## 1a. Demonstrating Knowledge of Content and Pedagogy

The elements of component 1a are:

# Knowledge of content and the structure of the discipline

Every discipline has a dominant structure, with smaller components or strands, as well as central concepts and skills.

## Knowledge of prerequisite relationships

Some disciplines—for example, mathematics—have important prerequisites; experienced teachers know what these are and how to use them in designing lessons and units.

## Knowledge of content-related pedagogy

Different disciplines have "signature pedagogies" that have evolved over time and been found to be most effective in teaching.

- Lesson and unit plans that reflect important concepts in the discipline
- Lesson and unit plans that accommodate prerequisite relationships among concepts and skills
- Clear and accurate classroom explanations
- Accurate answers to student questions
- Feedback to students that furthers learning
- Interdisciplinary connections in plans and practice

1b. Demonstrating Knowledge of Students

The elements of component 1b are:

Knowledge of child and adolescent development
Children learn differently at different stages of their lives.

Knowledge of the learning process Learning requires active intellectual engagement.

<u>Knowledge of students' skills, knowledge, and language proficiency</u>

What students are able to learn at any given time is influenced by their level of knowledge and skill.

Knowledge of students' interests and cultural heritage Children's backgrounds influence their learning.

Knowledge of students' special needs Children do not all develop in a typical fashion.

- Formal and informal information about students gathered by the teacher for use in planning and instruction
- Student interests and needs learned by the teacher for use in planning
- Teacher participation in community cultural events
- Teacher-designed opportunities for families to share their heritages
- Database of students with special needs

## 1c. Setting Instructional Outcomes

The elements of component 1c are:

# Value, sequence, and alignment

Outcomes represent significant learning in the discipline reflecting, where appropriate, the New Alaska Standards.

# Clarity

Outcomes must refer to what students will learn, <u>not</u> what they will do, and must permit viable methods of assessment.

#### Balance

Outcomes should reflect different types of learning, such as knowledge, conceptual understanding, and thinking skills.

# Suitability for diverse students

Outcomes must be appropriate for all students in the class.

- Outcomes of a challenging cognitive level
- Statements of student learning, not student activity
- Outcomes central to the discipline and related to those in other disciplines
- Outcomes permitting assessment of student attainment
- Outcomes differentiated for students of varying ability

# 1 d. Demonstrating Knowledge of Resources

The elements of component 1d are:

## Resources for classroom use

Materials must align with learning outcomes.

# Resources to extend content knowledge and pedagogy

Materials that can further teachers' professional knowledge must be available.

## Resources for students

Materials must be appropriately challenging.

- Materials provided by the district
- Materials provided by professional organizations
- A range of texts
- Internet resources
- Community resources
- Ongoing participation by the teacher in professional education courses or professional groups
- Guest speakers

# 1e. Designing Coherent Instruction

The elements of component 1e are:

## Learning activities

Instruction is designed to engage students and advance them through the content.

## Instructional materials and resources

Aids to instruction are appropriate to the learning needs of the students.

## Instructional groups

Teachers intentionally organize instructional groups to support student learning.

## Lesson and unit structure

Teachers produce clear and sequenced lesson and unit structures to advance student learning.

- Lessons that support instructional outcomes and reflect important concepts
- Instructional maps that indicate relationship to prior learning
- Activities that represent high-level thinking
- Opportunities for student choice
- Use of varied resources
- Thoughtfully planned learning groups
- Structured lesson plans

## 1f. Designing Student Assessments

The elements of component 1f are:

Congruence with instructional outcomes
Assessments must match learning expectations.

# <u>Criteria and standards</u> <u>Expectations must be clearly defined.</u>

# Design of formative assessments

Assessments for learning must be planned as part of the instructional process.

# <u>Use for planning</u> Results of assessment guide future planning

- Lesson plans indicating correspondence between assessments and instructional outcomes
- Assessment types suitable to the style of outcome
- · Variety of performance opportunities for students
- Modified assessment available for individual students as needed
- Expectations clearly written with descriptors for each level of performance
- Formative assessments designed to inform minute-to-minute decision making by the teacher during instruction

2a. Creating an environment of respect and rapport

The elements of component 2a are:

Teacher interactions with students, including both words and actions

A teacher's interactions with students set the tone for the classroom. Through their interactions, teachers convey that they are interested in and care about their students.

Student interactions with other students, including both words and actions
As important as a teacher's treatment of students is, how students are treated by their classmates is arguably even more important to students. At its worst, poor treatment causes students to feel rejected by their peers. At its best, positive interactions among students are mutually supportive and create an emotionally healthy school environment. Teachers not only model and teach students how to engage in respectful interactions with one another but also acknowledge such interactions.

- Respectful talk, active listening, and turn-taking
- Acknowledgement of students' backgrounds and lives outside the classroom
- Body language indicative of warmth and caring shown by teachers and students
- Physical proximity
- Politeness and encouragement
- Fairness

## 2b. Establishing a Culture for Learning

The elements of component 2b are:

## Importance of the content and of learning

In a classroom with a strong culture for learning, teachers convey the educational value of what the students are learning.

## **Expectations for learning and achievement**

In classrooms with robust cultures for learning, all students receive the message that although the work is challenging, they are capable of achieving it if they are prepared to work hard. A manifestation of teachers' expectations for high student is their insistence on the use of precise language by students.

## Student pride in work

When students are convinced of their capabilities, they are willing to devote energy to the task at hand, and they take pride in their accomplishments. This pride is reflected in their interactions with classmates and with the teacher.

- · Belief in the value of what is being learned
- High expectations, supported through both verbal and non-verbal behaviors, for both learning and participation.
- Expectation of high-quality work on the part of the students
- Expectation and recognition of effort and persistence on the part of the students
- High expectations for expression and work products

## **2c. Managing Classroom Procedures**

The elements of component 2c are:

# Management of instructional groups

Teachers help students to develop the skills to work purposefully and cooperatively in groups or independently, with little supervision from the teacher.

# Management of transitions

Many lessons engage students in different types of activities: large group, small group, independent work. It's important that little time is lost as students move from one activity to another; students know the "drill" and execute it seamlessly.

## Management of materials and supplies

Experienced teachers have all necessary materials at hand and have taught students to implement routines for distribution and collection of materials with a minimum of disruption to the flow of instruction.

## Performance of classroom routines

Overall, little instructional time is lost in activities such as taking attendance, recording the lunch count, or the return of permission slips for a class trip.

- Smooth functioning of all routines
- Little or no loss of instructional time
- Students playing an important role in carrying out the routines
- Students knowing what to do, where to move

## 2d. Managing Student Behavior

The elements of component 2d are:

# **Expectations**

It is clear, either from what the teacher says, or by inference from student actions, that expectations for student conduct have been established and that they are being implemented.

# Monitoring of student behavior

Experienced teachers seem to have eyes in the backs of their heads; they are attuned to what's happening in the classroom and can move subtly to help students, when necessary, re-engage with the content being addressed in the lesson. At a high level, such monitoring is preventive and subtle, which may make it challenging to observe.

## Response to student misbehavior

Even experienced teachers find that their students occasionally violate one or another of the agreed-upon standards of conduct; how the teacher responds to such infractions is an important mark of the teacher's skill. Accomplished teachers try to understand why students are conducting themselves in such a manner (are they unsure of the content? are they trying to impress their friends?) and respond in a way that respects the dignity of the student. The best responses are those that address misbehavior early in an episode, although doing so is not always possible.

- Clear standards of conduct, possibly posted, and possibly referred to during a lesson
- Absence of acrimony between teacher and students concerning behavior
- Teacher awareness of student conduct
- Preventive action when needed by the teacher
- Absence of misbehavior
- Reinforcement of positive behavior

2e. Organizing Physical Space

The elements of component 2e are:

# Safety and accessibility

Physical safety is a primary consideration of all teachers; no learning can occur if students are unsafe or if they don't have access to the board or other learning resources.

## Arrangement of furniture and use of physical resources

Both the physical arrangement of a classroom and the available resources provide opportunities for teachers to advance learning; when these resources are used skillfully, students can engage with the content in a productive manner. At the highest levels of performance, the students themselves contribute to the use or adaptation of the physical environment.

- Pleasant, inviting atmosphere
- Safe environment
- Accessibility for all students
- Furniture arrangement suitable for the learning activities
- Effective use of physical resources, including computer technology, by both teachers and students.

## **3a. Communicating With Students**

The elements of component 3a are:

## **Expectations for learning**

The goals for learning are communicated clearly to students. Even if the goals are not conveyed at the outset of a lesson (for example, in an inquiry science lesson), by the end of the lesson students are clear about what they have been learning.

## **Directions for activities**

Students understand what they are expected to do during a lesson, particularly if students are working independently or with classmates, without direct teacher supervision. These directions for the lesson's activities may be provided orally, in writing, or in some combination of the two, with modeling by the teacher, if it is appropriate.

## **Explanations of content**

Skilled teachers, when explaining concepts and strategies to students, use vivid language and imaginative analogies and metaphors, connecting explanations to students' interests and lives beyond school. The explanations are clear, with appropriate scaffolding, and, where appropriate, anticipate possible student misconceptions. These teachers invite students to be engaged intellec- tually and to formulate hypotheses regarding the concepts or strategies being presented.

## Use of oral and written language

For many students, their teachers' use of language represents their best model of both accurate syntax and a rich vocabulary; these models enable students to emulate such language, making their own more precise and expressive. Skilled teachers seize on opportunities both to use precise, academic vocabulary and to explain their use of it.

- Clarity of lesson purpose
- Clear directions and procedures specific to the lesson activities
- Absence of content errors and clear explanations of concepts and strategies
- Correct and imaginative use of language

3b. Using Questioning and Discussion Techniques

The elements of component 3b are:

# Quality of questions/prompts

Questions of high quality cause students to think and reflect, to deepen their understanding, and to test their ideas against those of their classmates. When teachers ask questions of high quality, they ask only a few of them and provide students with sufficient time to think about their responses, to reflect on the comments of their classmates, and to deepen their understanding. Occasionally, for the purposes of review, teachers ask students a series of (usually low-level) questions in a type of verbal quiz. This technique may be helpful for the purpose of establishing the facts of a historical event, for example, but should not be confused with the use of question- ing to deepen students' understanding.

# Discussion techniques

Effective teachers promote learning through discussion. A foundational skill that students learn through engaging in discussion is that of explaining and justifying their reasoning and conclusions, based on specific evidence. Teachers skilled in the use of questioning and discussion techniques challenge students to examine their premises, to build a logical argument, and to critique the arguments of others. Some teachers report, "We discussed x," when what they mean is "I said x." That is, some teachers confuse discussion with explanation of content; as important as that is, it's not discussion. Rather, in a true discussion a teacher poses a question and invites all students' views to be heard, enabling students to engage in discussion directly with one another, not always mediated by the teacher. Furthermore, in conducting discussions, skilled teachers build further questions on student responses and insist that students examine their premises, build a logical argument, and critique the arguments of others.

# Student participation

In some classes a few students tend to dominate the discussion; other students, recognizing this pattern, hold back their contributions. The skilled teacher uses a range of techniques to encourage all students to contribute to the discussion and enlists the assistance of students to ensure this outcome.

- Questions of high cognitive challenge, formulated by both students and teacher
- Questions with multiple correct answers or multiple approaches, even when there is a single correct response
- Effective use of student responses and ideas
- Discussion, with the teacher stepping out of the central, mediating role

- Focus on the reasoning exhibited by students in discussion, both in give-andtake with the teacher and with their classmates
- High levels of student participation in discussion

## 3c. Engaging Students in Learning

The elements of component 3c are:

## Activities and assignments

The activities and assignments are the centerpiece of student engagement, since they deter- mine what it is that students are asked to do. Activities and assignments that promote learning require student thinking that emphasizes depth over breadth and encourage students to explain their thinking.

# Grouping of students

How students are grouped for instruction (whole class, small groups, pairs, individuals) is one of the many decisions teachers make every day. There are many options; students of similar back- ground and skill may be clustered together, or the more-advanced students may be spread around into the different groups. Alternatively, a teacher might permit students to select their own groups, or they could be formed randomly.

#### Instructional materials and resources

The instructional materials a teacher selects to use in the classroom can have an enormous impact on students' experience. Though some teachers are obliged to use a school's or district's officially sanctioned materials, many teachers use these selectively or supplement them with others of their choosing that are better suited to engaging students in deep learning—for example, the use of primary source materials in social studies.

# Structure and pacing

No one, whether an adult or a student, likes to be either bored or rushed in completing a task. Keeping things moving, within a well-defined structure, is one of the marks of an experienced teacher. And since much of student learning results from their reflection on what they have done, a well-designed lesson includes time for reflection and closure.

- Student enthusiasm, interest, thinking, problem solving, etc.
- Learning tasks that require high-level student thinking and invite students to explain their thinking
- Students highly motivated to work on all tasks and persistent even when the tasks are challenging
- Students actively "working", rather than watching while their teacher "works".
- Suitable pacing of the lesson: neither dragged out nor rushed, with time for

closure and student reflection.

## 3d. Using Assessment in Instruction

The elements of component 3d are:

#### Assessment criteria

It is essential that students know the criteria for assessment. At its highest level, students themselves have had a hand in articulating the criteria (for example, of a clear oral presentation).

## Monitoring of student learning

A teacher's skill in eliciting evidence of student understanding is one of the true marks of expertise. This is not a hit-or-miss effort, but is planned carefully in advance. Even after planning carefully, however, a teacher must weave monitoring of student learning seamlessly into the lesson, using a variety of techniques.

## Feedback to students

Feedback on learning is an essential element of a rich instructional environment; without it, students are constantly guessing at how they are doing and at how their work can be improved. Valuable feedback must be timely, constructive, and substantive and must provide students the guidance they need to improve their performance.

## Student self-assessment and monitoring of progress

The culmination of students' assumption of responsibility for their learning is when they monitor their own learning and take appropriate action. Of course, they can do these things only if the criteria for learning are clear and if they have been taught the skills of checking their work against clear criteria.

- The teacher paying close attention to evidence of student understanding
- The teacher posing specifically created questions to elicit evidence of student understanding
- The teacher circulating to monitor student learning and to offer feedback
- Students assessing their own work against established criteria

## 3e. Demonstrating Flexibility and Responsiveness

The elements of component 3e are:

# Lesson adjustment

Experienced teachers are able to make both minor and (at times) major adjustments to a lesson, or mid-course corrections. Such adjustments depend on a teacher's store of alternate instructional strategies and the confidence to make a shift when needed.

## Response to students

Occasionally during a lesson, an unexpected event will occur that presents a true teachable moment. It is a mark of considerable teacher skill to be able to capitalize on such opportunities.

## Persistence

Committed teachers don't give up easily; when students encounter difficulty in learning (which all do at some point), these teachers seek alternate approaches to help their students be suc-cessful. In these efforts, teachers display a keen sense of efficacy.

- Incorporation of students' interests and daily events into a lesson
- The teacher adjusting instruction in response to evidence of student understanding (or lack of it).
- The teacher seizing on a teachable moment

## 4a. Reflecting on Teaching

The elements of component 4a are:

## Accuracy

As teachers gain experience, their reflections on practice become more accurate, corresponding to the assessments that would be given by an external and unbiased observer. Not only are the reflections accurate, but teachers can provide specific examples from the lesson to support their judgments.

# Use in future teaching

If the potential of reflection to improve teaching is to be fully realized, teachers must use their reflections to make adjustments in their practice. As their experience and expertise increases, teachers draw on an ever-increasing repertoire of strategies to inform these adjustments.

- Accurate reflections on a lesson
- Citation of adjustments to practice that draw on a repertoire of strategies

## 4b. Maintaining Accurate Records

The elements of component 4b are:

## Student completion of assignments

Most teachers, particularly at the secondary level, need to keep track of student completion of assignments, including not only whether the assignments were actually completed but also students' success in completing them.

# Student progress in learning

In order to plan instruction, teachers need to know where each student "is" in his or her learning. This information may be collected formally or informally but must be updated frequently.

## Noninstructional records

Noninstructional records encompass all the details of school life for which records must be maintained, particularly if they involve money. Examples include tracking which students have returned their permission slips for a field trip or which students have paid for their school pictures.

- Routines and systems that track student completion of assignments
- Systems of information regarding student progress against instructional outcomes
- Processes of maintaining accurate non-instructional records

4c. Communicating With Families

The elements of component 4c are:

Information about the instructional program

The teacher frequently provides information to families about the instructional program.

Information about individual students

The teacher frequently provides information to families about students' individual progress.

Engagement of families in the instructional program

The teacher frequently and successfully offers engagement opportunities to families so that they can participate in the learning activities.

- Frequent and culturally appropriate information sent home regarding the instructional program and student progress
- Two-way communication between the teacher and families
- Frequent opportunities for families to engage in the learning process

# 4d. Participating in the Professional Community

The elements of component 4d are:

# Relationships with colleagues

Teachers maintain professional collegial relationships that encourage sharing, planning, and working together toward improved instructional skill and student success.

# Involvement in a culture of professional inquiry

Teachers contribute to and participate in a learning community that supports and respects its members' efforts to improve practice.

## Service to the school

Teachers' efforts move beyond classroom duties by contributing to school initiatives and projects.

## Participation in school and district projects

Teachers contribute to and support larger school and district projects designed to improve the professional community.

- Regular teacher participation with colleagues to share and plan for student success
- Regular teacher participation in professional courses or communities that emphasize improving practice
- Regular teacher participation in school initiatives
- Regular teacher participation in and support of community initiatives

4e. Growing and Developing Professionally

The elements of component 4e are:

Enhancement of content knowledge and pedagogical skill

Teachers remain current by taking courses, reading professional literature, and remaining current on the evolution of thinking regarding instruction.

Receptivity to feedback from colleagues

Teachers actively pursue networks that provide collegial support and feedback.

Service to the profession

Teachers are active in professional organizations in order to enhance both their personal practice and their ability to provide leadership and support to colleagues.

- Frequent teacher attendance in courses and workshops; regular academic reading
- Participation in learning networks with colleagues; freely shared insights
- Participation in professional organizations supporting academic inquiry