

Measuring Teacher Quality in Connecticut.

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Abstract

For past two decades, there has been a growing national concern about teacher quality. This presentation discusses Connecticut's Beginning Educator Support and Training Program (BEST) and emulation of its assessment component by a medium sized department of education. The support component of BEST requires that all school districts provide assistance to novice teachers through their mentor teachers. The assessment part of BEST mandates that in order to obtain Provisional Educator Certification, the second level of state's three tiered structure, all new teachers provide evidence of their teaching competencies. This much needed evidence is provided through the development of a teaching portfolio. The portfolio contains five to eight hours of implementation of an instructional unit, lesson descriptions, videotaped segments of a lesson, samples of student work with corrective teacher feedback, and reflective commentaries on the teaching and learning that took place during the unit instruction in one of the classes taught by the teacher. The portfolio measures mastery of teaching competencies as defined by *Connecticut's Common Core of Teaching*. Every year, approximately 3000 teachers submit their portfolios and about 85% of them pass this assessment (CSDE, 2006).

In endeavors to prepare our teacher candidates for BEST, we have introduced BEST like performance assessment in our graduate and undergraduate elementary education program. The anecdotal data indicate that when our graduates have to participate in BEST, they feel better prepared than their peers.

(References 8)

Measuring Teacher Quality in Connecticut

Background

For past two decades, there has been a growing national concern about teacher quality and its subsequent impact on pupil achievement. The bulk of research based on thousands of pupil records in different parts of the country shows that the quality of the teacher is the most powerful variable that impacts pupil achievement. More than ever before, there is need for assurance that we have well- prepared, highly qualified teachers to meet the demands of globalization, explosion of information, continually changing technology, and increased societal diversity. Today, children bring to the classroom a variety of backgrounds and experiences, each accompanied by its own set of potential challenges and opportunities. It is only the highly qualified, competent teacher who can increase the probability of success for every school child. The researchers recommend the best way to assure that each child in American schools is taught by a competent; quality teacher is to reform teacher preparation, redesign it, raise its standards as well as expectations (American Federation for Teachers, 2006; Carnegie Corporation of New York, 2001; Darling-Hammond, 2000; National Commission on Teaching and America's Future, 2004).

Amongst several new approaches, this push for teacher quality has also resulted in high entrance and exit requirements for teacher education programs. In Connecticut, in addition to revised entrance and exit requirements, beginning teachers have also to participate in an assessment and induction program, known as Beginning Teacher Support and Training Program (BEST). The BEST ensures that teachers meet minimum state standards of teaching necessary to continue their state teacher certifications. (CSDE, 2006)

The support component of the BEST expects school districts to provide assistance to new teachers through their expert teachers. These experts, known as mentors help the beginning teachers throughout a school year and are compensated for their services. The assessment component of the BEST requires teachers to participate in performance assessment through the development of a teaching portfolio in their second year of service. The teaching portfolio documents five to eight hours of instruction with one of their classes. The teachers have to participate in BEST program to obtain their Provisional Educator Certification, which represents second level of the state's three-tiered teacher certification structure. The beginning teachers in the following 10 subject areas are required to participate in the BEST: (1) English, (2) Mathematics, (3) Science- Biology, Chemistry, Physics, Earth Science, General Science (4), Special Education, (5) Elementary Education, (6) History/Social Studies, (7) Visual Arts , (8) Music, (9) Physical Education, and (10) World Languages (CSDE, 2006).

The beginning teachers are automatically enrolled in BEST program by their school districts. The districts are responsible for informing State Department of Education (SDE) of all novice teachers hired in an academic year. Through portfolio development, beginning teachers document evidence of their teaching competencies. The portfolio contains implementation of an instructional unit, lesson descriptions, videotaped segments of a lesson, samples of student work with corrective teacher feedback, and reflective commentaries on the teaching and learning that took place during the unit instruction the teacher delivered (CSDE, 2006).

Purpose

The purpose of this presentation at the annual meeting of the Association for Teacher Educators (ATE) was to:

- Discuss with fellow teacher educators how the BEST requires collaboration amongst educators.
- Highlight the features of the BEST program
- Discuss ways the BEST is used to measure and insure teacher quality in Connecticut
- Examine the way a department of education of a public liberal arts university has emulated BEST in their elementary teacher education program

This presentation would be of interest to teacher educators who are curious about Connecticut's endeavors at assuring teacher quality. It would provide them an opportunity to compare BEST with similar approaches in their respective programs and states.

Relationship to Conference Theme

This presentation actively engaged other teacher educators in a stimulating discussion about the issues surrounding teacher quality and pupil performance. Evidently, we are all collaborating for the education and increased performance of all school children.

Content of Presentation

Since the mid-1980s, Connecticut's educational agenda has focused on promoting rigorous standards for students and teachers. Improving the quality of Connecticut's teachers has been viewed as central to improving student achievement. In order to be eligible for Provisional Educator certificate, beginning teachers in Connecticut must demonstrate essential teaching competencies through portfolio assessment, known as BEST Program (CSDE, 2006).

According to Connecticut State Department of Education (2006), the goal of the BEST program is to ensure that all students have high quality, committed and caring teachers, promoting effective teaching practice leading to increased student learning. Many of the state's professional associations have expressed their support for the BEST Program and for the teaching portfolio as a reliable measure of beginning teacher's competencies (CSDE, 2006).

The BEST teaching portfolio requires the teachers to document all essential elements of instruction-planning, implementation, assessment, and reflection and mastery of teaching

competencies as defined by *Connecticut's Common Core of Teaching*. As teachers develop their portfolios, they are encouraged to collaborate with mentors and colleagues. The Connecticut State Department of Education also offers on-line and face-to-face workshops to prepare the beginning teachers for the BEST portfolio (CSDE, 2006).

The teaching portfolio of BEST has four parts. In the first part, teachers describe their students and the context of their teaching. In the second part, they document their planning and teaching of a learning segment that will have 3-4 lessons. In the third part, teachers present a videotape of one of their lessons which highlights accommodations and modifications for their students with special needs. And in the fourth part, teachers demonstrate their competence in the analysis of student learning and teaching (CSDE, 2006)

The BEST portfolios are scored by experienced educators who are fully trained by the Connecticut State Department of Education in the scoring procedures. . The scoring is based on rubrics and is holistic. The final portfolio score ranges from 1-4, with 4 being the highest level of performance. The presenter had an opportunity to receive scorer training offered by SDE. It was a great experience. The faculty in our education department introduced BEST like performance assessment in our elementary teacher education program.

BEST-Like Teaching Portfolio in our Education Department

We are a liberal arts public college with a student body of approximately five thousand students. We are located in the rural part of Eastern Connecticut. Our department offers teacher certification programs in Early Childhood Education with dual N-K certification in Special Education, Elementary Education, and Secondary Education. We offer our undergraduate secondary and elementary programs as cohorts that begin in spring of each year. Our elementary and secondary education courses are divided into three blocks known as CORE I, CORE II, and

CORE III. In CORE III, after teacher candidates have completed all the required education coursework, they spend a full semester of student teaching in regional schools (ECSU, 2006).

We have recently introduced BEST like teaching portfolio in our elementary, graduate and undergraduate program. During student teaching, our elementary teacher candidates develop the teaching portfolio. This portfolio resembles the BEST portfolio required by the Connecticut State Department of Education. As shown in *Figure 1*, it measures teacher candidates' competencies for instructional planning, delivery, assessment of pupil learning, and reflection.

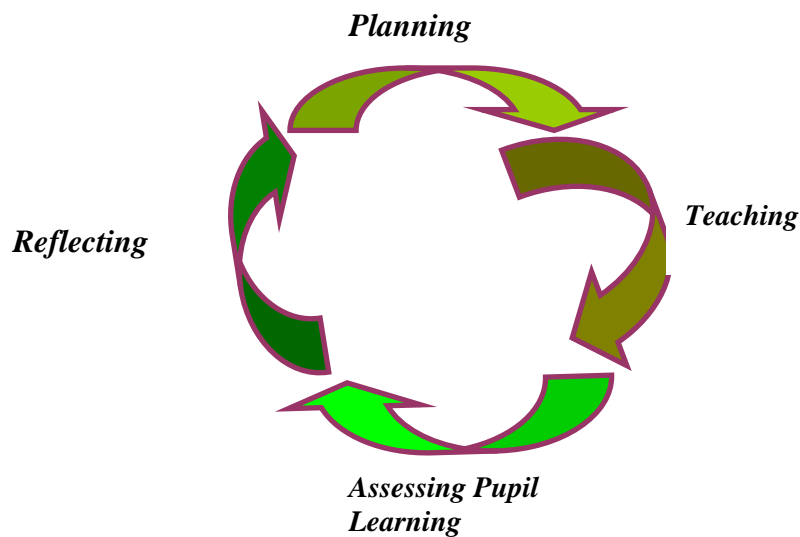


Figure 1. Competencies Measured by Teaching Portfolio

After teaching in schools for full day, elementary teacher candidates, graduates and undergraduates come to campus in the evening and participate in a student teaching seminar (EDU 465/EDU 565). It is during this seminar that the development of teaching portfolios takes place. The teacher candidates are given a document that contains guidelines for the development of teaching portfolio. *Here are the guidelines* for the development of teaching portfolio:

The elementary teaching portfolio has two parts. All of the documentation of the required teaching competencies has to be arranged within these two parts. These parts are: ***Part A:***

Introduction & Learning Community, Part B: Literacy, or Numeracy Instruction

Part A: Introduction and Learning Community

In Part A of teaching portfolio, you are required to complete two tasks. The first task is for you to provide information about your pupils. For the second task, you are to describe different aspects of the learning community that you have developed in you classroom. For the completion of these tasks, you are to:

1. Complete the Class Profile Form (See Appendix A). Include it as the first page of your portfolio.
2. Write a commentary of up to two pages. You have to include an overview of the learning community you have established and continue to develop in your classroom. You may discuss and refer to all that you have done to create a learning community since the beginning of your student teaching.

Part B: Literacy or Numeracy Instruction

You are expected to develop a 2-3 lesson unit in literacy or numeracy. To complete this task, you have to do the following:

1. Give your pupils a pre-assessment before beginning the new unit and analyze the data to plan instruction. Provide a copy of the assessment and your feedback/analyses of **only two** of your students' work.
2. Develop 2-3 lesson plans of your targeted unit using the Connecticut State Department of Education's format. You have to make sure that your lesson plans have a post-assessment task that shows impact of your teaching on pupil learning.
3. Include post-assessment data of the two students you selected for pre-assessment. Compare pre-assessment and post-assessment data.
4. Teach your lessons and for one of the lessons, write a reflection. In your reflection, you must include the following:
 - ✓ What did you expect students in class to learn during the lesson?
 - ✓ How effective were your teaching activities?
 - ✓ Were your assessment tasks reliable and valid?
 - ✓ Through your assessment, what did you learn about students' progress toward concept (s) you taught?
 - ✓ Did you make any accommodations for individual students. If yes, were they effective?
 - ✓ Did you clearly inform students about their progress toward the lesson objectives?

5. Video tape a 15-minute segment of one of your lessons that gives evidence of your lesson initiation (3-5 Minutes), procedure (s), inquiry or discussion (5-7 minutes) and closure (2-3 minutes). *Videotaping tips are included in Appendix B.*

Note: Teacher candidates are permitted to use a DVD in place of a videotape.

What should teacher candidates submit for their portfolio?

- I. Pre-assessment work of two of your students with teacher feedback.
- II. Post-assessment work of the two students with teacher feedback (these should be the same students whose pre-assessment work they plan to submit)
- III. Your lesson plans with handouts if any.
- IV. Your reflection and analysis of pre-post assessment (s).
- V. Your video taped teaching segment.

It is recommended that teacher candidates submit their work in a 3-ring binder. The portfolio should have a table of contents page. All pages in the portfolio must be numbered. It is recommended for teacher candidates not to use plastic covers for individual sheets (Singh, 2004).

Evaluation of Teaching Portfolio

The teaching portfolio is evaluated by two faculty members in elementary program. The instructor of student teaching seminar (EDU465/EDU565) is the first reader. This adds to the reliability of evaluation process. In the event of disagreements, faculty readers meet and discuss the teaching portfolio being evaluated. The rubric that is used for the evaluation of teaching portfolio is included on the following pages. This rubric mirrors the rubric used by Connecticut State Department of Education for the scoring of BEST portfolios.

I. Instructional Design: *How did the teacher design units in which the students built understanding and applied knowledge, skills, and ideas?*

| <i>Performance Indicators</i> | <i>Performance Continuum</i> | | | |
|---|---|--|--|--|
| <i>I.1</i> Describe how the teacher used curriculum and knowledge about the students to establish expectations for learning. | The teacher designed activities to meet curricular objectives with little reference to knowledge about students. | The teacher used the curriculum and general knowledge about students to design activities and set expectations. | The teacher used the curriculum and knowledge about students' academic needs to design activities and set expectations. | The teacher used the curriculum and knowledge about standards, and individual students' academic as well social needs to design activities and set expectations. |
| <i>I.2</i> Describe how the teacher structured content and learning activities to support pupil learning. | Learning was primarily structured through activities that focused on memorization and recall | Learning was structured through activities that were a mix of procedural and conceptual learning | Learning was structured through sequenced activities that built on one another and supported procedural and conceptual learning | Learning was structured through sequenced activities that built on one another and focused on conceptual understanding and the learning needs of individual students |
| <i>I.3</i> Describe how instructional strategies and materials supported student learning | Strategies and materials determined instructional sequence and primarily focused students on discrete skills & following directions | Strategies focused students on task completion and materials included concrete models that were developmentally appropriate for the students | Strategies and materials included multiple developmentally appropriate models and provided varied opportunities for students to apply skills | Strategies and materials included multiple developmentally appropriate models and provided students with opportunities to apply skills and explore as well as analyze data or text |

II. Instructional implementation: *In what ways did the teacher use instructional strategies and resources to create a learning environment in which all students were encouraged to develop concepts, skills and understandings in literacy?*

| Performance Indicators | Performance Continuum | | | |
|--|--|---|--|---|
| LII.1 Describe how the teacher used reading instruction to help students develop literacy | Reading was presented as discrete skills. Tasks primarily focused on the completion of exercises and were not really connected to authentic text | Reading provided opportunities for students to build comprehension that was literal and make some connections to authentic text | Reading provided opportunities for students to build understanding. It also provided opportunity to interpret and make connections to authentic text | Reading provided opportunities for students to build understanding. It enabled them to interpret and think critically about authentic text |
| LII.2 Describe how the teacher used writing instruction to help students develop literacy | Writing was presented as discrete skills that emphasized mechanics or was used to complete specific tasks | Writing developed through a set process and form. Following of the procedure was the purpose of the activity | Writing developed through a process usually related to a prompt and was structured to communicate students' ideas in a specific format | Writing developed through a flexible process and was used to explore and communicate ideas to an identified audience for a specific purpose |
| LII.3 Describe the opportunities for students to communicate their thinking in literacy | The teacher lectured for majority of the time. The students were limited to short answer responses | The teacher asked questions that required mostly literal, low level responses | The teacher asked students to explain their answers and work with references to text | The teacher asked students to explain text, explore meaning o and/or defend their reasoning |
| LII.4 Describe how the teacher accommodated students' learning needs | The class was treated as a whole; all students worked toward the same goal at the same pace mostly on the same work | The class was structured as a whole; some students were given more time or a greater/lesser amount of work to achieve the goal(s) | The class was instructed as whole with some small group work. Students were given differentiated assignments to reach the same goal | The class was instructed in a mix of whole class, small group and individual activities. The teacher adjusted instructional goals to accommodate differences in pupil learning needs. A variety of tasks and activities were designed so that students achieved instructional goals |

II. Instructional Implementation: *In what ways did the teacher use instructional strategies and resources to create a learning environment in which all students were encouraged to develop concepts, skills and understandings in numeracy?*

| Performance Indicators | Performance Continuum | | | |
|---|--|--|---|---|
| NII.1 Describe the numeracy activities used to help students problem solve and develop numeracy | The numeracy activities offered little variety and emphasized memorizing of terms, following rules and/or developing discrete skills | The numeracy activities provided some opportunities for problem solving mostly through a single method. | The numeracy activities provided opportunities for problem solving using several methods | The numeracy activities provided multiple opportunities for students to problem solve by exploring solutions |
| NII.2 Describe how well the teacher used resources to support students' development in <u>numeracy</u> . | Resources limited opportunities for students to develop mathematical understanding. | Resources supported students' learning and application of numeracy skills. | Resources supported students' application of skills and building of conceptual understanding | Resources supported students in solving problems and applying mathematical knowledge to new situations |
| NII.3 Describe the opportunities for students to communicate their thinking in numeracy. | The teacher primarily lectured or limited students to responding in short answers. | The teacher provided structured opportunities for students to answer teacher questions and/or describe procedures for calculations. | The teacher provided opportunities for students to support answers or reasons for choosing a particular method for solving problems. | The teacher provided multiple opportunities that challenged students to explain answers and to explore various methods for solving problems |
| N.II.4 Describe how the teacher accommodated students' learning needs. | The class was treated as a whole; all students worked at the same pace mostly on the same work. | The class was instructed as a whole; some students were given more time or greater/lesser amount of work to achieve the objective(s) | The class was instructed as a whole with some small group work. Students were given differentiated assignments to reach the same goal | The class was instructed in a mix of whole class, small group and individual activities. The teacher adjusted goals to accommodate differences in students' learning needs and activities were designed so that students achieved goals |

III. Assessment of learning: *How did the teacher communicate with students about assessment and evaluate student performance?*

| Performance Indicators | Performance Continuum | | | |
|---|---|--|---|---|
| III.1 Describe the ways the teacher communicated criteria for success to promote student learning. | Assessment criteria were loosely related to performance expectations, and communicated to students in vague terms or were not communicated to students at all | Assessment criteria were related to performance expectations for the whole class and were communicated to students in general terms | Assessment criteria were related to performance expectations for the whole class & communicated to students in specific terms | Assessment criteria were closely tied to performance expectations, were clearly communicated to the whole class, and were adapted for individual students in specific terms |
| III.2 Describe how the teacher assessed and analyzed student performance. | The teacher's assessment of student performances focused on the completion of and engagement with the work | The teacher's assessment of student performances focused on the procedural: the correctness of and engagement with the work with some attention to student understanding | The teacher's assessment of student performances focused on students' conceptual understanding and application of knowledge. | The teacher's assessment of student performances focused on analyzing students' conceptual understanding, application and explanation of knowledge |
| III.3 Describe how the teacher communicated assessment feedback to students to promote learning. | Assessment feedback focused on accuracy with little or no attention to students' strengths. Communication of results was unclear | Assessment feedback included general comments and provided students with limited description of strengths and/or weaknesses | Assessment feedback included a mix of general and specific comments and provided students with some description of strengths and weaknesses | Assessment feedback was clear, specific and detailed. It provided students with a description of strengths & weaknesses related to the performance expectations |

III Assessment of Learning: How did the teacher communicate with students about assessment and evaluate student performance?

| | | | | |
|---|---|--|--|---|
| III.4 Describe how the teacher monitored student performance and used information about student performance in instruction | The teacher inconsistently monitored students' performance. There was limited evidence that the teacher adjusted instruction to meet students' learning needs | The teacher monitored activity completion and/or student engagement. The teacher made adjustments when needed that focused on procedures | The teacher monitored student progress toward achieving the lesson objectives. The teacher made adjustments when needed to address the individual and collective learning needs of students. | The teacher consistently monitored students' progress toward conceptual understanding. The teacher made adjustments when needed to address the individual and collective learning needs of students and to challenge students |
|---|---|--|--|---|

IV. Analyzing teaching & learning: How well did the teacher analyze students' learning and reflect on the connections between teaching and learning?

| Performance Indicators | Performance Continuum | | | |
|---|--|--|--|--|
| IV.1. Describe the analysis of student learning and the use of student work to support the conclusions | The teacher's analysis of student learning was limited or vague | The teacher's analysis of student learning focused mainly on the completion of the learning assignments | The teacher's analysis of student learning focused mainly on student understanding of facts and procedures, and some of the conclusions were supported by student work | The teacher's analysis of student learning focused mainly on student understanding of concepts, and the conclusions were supported by the submitted student work |
| IV.2 Describe the quality of the teacher's reflection on practice | The reflective commentary on teaching identified limited connections between teaching practices and students' learning | The reflective commentary on teaching identified general connections between teaching practices and students' learning | The reflective commentary on teaching identified general and specific connections between teaching practices and students' learning | The reflective commentary on teaching identified specific connections between teaching practices and students' learning supported by evidence in the portfolio |

Description of Participant Involvement

1. The attendees actively participated in the conversation about Connecticut's BEST program which has approximately 3000 teacher participants each year with approximately 85% pass rate.
2. They critiqued the Connecticut's BEST Program. They were informed that on average elementary teachers perform better on the literacy component of the portfolio than on the numeracy component.
3. They shared their experience/ endeavors at measuring the quality of teachers and teacher candidates.
4. They exchanged phone numbers and e-mail addresses with the presenter and with one another to continue the discussion and network.

Session Outcomes

At the end of our Roundtable conversations, the participants were able to:

1. Demonstrate knowledge about Connecticut's initiative of controlling and measuring teacher quality.
2. Discuss the strengths and challenges of the BEST Program.
3. Reflect the ways; their teacher education programs can measure quality & effectiveness of their teacher candidates.
4. Highlight the features of one institution's BEST like program.
5. Discuss the ways we can all collaborate to improve teacher quality to raise the achievement of all school children.

References

- American Federation of Teachers (2006). *Teaching quality*. Retrieved January 18, 2006 from <http://www.aft.org/topics/teacher-quality/index.htm>
- Carnegie Corporation of New York (2001). *Teachers for a New Era: A national initiative to improve the quality of teaching*. Retrieved January 30, 2006 from <http://teachersforanewera.org/index.cfm?fuseaction=home.aboutTNE>
- Connecticut State Department of Education (2006). *BEST portfolio performance results*. Retrieved January 28, 2006 from http://www.sde.ct.gov/sde/lib/sde/PDF/BEST/research_reports/BEST_Five_Year_Report_Draft_9_05.pdf
- Connecticut State Department of Education (2006). *BEST connections*. Retrieved January 15, 2006 from <http://www.ctbest.org/>
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education policy analysis archives*, 8(1). Retrieved January 2, 2006 from <http://epaa.asu.edu/epaa/>
- Eastern Connecticut State University (2006). *Undergraduate & Graduate Catalog 2006-2008*. Willimantic, Author
- National Commission on Teaching and America's Future (2004). *National Commission on Teaching and America's Future (NCTAF) Summit on High Quality Teacher Preparation*. Retrieved from May 15, 2005 from http://www.nctaf.org/resources/events/2004_summit-1/documents/Summit_3_Report.pdf
- Singh, D. (2004). *Development of elementary teaching portfolio: A manual*. Unpublished manuscript, Eastern Connecticut State University, Willimantic, CT

Appendix A

Class Profile Form for Teaching Portfolio

Please complete this form and include it as the first page of your teaching portfolio.

1. Portfolio school configuration:

Elementary Middle (circle one)

2. Grade level in your portfolio class

3. 1 2 3 4 5 6 (circle one)

4. Total number of students in class _____

Number of Boys _____ Number of Girls _____

Number of student with special needs _____

Number of students with limited English proficiency _____

5. Duration of instructional time for each class _____

6. Text (s) and electronic resources used for unit development _____

7. Number of other adults in classroom during instruction

8. Paraprofessional _____ Co-teacher _____ Cooperating teacher _____ Other

(check all that apply)

Appendix B

Tips for Videotaping

You would need to check with your cooperating teacher about school policy on videotaping children. You might have to seek parental permission to videotape children in your class. In that case, develop a consent form and send it home with children

1. Reserve the necessary video/audio equipment well in advance.
2. Do a pilot run of your videotaping equipment before the actual day of taping in order to make sure that the equipment is functional and is free of technological problems.
3. Obtain a camera operator. You might ask your cooperating teacher, a paraprofessional, or a media specialist if available in your school.
4. Predetermine the features of your lesson that you would like to be captured.
5. Predetermine where you would place the camera so that all you want to record does get recorded.
6. Rehearse your lesson and the videotaping process.