THE PREVALENCE OF SPECIFIC STANDARDS-BASED TEACHING PRACTICES OBSERVED IN THE CLASSROOMS OF FIRST AND SECOND YEAR TEACHERS

Prepared for the O-QAT Title-II Initiative 3.1 Continuing Licensure Design Team

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Questions Addressed

1. Which standards based teaching and/or learning practices were the most prevalent during classroom observations?
2. Which standards based teaching and/or learning practices were the least prevalent during classroom observations?
3. Does the incidence of observed practices differ by level of schooling?
4. Does the incidence of observed practices differ by emphases within teacher preparation programs?
5. Does the incidence of specific practices change over time?

Measures Reports and Teacher Sample Involved

Measures. The incidence of specific teaching practices obtained through the observation system described in Research brief 5 (see the middle 2 pages of the attachment to the brief) developed for and used in the TEP-2 project to assess the proficiency of early career elementary teachers in Oregon’s standards-based schools.

Sample. The first and second cohort of teachers taking part in the research for whom classroom observation data were collected these consisted of 75 1st year teachers and 51 2nd year teachers.

Key Findings

Most prevalent standards-based teaching practices observed.
- The teacher makes clear to students what they are to learn (content or other outcomes desired)
- The teacher makes clear to students what level of performance is expected and acceptable.
- Instructional activities are aligned with learning outcomes to be accomplished.
- Students have opportunities to practice skills they are to demonstrate.
- The teacher determines what students know about a topic before instruction proceeds, and adjusts instructional plans as needed.
- The teacher uses a variety of assessments to check student understanding.

Least prevalent standards-based teaching practices observed.
- The teacher reinforces with students the importance of what is being learned.
- Instruction is altered “in-flight” to meet student needs.
- Instructional adaptations are evident for exceptional learners.
- The teacher involves students in self- and peer-assessment and feedback.
- The teacher evaluates student work consistently.

Prevalence of specific standards-based teaching practices by level of schooling/benchmark grades
- Overall, the specific standards-based practices observed were much more prevalent in grades K-2 and 3-4 than at grades 5 - 6.
- Overall, the of specific standards-based teaching practices observed were more prevalent in non-
benchmark classrooms (grades K-2, 4 and 6) than in benchmark (grades 3 and 5) classrooms.

**Prevalence of specific standards-based teaching practices by level of exposure to preparation emphases**

- No consistent patterns emerged in specific teaching practices used to “Communicate to students what is to be learned” that could be traced to the preparation emphases investigated in the research.
- A consistent pattern emerged in this regard, however, for teaching practices used in “Aligning instructional activities and materials with learning outcomes to be accomplished.” Teachers prepared in programs with an overall rating of High or Very High in the emphases of interest in the research were observed engaged in these practices somewhat more often than teachers prepared in programs receiving a Low-Moderate rating.
- A consistent pattern also emerged for teaching practices used to “Assess student progress in learning, and provide feedback to students about their learning.” Teachers prepared in programs with an overall rating of High or Very High in the emphases of interest were observed engaging in these practices somewhat more often than teachers prepared in programs receiving a Low-Moderate rating.

**Change/stability in the prevalence of specific standards-based teaching practices over time.**

- The prevalence of these practices, for the most part, changed over time. Six became more prevalent, six became less prevalent, and four maintained about the same frequency of use.
- Typically, those practices that became more prevalent with time were observed frequently during the first year of teaching.
- Typically, those practices that became less prevalent over time were observed infrequently during the first year of teaching.

**Potential Implications for CONTINUING Licensure**

- Looking at the incidence of specific teaching practices as part of an observation system for continuing licensure will provide complementary information to ratings of quality.
- By focusing on teaching practices over time it is clear that beginning teachers purposely choose practices that work for them, and discard those that don’t. It is unlikely that the full range of the practices incorporated within any particular proficiency to be demonstrated for a continuing license to teach in Oregon will be observed in any one candidate.
- Allowing candidates to pick and choose among various practices to demonstrate their proficiency as a teacher within the context in which they work seems practical and realistic for both programs and candidates.

**Potential Implications for INITIAL Licensure**

- The teaching practices that make up the competencies to be demonstrated for an initial license to teach in Oregon’s schools are indeed part of the repertoire of practices used by these beginning teachers.
- The use of these designated practices does vary, especially by level of schooling, possibly indicating that either they are emphasized more at various authorization levels, or viewed as more appropriate with some ages of students than others.
Introduction

The central objective of the TEP-2 Project (The Longitudinal Effects of Teacher Preparation on the Practice and Beliefs of New Teachers and the Learning of Their Students.) is to determine whether exposure to selected emphases within teacher preparation makes a difference in the practice, beliefs and thinking of early career elementary school teachers and the learning of their students in Oregon’s standards-based schools.

Direct observation and recording of the performance of these teachers as facilitators and managers of student learning is the most efficient means of obtaining defensible evidence regarding use of specific teacher practices. If these records of performance are reasonably detailed and focus on dimensions of teaching known to influence learning, this information can serve both an explanatory and predictive role in investigating the impact of early career teachers on student learning.

Classroom observation holds a similar place of significance within the continuing licensure of teachers. CTL Proficiency #4 (Instruction) can be demonstrated only within the context of an ongoing classroom, and thus most defensibly documented through direct observation and recording. The proviso holds, of course, that WHAT is observed a) is of known significance to standards-based learning, b) can and is likely to be observed in the classrooms and teachers studied, and c) will be recognized and classified as such by different observers watching the same episode of classroom life.

Related Research Questions

The questions pursued in this brief pertain to the specific standards-based teaching practices and activities observed in the classrooms of first and second year teachers working within the context of Oregon’s standards-based schools. Instead of a rating of quality, however, these questions pertain to the incidence or prevalence of specific behaviors or practices observed. We concentrate here on practices that have been deemed critical to teaching in a standards-based classroom. The specific behaviors/practices presented in this Brief are clustered under: 1) Communicating to students what is to be learned; 2) Aligning and varying instructional activities, materials and procedures to support students in their learning; and, 3) Assessing student progress in learning and providing feedback to students about their learning.

Questions investigated with respect to specific practices include:

- Which standards-based teaching and/or learning practices were the most prevalent during classroom observations?
- Which standards-based teaching and/or learning practices were the least prevalent during classroom observations?
- Does the incidence of observed practices differ by level of schooling?
- Does the incidence of observed practices differ by emphases within teacher preparation programs?
- Does the incidence of specific practices change over time?

For the most part these questions are answered through simple descriptive statistics, including the percentage of observations in which a specific teaching practice was noted in a role of prominence.

Data Collection Sources/Methods

The data to be reported in this brief were collected through the observation system described in Research Brief #5. These data, however, are taken only from Part 2 of the observation protocol, which asks observers to note when a designated teacher practice or student behavior assumed a place of prominence within the instructional period being observed.

Results

The data presented here are for teachers and/or their students in an individual observational period lasting an hour to an hour and a half. As was discussed in Research Brief #5, two separate observations were made during each site visit. Over the first two years of the study then, an individual
teacher can have as many as 6 unique observation data points. Results are presented in terms of the percentage of total observations in which the specific practice or behavior was actually observed. Total observations for each time period are:

Spring, Year 1 = 122 instructional periods observed for 75 first year teachers.
Fall, Year 2 = 101 instructional periods observed for 52 second year teachers.
Spring, Year 2 = 102 instructional periods observed for 51 second year teachers.

Specific Standards-Based Teaching Practices to be Noted When Prominent

Five specific teaching/learning practices were assigned for notation under “Communicating to students what is to be learned.”
These include:
COM1: Clarifying what students are to learn;
COM2: Clarifying performance expectations;
COM3: Letting students know how they are progressing;
COM4: Reinforcing that all students can learn; and
COM5: Reinforcing the importance of what is to be learned.

Five teaching/learning practices also were designated under “Aligning and varying instructional activities, materials and procedures to support students in their learning.”
These include:
AL1: Activities are aligned with outcomes to be accomplished;
AL2: Students have opportunities to practice skills they are to demonstrate;
AL3: Instruction is altered “in-flight” to meet student needs;
AL4: Instruction is purposely varied to meet the learning needs of all students; and
AL5: Adaptations are evident for exceptional learners.

Six teaching/learning practices were designated for notation under “Assessing student progress in learning and providing feedback.”
These include:
AS1: Determines what students know about a topic before instruction proceeds, and adjusts instructional plans as needed;
AS2: Uses a variety of assessments to check student understanding;
AS3: Evaluates student work consistently;
AS4: Shares examples of student work to let students know what is expected;
AS5: Involves students in self- and peer-assessment and feedback; and
AS6: Gives clear, direct feedback to students on how they are doing and how they can improve.

Most commonly observed teaching/learning practices

Communicating to Students What is to be Learned:
The two most commonly observed practices in this area were COM1-The teacher makes clear to students what they are to learn (content or other outcomes desired), and COM2-The teacher makes clear to students what level of performance is expected and acceptable. The percent of instructional periods in which the practices were observed is shown in Figure 10.1

Figure 10.1. Most Common Practices Used in Communicating to Students What is to be Learned

* Percent of instructional period in which a practice was noted as playing a prominent role.

We have defined a practice as being prevalent if it
was noted in 75% of all instructional periods observed. Neither of these outcome-related communication practices meet this criterion for a “high incidence” practice, but note the steady increase in COM2 use overtime.

Aligning and Varying Instructional Activities, Materials and Procedures. The two most frequently observed practices in this area were AL1: Activities are aligned with outcomes, and AL2: Students have opportunities to practice skills they are to demonstrate. The percent of instructional periods in which these practices were noted is shown in Figure 10.2. Both of these exceeded the criterion for prevalence of use, and both show a steady increase in use over time.

Figure 10.2. Most common Practices Used in Aligning and Varying Instructional Activities/Materials

Assessing student progress in learning and providing feedback to students about their learning. The two most often observed practices in this area were AS1- Determines what students already know about what is to be learned, and AS2- Uses a variety of assessments to check student understanding. The percent of instructional periods in which these practices were noted is shown in Figure 10.3.

Figure 10.3. Most common Practices Used in to Assess Student Progress in Learning and Provide Feedback to Student about their Learning.

Of the six most commonly observed teaching standards-based practices assessment and feedback practices were least frequently used. Neither met the criterion for a “high incidence” practice, and neither increased appreciably with time. This should not be unexpected since assessment and feedback activities are not a daily practice, though informal “in-flight” assessments and feedback tend to be.

Least commonly observed standards based teaching/learning practices

Communicating to Students What is to be Learned. The least commonly observed practice in this area was COM5-The teacher reinforces with students the importance of what is being learned. Its relatively low incidence of use, as shown in Figure 10.4, may be due to sampling error in that the practice could be used more frequently at other times in a unit. Or it may be that early career teachers simply do not typically reinforce the importance of what they are teaching. In any event, this practice was noted in only about half of the classroom observations that took place and decreased in frequency from the 1st to the 2nd year of teaching. (NOTE: This was the only standards-based practice that occurred fewer than 60% of the instructional periods observed.)
Aligning and Varying Instructional Activities, Materials and Procedures. The least frequently observed practices in this area were AL3-Instruction is altered “in-flight” to meet student needs, and AL5-Adaptations are evident for exceptional learners. The percent of instructional periods in which these practices were observed is shown in Figure 10.5.

Neither of these practices were prevalent in the classrooms observed (they were noted in only about 50% of the observations conducted). While adapting activities and materials for exceptional learners is subject to classroom demographics, altering instruction “in-flight” is not. Purposefully varying activities and materials to meet student’s needs, or adapting lessons as they progress, do not appear to be prevalent practices for these early career elementary teachers. More troubling, they appear to decrease with time.

Assessing student progress in learning and providing feedback to student about their learning. The least frequently observed practices in this aspect of standards-based teaching were AS5-Involves students in self- and peer-assessment and feedback, and AS3-Evaluates student work consistently. The percent of instructional periods in which these practices were observed is shown in Figure 10.6.

It will be seen from these data that students were involved in self- or peer-assessment and feedback activities in half the classrooms observed during the 1st and 2nd year of teaching, with little change from one year to the next. The pattern for the evaluation of student work, however, varied considerably from the 1st to the second year. In 70% of the instructional periods observed in year 1 teachers were viewed as consistently evaluating student work but this dropped to less than 50% in year 2. It will be interesting to trace this pattern into year 3.
Incidence of observed practices grade levels

One obvious question that arises when looking at the data presented in Figures 10.1 through 10.6 is whether specific practices vary by level of schooling. That is the focus of the data presented in Figure 10.7. For this analysis we limited our data to just first year teacher observations, and combined grades K-2, 3-4, and 5-6.

Communicating to Students What is to be Learned. Two communication practices differed significantly by level of schooling. Both COM2-Clarifying performance standards, and COM3-Letting students know how they are doing, were much more prevalent at both K-2 and 3-4, than at grades 5 and 6. These data are shown in Figure 10.7.

Aligning and Varying Instructional Activities, Materials and Procedures. The largest difference by grade level in the incidence of specific practices related to aligning and varying instruction was for AL2-Students have opportunities to practice skills they are to demonstrate. This practice was much more prevalent at both grades K-2 and 3-4 than at grades 5 and 6. Other differences that occurred between grade levels were small and inconsistent.

Assessing student progress in learning and providing feedback to students on their learning. No discernable patterns emerged in our data that would suggest that certain assessment practices are more prevalent at one level of schooling than another. Differences that occurred were small and inconsistent.

Incidence of observed practices in “benchmark” (grades 3 and 5) vs non-benchmark grades.

There is mounting evidence that the administration of state tests for accountability purposes has far reaching impact on the instructional practices of teachers. In general it tends to focuses and narrow instruction to content covered on the tests. The following analyses address this question from the perspective of the three dimensions of standards-based teaching presented in previous paragraphs.

The question addressed here is whether specific standards-based teaching practices vary for teachers in benchmark grades compared to teachers working at other grade levels. We have limited our analyses in this regard to just first year teacher observations.

Communicating to Students What is to be Learned. It will be seen from the data presented in Figure 10.8 that the incidence of all specific teaching practices in this aspect of standards-based teaching was higher in non-benchmark classrooms than in benchmark classrooms. This finding runs counter to that expected from related research and pushes hard for an explanation. The only one suggested thus far is that state standards for learning are
reasonably explicit in their performance expectations at benchmark grades while they are silent about performance expectations at other grade levels. This leaves the task of clarifying learning outcomes and related performance standards at other grade levels to teachers. It is conceivable that this could account for the differences appearing in Figure 10.8. specific practice of COM2-Clarifying performance standards. While this practice was observed 77.7% of the time in non-benchmark classrooms, it was only observed 60% of the time in benchmark grade classrooms.

Figure 10.8. Differences in Communication Practices around what is to be Learned in Benchmark vs Non-Benchmark Grades

Aligning and Varying Instructional Activities, Materials and Procedures. The data presented in Figure 10.9 do not pattern as clearly for benchmark vs non-benchmark grades as those appearing in Figure 10.8. Three alignment related practices are used more frequently in non-benchmark grades (AL2 - Providing students with opportunities to practice skills they are expected to demonstrate, AL3 - Altering instruction “in-flight” to meet student needs, and AL5 - Adapting instruction for exceptional learners -- with large differences appearing for AL3), but AL1 - Clearly aligning instructional activities to outcomes was used more frequently by teachers in benchmark grades.

Assessing student progress in learning and providing feedback to students on their learning. It will be seen from the data presented in Figure 10.10 that the incidence of assessment and feedback related practices was essentially identical for AS1, 2 and 3 (see page 10.2 for descriptions) in benchmark and non-benchmark grades, but slightly greater for AS4, 5 and 6 in non-benchmark grades. With the exception of AS4, however (Shares examples to let students know what is expected), these differences are small.

Figure 10.9. Differences in Aligning and Varying Practices by Benchmark vs Non-Benchmark Grades

Figure 10.10. Differences in Assessment and Feedback Practices by Benchmark vs Non-Benchmark Grades

10.6
Incidence of observed practices by emphases within preparation program

Consistent with the central hypothesis to be tested in the TEP-2 project, we want to know whether teachers prepared in programs that were rated as engaging in higher levels of the emphases of interest also engage in a higher incidence of these specific standard-based teaching practices. Again, we limit this analysis to first year teacher observations.

To simplify related analyses and presentation of results we have compressed the four-level classification of program difference in the degree to which a teacher’s preparation program engaged in the characteristics of interest into a two level classification: Low-Moderate vs High-Very High.

Communicating to Students What is to Learned: It will be seen from Figure 10.11 that no consistent pattern emerged with respect to the five specific teaching practices noted under this aspect of standards-based teaching and that differences that did occur were not large.

Figure 10.11. Differences in Communication Practices around what is to be Learned by Program Characteristics

Aligning and Varying Instructional Activities, Materials and Procedures. In contrast to communication practices around outcomes to be accomplished a consistent pattern did emerge for the five teaching practices noted under this aspect of standards-based teaching. Teachers prepared in programs with an overall rating of High or Very High with respect to emphases of interest engaged more frequently in these practices than teachers prepared in programs receiving a Low-Moderate rating. While the incidence was higher in four of the five practices, the difference was greatest for AL5: Adaptations are evident for exceptional learners.

Assessing Student Progress in Learning and Providing Feedback to Students about their Learning. Again, as shown in Figure 10.13, a consistent pattern emerged for the specific teaching practices noted under this aspect of standards-based teaching. Teachers prepared in programs with an overall rating of High or Very High on the emphases of interest engaged in these practices more frequently than teachers prepared in programs receiving a Low-Moderate rating. These differences were fairly large for both AS3-Evaluates student work consistently, and AS6-Gives clear, direct feedback to students on how they are doing and how they can improve, and very large for AS4 - Shares examples to let students know what is expect.
Does the incidence of specific practices change over time?

To address this question we analyzed the incidence of all specific practices discussed in this brief for an intact group of teachers in their first and second year of teaching. Of the sixteen specific teaching practices under the three major domains of teaching that have been addressed, there was a definite upward trend in 6, a definite downward trend in 4, and no discernable trend for the remaining 6.

The six practices for which an increased incidence was observed over the first two years of teaching included:

**COM2:** Clarifying performance expectations;  
**COM3:** Letting students know how they are progressing;  
**AL1:** Activities are aligned with outcomes;  
**AL2:** Students have opportunities to practice skills they are to demonstrate;  
**AS4:** Shares examples to let students know what is expected; and  
**AS5:** Involves students in self- and peer-assessment and feedback.

The data pertaining to these practices are shown in Figure 10.14.

While these six practices were more frequently observed in the second year of teaching than the first, it should be noted that three of the six (COM3, AS4 and AS5) still do not reach the criterion of being a prevalent practice among these teachers.

The four teaching practices for which a decreased incidence was observed over the first two years of teaching included:

**AL3:** Instruction is altered “in-flight” to meet student needs;  
**AL5:** Adaptations are evident for exceptional learners;  
**AS3:** Evaluates student work consistently; and  
**AS6:** Gives clear, direct feedback to students on how they are doing and how they can improve.

The data pertaining to these practices are shown in Figure 10.15.
While instructional practices that increase or decrease with experience are of immediate interest, it is informative to note practices that do not appear to vary in use with experience. These include:

COM1 - Clarifying what students are to learn;
COM2 - Reinforcing that all students can learn;
COM5 - Reinforcing the importance of what is to be learned;
AL4 - Instruction is purposely varied to meet the learning needs of all students;
AS1 - Determines what students know about a topic before instruction, and adjusts instructional plans as needed; and
AS2 - Uses a variety of assessments to check student understanding.

It will be interesting to see whether this list changes in year 3.

**Summary and Discussion**

The incidence of specific teaching practices held to be critical for effective standards-based teaching provides us with a lens for looking back to initial preparation and forward to continuing licensure. It is fairly clear from these data that some of these practices are much more prevalent in the classrooms of beginning teachers than others. While some of this disparity might be associated with sampling (the practice was not observed during the specific sample of teaching taken, but might be present at other times) it is unlikely that this would account for all of the patterns and differences observed.

In terms of incidence, it is surprising to us that only 3 of the 16 specific teaching practices addressed in this Brief were observed in 75% or more of the instructional periods. We find it surprising because 14 of the 16 are tied to Oregon’s standards for initial licensure, and deemed central to teaching at any level in standards-based schools. Clearly, the teaching practices that form a central core in the initial preparation of teachers do not become prevalent practices for graduates.

Equally surprising, and somewhat troubling, is that most of these practices are less prevalent in classrooms at benchmark grades than in classrooms at non-benchmark grades.

From the perspective of the TEP-2 research project results reported in this brief support the hypothesis that teachers prepared in programs give high vs low “exposure” to emphases reflecting a standards orientation to schooling will perform differently in their classrooms as early career teachers. Beginning teachers prepared in high or very-high “exposure” programs engaged in 14 out of 16 of the practices reviewed more often than teachers prepared in low to moderate “exposure” programs.

Finally, a majority of the teaching practices discussed in the brief (10 of the 16) over time. Some practices become more prevalent and some less. Also, some practices that were prevalent in the first year of teaching became even more so in the second year. At the other extreme, some practices that were not particularly prevalent in the first year of teaching become even less so in the second year. In only one case did we find a practice that crossed the 75% threshold for “prevalence” from the first to the second year of teaching: COM2-Clarifying performance expectations.