lessons.
2. Teachers sometimes start a lesson or an investigation with a complex or provocative problem and build skills, vocabulary, and concepts on a “need to know” basis.
3. Teachers sometimes start a lesson or an investigation with an experience, and invite students to make sense of it.
4. Teachers activate and build upon students’ prior knowledge.
5. Students use manipulatives as tools for thinking and representing.
6. Each lesson incorporates strategies to build curiosity and has a sense of urgency and purpose.
7. Every student has a role and/or a responsibility for producing something that shows his or her thinking.
8. During independent work times, teachers actively engage and guide students (e.g., confer with students, pull small invitational groups, etc.).
9. Teachers structure lessons so that teachers talk less and students talk more; the students do the thinking and the work.

B. Practices

Teachers use one or more practices from the following categories on a daily basis; these practices describe teaching at all grade levels.

1. Protocols

- a. Teachers use protocols (e.g., Socratic seminars, learning logs, and jigsaws) to ensure that all students think critically and participate fully.
- b. Teachers use protocols to look at student work (e.g., Collaborative Assessment Conference).
- c. Teachers use protocols to facilitate classroom meetings and crews, and to model and encourage behavior that allows for productive individual and group work.

2. Workshops

- a. Teachers use the workshop format to model or demonstrate a concept, skill or strategy; require students to practice and apply what was modeled; and discuss and debrief what has been learned.

3. Mini-lessons

- a. Sometimes teachers introduce and explicitly teach concepts, skills, and strategies in a mini-lesson format.
- b. Teachers often develop mini-lessons in response to student work and misconceptions.
- c. Mini-lessons are taught to the whole class or small groups depending on student needs.

4. Modeling

- a. Teachers use practices such as demonstrations, role-plays, and fishbowls to set criteria and model expectations for high quality group process, products, writing, reading, and problem-solving.
- b. Teachers use practices such as think-alouds to model comprehension strategies and skills.

5. Representing Thinking

- a. Teachers use anchor charts and other forms of documentation to synthesize and make public student understanding.
- b. Students represent their thinking using formats such as graphic organizers, recording forms, journals, quick-writes, and summaries of their learning.

6. Questioning and Following Student Thinking

- a. Teachers ask open-ended questions and pursue student thinking by asking follow-up questions.
- b. Teachers regularly confer with students individually and in small groups to monitor each student’s level of understanding, to identify classwide issues, and to differentiate instruction.

7. Using Exemplars And Models

- a. Teachers use exemplars and models to help students understand quality, format, and group work.
- b. Teachers use a range of exemplars and models to generate criteria and to construct rubrics.

8. Multiple Drafts, Revision, and Critique

- a. Students produce multiple drafts for all products and assess each draft against generated criteria and rubrics to improve successive drafts.
- b. Teachers develop focused questions to guide revision.
- c. Students use critique protocols to receive and provide feedback and to revise their work.

9. Reflecting and Debriefing

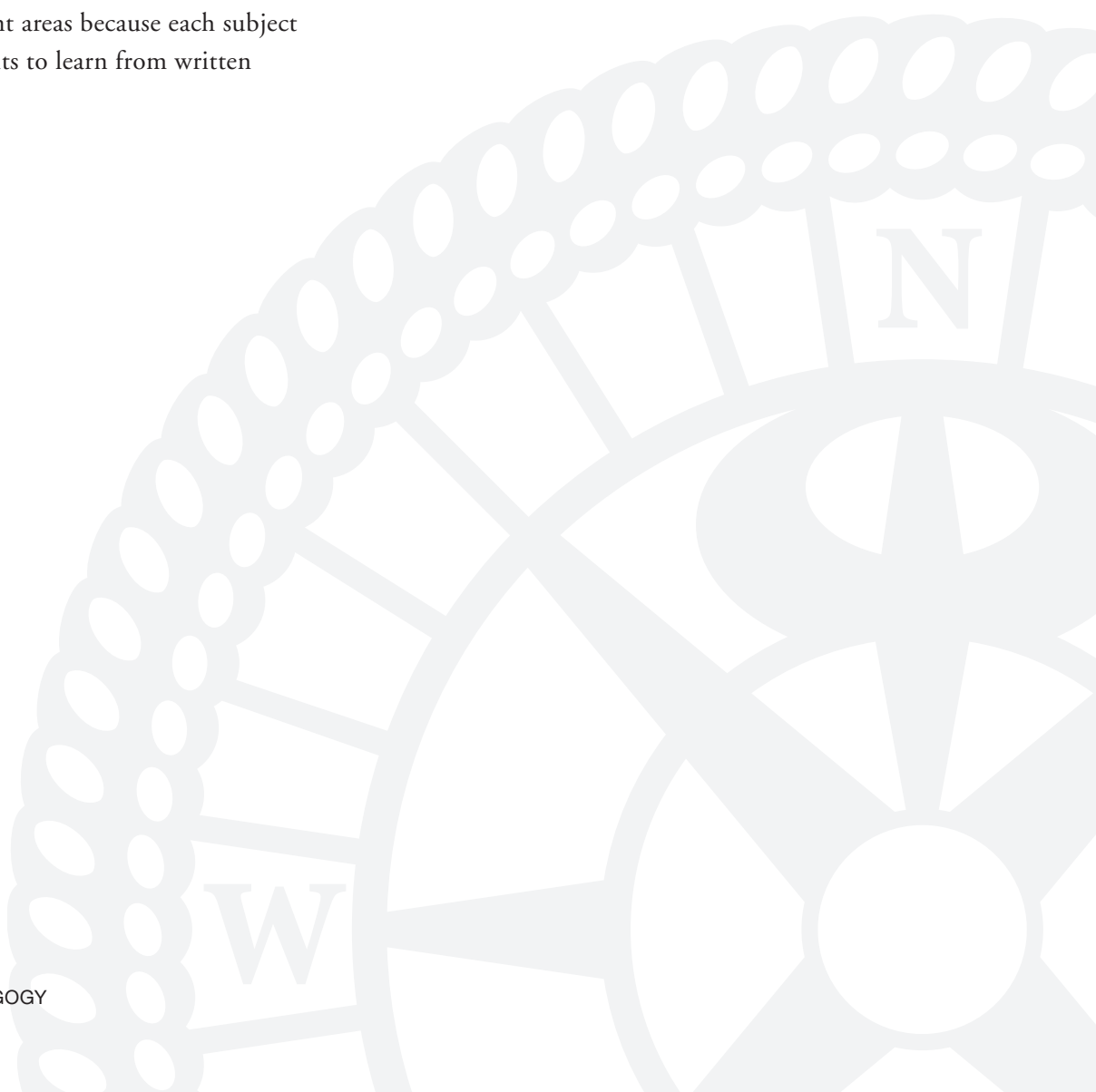
- a. Teachers and students reflect on and debrief lessons and experiences to improve retention of information, generalization, and transfer of learning.
- b. Teachers help students use reflection and debriefing to set goals for future learning.

Active Pedagogy: Teaching Reading K-12 Across the Disciplines

Overview

Reading is a complex process that includes phonemic awareness, phonics, fluency, vocabulary development, and an array of comprehension strategies. In Expeditionary Learning schools, comprehension strategies are taught from kindergarten through high school to convey the idea that reading is all about making meaning. The excitement of learning expeditions motivates students to read; in turn, the explicit teaching of reading comprehension deepens students' understanding of content. Reading is taught across all the content areas because each subject area requires students to learn from written

materials and requires different kinds of text (e.g., science articles, primary sources in history, word problems in math). Trade books, primary sources, and discipline-related articles are used along with or instead of textbooks. Primary teachers in Expeditionary Learning schools teach students problem-solving strategies for fluent decoding and help students build solid theories of how letter-sound relationships work.



BENCHMARK 2:

TEACHING READING K-12 ACROSS THE DISCIPLINES

A. Understanding and Teaching the Reading Process

1. Teachers understand how students develop phonemic awareness, decoding skills, fluency, and comprehension so they can teach those skills and concepts explicitly.
2. Teachers are metacognitive about their own reading and understand how they use comprehension strategies to make sense of what they read.
3. Teachers use a common language to teach comprehension strategies.
4. Teachers model the use of comprehension strategies, the enjoyment of reading, and reading for multiple purposes.
5. Teachers know their students as readers and show them how to choose books.

B. Integrating Reading into Learning Expeditions

1. Teachers integrate reading into learning expeditions to teach content and to develop literacy skills.
2. An anchor text or texts are chosen for read-alouds to help teach expedition content.
3. Readers' workshops are used to teach decoding, comprehension strategies, learning expedition content, and to scaffold expedition products.
4. Literature circle texts often relate to the expedition theme, illuminate guiding questions, and build background knowledge.
5. Socratic seminars and other protocols for structured discussions are used for expedition-related articles and texts.
6. Texts selected for learning expeditions include a variety of genres and primary sources.
7. Issues of ethnicity, class, gender, and multiple perspectives are considered in selecting texts.

C. Creating a Culture of Literacy

1. Students read every day and discuss and write about what they read.
2. Students use the common language of comprehension strategies to discuss their reading.
3. Students enjoy reading, know how to choose texts, and read difficult texts.
4. Classrooms contain libraries with an assortment of resources, including texts related to expeditions, student-produced books, primary sources, and a range of media, genres, and levels.
5. Classrooms display evidence of student learning about literacy (e.g., anchor charts).
6. Reading is taught K-12 in all content areas.

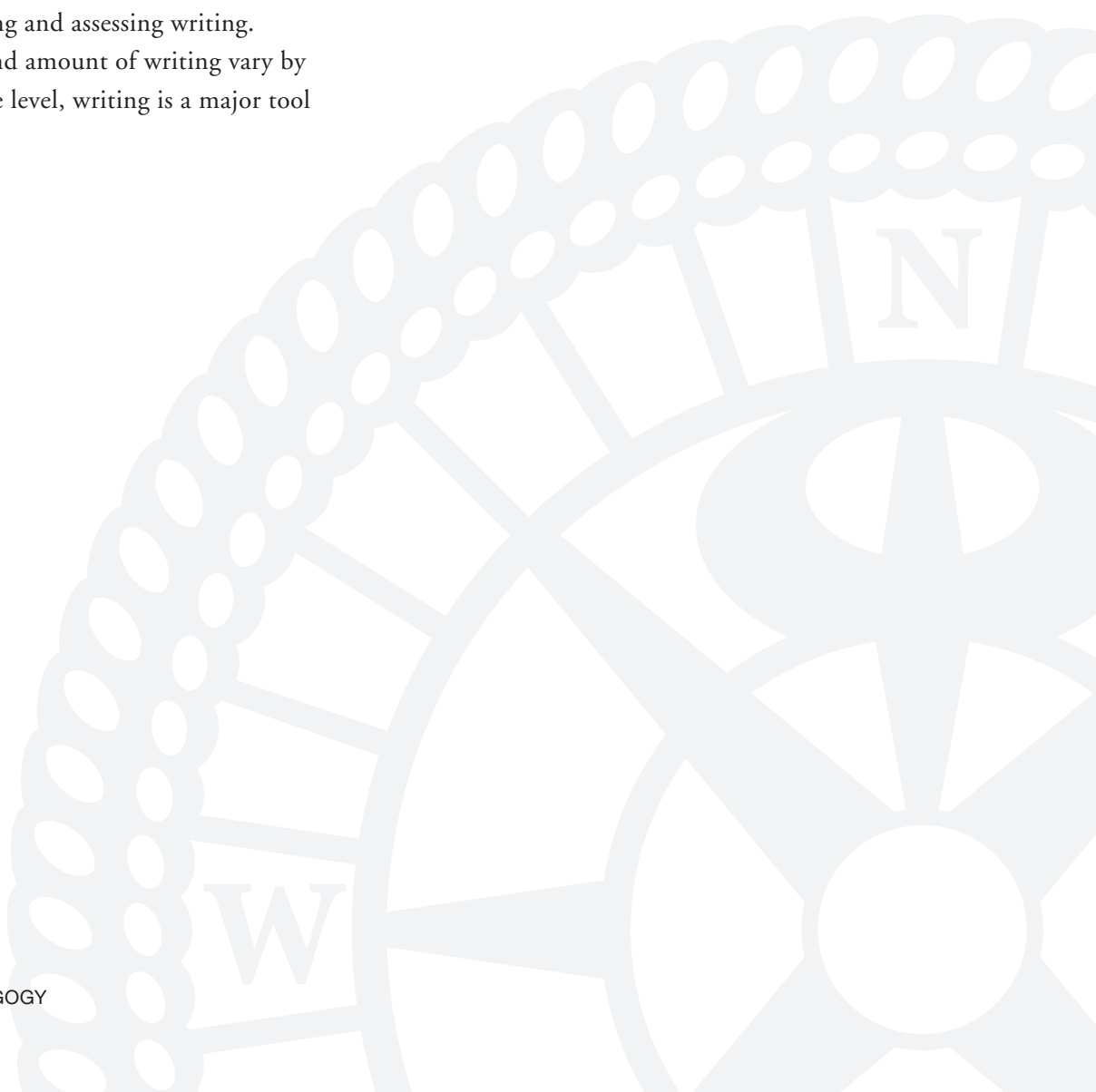
D. Assessing Reading

1. Students are metacognitive about their reading.
2. Recording forms and reader-response journal entries document growth over time.
3. Teachers confer with students regularly.
4. All teachers keep records of students' reading progress (e.g., running records, profiles).
5. Standardized and performance-based test data are used to identify reading problems and inform instruction.

Active Pedagogy: Teaching Writing K-12 Across the Disciplines

Overview

Students in Expeditionary Learning schools write for various purposes and audiences and across all areas of the curriculum. Students do their best writing when they care about the topic, purpose, and audience. Compelling topics, in-depth investigations, and written projects and products motivate students and require them to represent their understanding of learning expedition content and issues. Teachers develop and teach a common language for the writing process and the components of writing and use consistent practices for teaching and assessing writing. While the nature and amount of writing vary by discipline and grade level, writing is a major tool in all content areas.



BENCHMARK 3:

TEACHING WRITING K-12 ACROSS THE DISCIPLINES

A. Using the Writing Process

1. Teachers teach the steps of the writing process: prewriting, drafting, revising (for ideas, organization, and style), editing (for conventions), and making the work public.
2. Students understand, use, and articulate the steps of the writing process.

B. Explicitly Teaching Writing Components and Types of Writing

1. Teachers have a common understanding and language for teaching the components of writing (i.e. ideas, organization, style, and conventions).
2. Teachers explicitly teach writing through mini-lessons, writers' workshops, models, and critique sessions.
3. Teachers use their own writing to model the writing and revision process.
4. Anchor charts document student understanding of the elements of good writing.

C. Writing for Audience and Purpose in All Content Areas

1. Writing is used to promote understanding and reflection in all content areas, fieldwork, and service.
2. Students write for authentic audiences within and beyond the school community.

D. Teaching and Designing Formats and Products

1. Learning expeditions include written projects and products.
2. Exemplary models of text are used to teach learning expedition content, to show how a genre or format works, and to generate criteria for products.
3. Types of writing and formats for learning expedition products are chosen for variety and purpose and to ensure that students become familiar with a range of standard formats.
4. Writers' workshops are used to scaffold major writing projects.

E. Critiquing and Assessing Writing

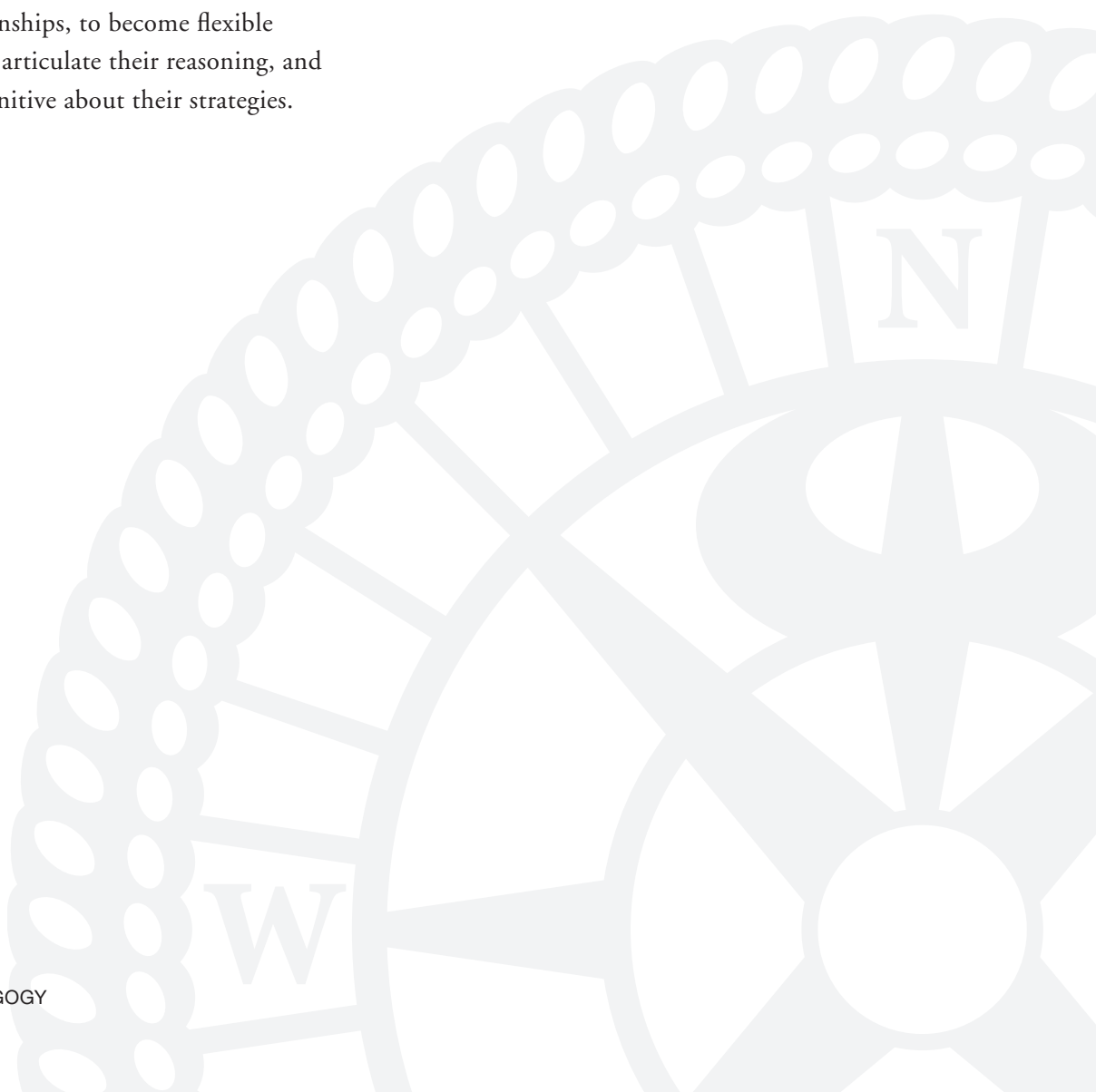
1. Teachers use written projects to assess student understanding of content and writing skills.
2. Teachers systematically assess student writing and track the growth of individual students.
3. Teachers and school leaders use results from local, state, and national writing assessments to understand their students' performance and to better align instruction with standards.
4. Instructional rubrics based on standards and student-generated criteria are used to assess writing.
5. Students have a common language for critiquing writing, can assess their own writing, and are articulate about their revisions.
6. Portfolios document growth in writing and students' reflection on that growth.

Active Pedagogy: Teaching Inquiry-Based Math

Overview

Learning math involves understanding concepts, grasping procedures, and applying them to real-life contexts. In Expeditionary Learning schools mathematics is taught in an inquiry-based manner as emphasized by the National Council of Teachers of Mathematics standards. The Expeditionary Learning approach focuses on big mathematical ideas, high quality student work, and structures for teaching math within and outside of learning expeditions. Expeditionary Learning math teachers invite students to find patterns and relationships, to become flexible problem-solvers, to articulate their reasoning, and to become metacognitive about their strategies.

Teachers cultivate mathematical habits of mind: curiosity, risk-taking, perseverance, craftsmanship, and tolerance for ambiguity. No matter what math curriculum is used, math class is often conducted as a workshop. It begins with a complex problem, and continues with independent or group work, a mini-lesson based on what students are struggling with or have discovered, sharing/comparing problem-solving strategies, and a synthesis of the day's learning. This sequence ensures that students are doing the thinking.



BENCHMARK 4:

TEACHING INQUIRY-BASED MATH

A. Structures for Teaching Math

1. Inquiry-based investigations, occurring over one or more class sessions, are a primary way for students to build understanding of mathematical concepts and skills.
2. Sometimes math is the core of the learning expedition.
3. Sometimes math is taught through integrated math projects connected to interdisciplinary learning expeditions.
4. Students apply math concepts and problem solving strategies through independent math projects that incorporate some elements of a learning expedition.

B. Math Curriculum

1. Teachers emphasize big mathematical ideas and encourage the generalization and abstraction of big ideas from experience and application.
2. Students study the history of mathematics and the contributions of diverse cultures to that history.
3. Student work focuses on authentic application as much as possible.
4. Students work on open-ended problems, investigations, and projects.
5. Teachers model comprehension strategies to improve understanding and to build a common language for talking about math.
6. Teachers foster mathematical discourse by asking open-ended questions, teaching the vocabulary of the discipline, and using effective instructional practices.
7. Classrooms provide evidence of students' mathematical thinking and learning through anchor charts and displays of student work.

C. Teaching Students to Think and Act Like Mathematicians

1. Teachers make sure that students become fluent with number facts and computation: they allot plenty of time for practice and help students see patterns, relationships, and shortcuts.
2. Teachers promote flexibility in mathematical thinking by encouraging different ways to solve problems.
3. Teachers help students develop efficient problem-solving techniques.
4. Teachers stress craftsmanship in mathematics through elegant solutions, accuracy, and neat work.
5. Teachers ask students to analyze and make sense of errors.
6. Students show the thinking behind their answers through numbers, words, graphs, and diagrams.
7. Teachers ask that students pose as well as solve mathematical problems.
8. Students use manipulatives as tools for thinking and representing.
9. Teachers promote critical thinking through rich mathematical discourse.

Active Pedagogy: Teaching Inquiry-Based Science and Social Studies

Overview

In Expeditionary Learning schools, teachers use expeditions and projects, problem-based content, and interactive instructional practices to foster inquiry in science and social studies. As much as possible, these disciplines are taught through learning expeditions that focus on big ideas. Science and social studies expeditions require students to think, write, and research like social scientists or scientists, and to use the tools of inquiry specific to the disciplines studied. The in-depth investigations of science and social studies expeditions focus on issues and problems that promote inquiry.



BENCHMARK 5:

TEACHING INQUIRY-BASED SCIENCE AND SOCIAL STUDIES

A. Structures for Teaching Science and Social Studies

1. Specific science and/or social studies content areas (e.g., biology, history, archaeology) are often at the core of learning expeditions.
2. Some expeditions integrate science and/or social studies with other subject areas so that each subject area shares equal focus.
3. Some expeditions are designed with another subject area at the core, and science and/or social studies content is integrated where authentic (e.g., World War II and nuclear fission).
4. Science and social studies projects that are not part of learning expeditions always incorporate some expedition elements.
5. Science and social studies expeditions and projects always integrate literacy and research: students read, write, speak, investigate, and think critically.

B. Science and Social Studies Curriculum

1. The compelling topic often focuses on engaging current issues, controversies, social justice, and cultural diversity.
2. Often, the compelling topic concentrates on an event, a place, a person, or living history (e.g., the case study approach).
3. In-depth investigations lead students to generalizations, concepts, and big ideas.
4. Inquiry and products require research and the authentic use of the tools of the discipline studied.
5. Learning expeditions in science often examine the history of the development of scientific ideas.
6. Expeditions foster identification with the discipline studied by modeling the inquiry and practice of real professionals and by including their expertise in the expedition plan.
7. Teachers select a variety of engaging information sources beyond textbooks for research and products (e.g., articles, short text, biographies, data sets, primary sources, original documents, interviews, experts, and fieldwork).

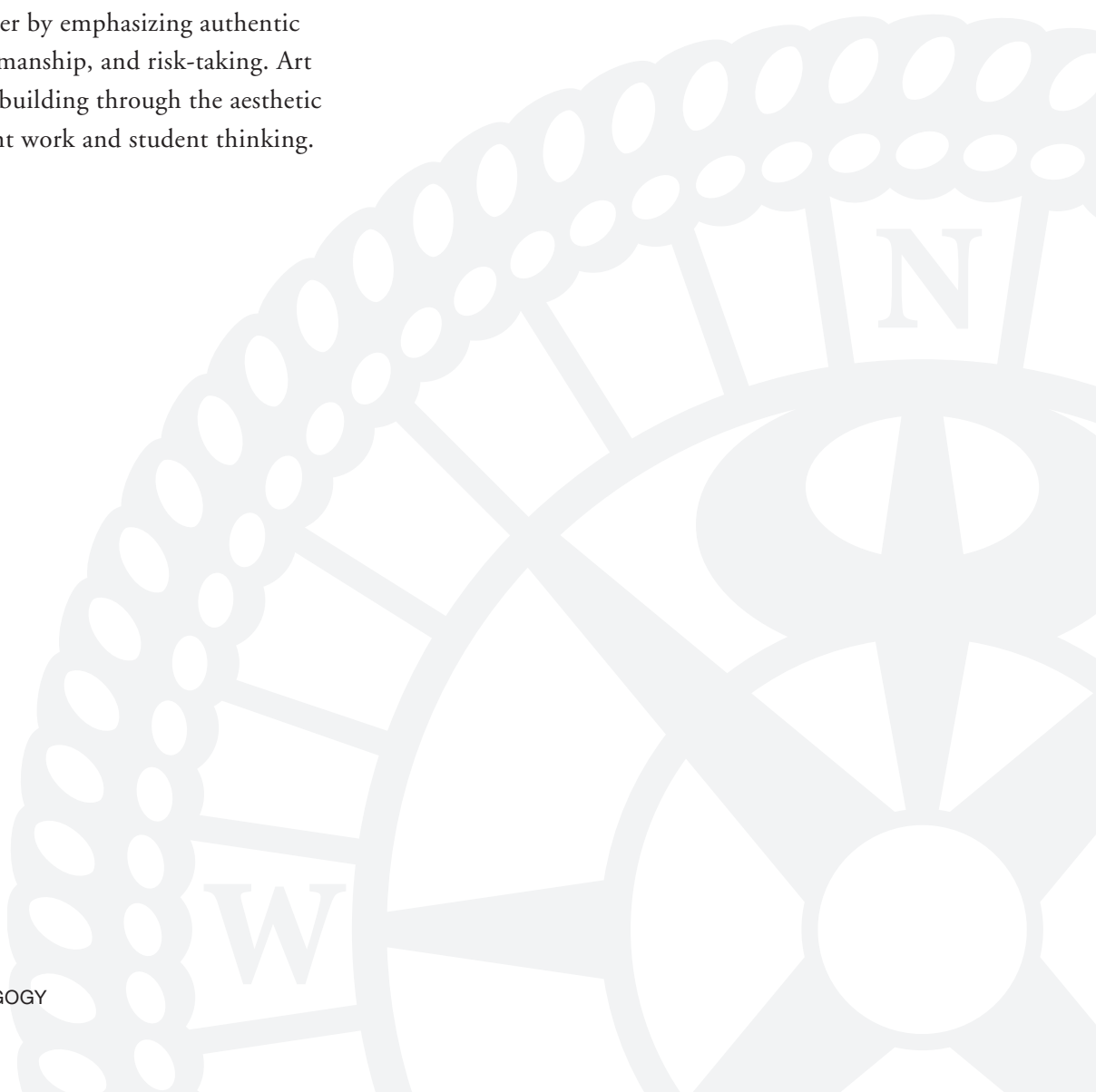
C. Teaching Science and Social Studies

1. Teachers model and make explicit the use of subject-specific comprehension strategies.
2. Students are given multiple opportunities to engage in complex, problem-based activities, labs, and investigations, and to represent and analyze data.
3. Teachers ask students to articulate their theories, explanations, and understandings.
4. Teachers ask students to represent and reflect on their thinking (e.g., create analogies, make graphs, create pictures, build models).
5. Students are asked to apply knowledge in diverse and authentic contexts, explain ideas, interpret texts, predict phenomena, and construct arguments based on evidence (instead of focusing exclusively on pre-determined “right answers”).
6. Students are asked to take and defend positions and to consider multiple perspectives.
7. As part of ongoing assessment, teachers look for misconceptions and create experiences that challenge those misconceptions.
8. Students are asked to generalize, transfer, and apply concepts and procedures to other contexts and problems.
9. Students are taught to engage in disciplinary discourse that pushes their understanding.

Active Pedagogy: Learning In and Through the Arts

Overview

In Expeditionary Learning schools, art is an important vehicle for learning and for representing learning through products. In learning expeditions, students have the opportunity to create, perform, and respond to a variety of art forms, and to connect the arts to content. The visual and performing arts are taught using the same effective instructional practices that are used in other disciplines and every effort is made to give all students access to exhibitions and performances. The arts build school culture and student character by emphasizing authentic performance, craftsmanship, and risk-taking. Art enlivens the school building through the aesthetic exhibition of student work and student thinking.



BENCHMARK 6:

LEARNING IN AND THROUGH THE ARTS

A. Structures for Teaching the Arts

1. The arts and/or history of the arts are sometimes the focus of inquiry for an expedition (e.g., Arts during the Harlem Renaissance) where each in-depth investigation examines a different artistic genre (e.g., jazz, painting, and poetry).
2. The arts and history of the arts are sometimes the subject of in-depth investigations in a social studies expedition.
3. Sometimes art is taught through integrated art projects connected to interdisciplinary learning expeditions.
4. Independent projects in an arts discipline or in the arts are sometimes used to teach the skills and techniques of a particular art form.

B. Teaching Through the Arts

1. Teachers design projects and products that require students to learn the techniques of an artistic medium and to represent their understanding of expedition content.
2. Visual arts, movement, and drama are used to make sense of concepts in various disciplines.
3. Teachers ask students to respond to fieldwork, exhibitions, performances, and literature using various art forms.
4. Teachers help students generalize what they learn from analyzing and critiquing art to other disciplines (e.g., making connections between drawing and writing).

C. Teaching the Arts

1. In-depth observation skills are taught.
2. Students are taught a common language for analyzing, critiquing, and responding to the art form they are studying.
3. Critique and revision refine and improve artistic skills and techniques.

4. Students are taught to reason and solve problems in artistic production.
5. Students learn the symbol system for the particular art form they are studying (e.g., notation in music).

D. Documenting Student Learning and Creating an Aesthetic Environment

1. The school creates displays of student work that demonstrate student thinking and articulate student learning in classrooms and hallways.
2. These displays demonstrate the values of presentation and craftsmanship.

E. Culture, Equity, Diversity, and Character

1. Teachers use the arts to reach diverse learning styles and to enable students to discover talents and aptitudes.
2. Students exhibit craftsmanship in art projects, products, and performances.
3. Teachers use performances to build classroom culture, community, and teamwork.
4. The school provides all students with access to live art performances, artists, and exhibitions.
5. All students are exposed to the major arts and each student has opportunities to work in a variety of media.
6. The arts are used to help teach persistence and self-discipline.
7. The arts help students learn about and appreciate other cultures and diverse artistic styles.
8. Art is intentionally used to help students take multiple perspectives.

Active Pedagogy: Using Effective Assessment Practices

Overview

Assessment practices in Expeditionary Learning classrooms drive instructional decisions and invite students into the assessment process. Teachers analyze student work and evidence of student thinking to understand learning and to shape instruction. Assessment practices help students understand, reflect on, and take responsibility for their own learning. Teachers and students collaborate to develop standards-based criteria for good work, and students learn to use explicit criteria to assess their progress and improve.



BENCHMARK 7:

USING EFFECTIVE ASSESSMENT PRACTICES

A. Using Multiple Assessments

1. Teachers practice ongoing assessment of student understanding by listening to evidence of student thinking and by posing probing questions.
2. Teachers focus on the thinking behind students' answers and not only on the answers themselves.
3. Teachers analyze student work to assess understanding and to evaluate and refocus instruction.
4. Teachers employ a variety of effort-based (e.g., performance assessments) and on-demand (e.g., writing to prompts) assessment strategies.
5. Teachers match the purpose and function of each assessment to learning targets (e.g., essays for critical thinking about content, multiple-choice tests for facts, and performance-based assessments for application of knowledge).
6. Teachers keep ongoing records to document student progress and guide instruction.

B. Reflection and Critique

1. Teachers and students generate criteria and build rubrics by examining exemplary models.
2. Rubrics are specific to particular products and assess content knowledge as well as presentation.
3. Students develop a common language for each discipline so they can pose revision questions, articulate goals, and give feedback.
4. Students use critique protocols to analyze the strength of their own work, learn from models, and provide feedback on the work of others.
5. Students reflect on their work: to examine improvement over successive drafts, to make sense of experiential learning, to think about their own learning, to analyze their interactions and collaborations, and to set goals for improvement.

C. Portfolios

1. The school establishes a portfolio system that includes working portfolios in major subject areas and master presentation portfolios.
2. The portfolio system has content requirements that align with learning expedition products and standards.
3. Working portfolios and master presentation portfolios show growth over time.
4. Portfolios include rubrics for major projects and assignments.
5. Students include multiple drafts and reflections to show how their work has improved and how they have met standards.

D. Preparation for High-Stakes Tests

1. Teachers help students analyze and practice the formats used on high-stakes tests (e.g., writing to prompts, multiple choice, and showing thinking in math and science).