

Christa McAuliffe Award for
Exemplary Programs in
Teacher Education

WSE LEARNING-
CENTERED COGNITIVE
COACHING MODEL



Final Proposal 2006

Submitted by:

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Describe your program: mission, goals, structure, etc. Include discussion of how this is a cooperative effort between the faculty in the college of education, arts and sciences, and P-12 schools.

The **WSE Learning-Centered Cognitive Coaching Model (LCCCM)** program is based on the work of Arthur L. Costa and Robert J. Garmston, *Cognitive Coaching* (2002). They have synthesized work from researchers such as Glickman (developmental supervision), Goldhammer and Cogan (clinical supervision), Berliner (teacher “executive processes”), Sergiovanni (supervision theory), Sprinthall (teacher as adult learner), Sternberg (metacognition and intelligence), Koestler (holonomy), and Keagan (adult development). In their book *Cognitive Coaching*, Costa and Garmston state, “Research demonstrates that teachers with high conceptual levels are more adaptive and flexible in their teaching style. They act in accordance with a disciplined commitment to human values, and they produce higher achieving students who are more cooperative and involved in their work. Cognitive coaching increases the capacities for sound decision making and self-directedness, which helps to achieve goals like these (p. 4).”

Building and sustaining career teacher and teacher candidate key capacities for increasing effectiveness utilizing cognitive coaching has been a long-standing practice of the Watson School. This **LCCCM** program is also supported by extensive research developed by Colton and Langer (1993, revisited 2003) using *A Framework for Teachers’ Reflective Inquiry*. This framework portrays the interdependent nature of the components: the teacher’s professional knowledge base, the analysis cycle for constructing new understanding, the teacher’s filtering system, and the teacher’s personal characteristics. The framework can be applied to any case of teacher’s decision making (e.g., during planning, teaching, or assessment). Moreover, the framework is extremely powerful when applied through a teacher’s analysis of student work. Many of the ideas described in the framework are also articulated in the National Board for Professional Standards as key factors in accomplished teaching.

The Professional Development System university-school partnership (PDS) of The Watson School of Education (WSE), University of North Carolina Wilmington (UNCW) has as its mission to produce highly competent professional educators who consistently engage in the development of *higher order instructional dispositions*. **The Learning-Centered Cognitive Coaching Model** program utilized by the WSE university-school partnership provides structured environments for developing these dispositions in candidates. This development is accomplished through the use of reflective coaching cycles focused on making instructional decisions based on the objective collection, analysis and synthesis of data. Recursive in nature, 8-10 coaching plans used by both partnership teachers and university supervisors document and facilitate dialogue to lead interns through planning, reflection and decision making, helping them become aware of their own insights and learning. Self-discovery is a process of reflection that is built into coaching as a learning disposition, reaching the interns on both an affective and a cognitive level. The coaching cycle is designed around having the partner teacher use questioning strategies to guide the novice through metacognitive thinking, enhancing his/her teaching and self-reflection in the future. By asking the right questions, coaches lead interns through the type of planning, self-reflection and self-regulation that highly competent teachers practice on a daily basis.

To this end, the Watson School has designed a **Learning-Centered Cognitive Coaching Model** program for building and sustaining key capacities for increasing teacher effectiveness of both career teachers and teacher candidates.

Key Components for Developing Higher Order Instructional Dispositions:

- ***Recognizing the Strengths of Metacognition*** ~ Novice teachers are not just involved in teaching as they begin their careers; they also are involved in their own learning about many of the techniques and strategies it takes to be an effective teacher. Coaches/teachers in this program help foster independent learning by encouraging metacognitive thinking as they coach interns to help provide them with tools to take them forward as professionals. Key dispositions that are developed using metacognition are ***self-reflection*** and ***self-regulation***. These can be made visible before teaching through developing the plan of teaching; during teaching through the maintenance and monitoring of the teaching plan; and after teaching through evaluating the process.
- ***Using Dialogue to Reveal “Invisible” Cognitive Skills*** ~ Trained partnership teacher coaches use dialogue to lead candidates through planning, reflection, and decision making, helping both interns and teachers become more aware of their own insights and learning.
- ***Scaffolding Cognitive Maps to Refine Instructional Choices and Behaviors*** ~ Cognitive Coaching guides the development and refinement of cognitive maps. The *Planning Conference* allows the interns to talk about their thinking and decisions about teaching a lesson and explore a variety of implementation possibilities. The *Observation and Data Collection* process requires the intern to focus on a specific aspect of his/her teaching for the purpose of growth relative to or in terms of placing emphasis on student achievement. The *Reflective Conference* helps scaffold and promote teacher reflection by asking questions that will lead to self-regulation and analysis of the lesson and learning based on the data collected. It also helps the candidate to consider how the application of the new insights can be applied to future lessons. This is the critical transformation stage that is necessary to ensure that a teacher’s instructional decisions consistently impact student learning.
- ***Using Data to Inform Instructional Decisions*** ~ Highly competent teachers utilize data from both within and outside their classroom to inform their practices. As inquirers, teachers are always observing and gathering information about their teaching and student learning. Since the data used in the coaching cycle have been requested by the intern, s/he has a much greater sense of ownership for learning, critical analysis, and reflection leading to more effective instructional decisions.

The Watson School of Education Learning-Centered Cognitive Coaching Model

program places strong emphasis on the candidates’ ability to make decisions based on information and data from reliable and relevant resources. This includes theories of learning and development, and research documenting effective methods for promoting learning and development. Effective decisions also require ongoing data about learners, including current knowledge, skills, and capabilities as well as outcomes of the learning activities in which they participate.

The WSE Professional Development System University-School partnership is the result of a long-standing and comprehensive cooperative effort among the faculty in the School of Education, the College of Arts and Sciences and P-12 schools in southeastern North Carolina. This partnership has grown to include over 100 schools and over 1100 trained P-12 educators. Partnership teachers, administrators, and university faculty participate in required training designed to provide opportunities that foster understanding of the conceptual framework, build capacity in learning-centered cognitive coaching, and develop skills necessary to develop *higher order instructional dispositions* for candidates and P-12 teachers. Together, partners have

designed a common vision of teaching and learning that is grounded in research and practitioner knowledge. The WSE collaborative partnership promotes the belief that highly competent professionals recognize that effective teaching requires continuous self-evaluation and reflection, rather than simply a set of techniques to be mastered and applied. They view themselves as both learners and teachers, welcoming opportunities for personal and professional growth. They examine both the processes and outcomes of learning activities to determine how instruction can be made more effective. Through this deep reflective process, they are better able to meet the needs of diverse learners because they recognize that learning takes place in the context of ethnic, cultural, linguistic and socioeconomic constructs. They also examine the impact of culture on their own attitudes and practices, developing a deep respect for diversity among learners.

Two training initiatives that exemplify this shared approach to clinical faculty preparation are highlighted below:

PDS Orientation Training: University and P-12 partners collaboratively designed a ten-hour PDS Orientation Training required for partner educators and WSE and Arts and Sciences faculty. It focuses on a learning-centered cognitive coaching model and the construction and maintenance of professional cultures, both of which incorporate the *Principles of Learning-Centered Coaching/Supervision*, a document co-written by partners in the pilot phase of this partnership. These principles create a collaborative framework that supports the key beliefs inherent in the **Learning-Centered Cognitive Coaching Model** program:

- Building human relationships of trust and respect
- Working in collegial, collaborative ways to develop patterns of open communication with all participants
- Supporting growth and development through cycles of coaching
- Basing coaching/supervision on knowledge about the person being supervised
- Encouraging personal ownership for learning, critical analysis, and reflection so that growth and development can occur
- Understanding that the learner has the ultimate responsibility for his or her own learning
- Believing that supervision should guide growth and development
- Understanding that knowledge generation can occur for all educators regardless of their level of practice
- Utilizing cycles of assistance as the framework for supervision: pre-conference, observation and data collection, post-conference. (See Figure 1)

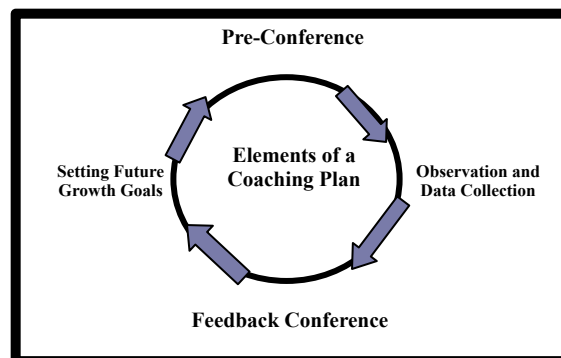


Figure 1: Cycle of Assistance for Intern Coaching Plan

Focusing the training for this program on these principles forces partners to view supervision/coaching through a collaborative, growth-oriented lens rather than the teacher-as-expert lens. Training includes viewing a coaching cycle, discussing data-gathering techniques, effective questioning, and the importance of dialogue in building trust.

PDS Extended Training: In addition to the ten-hour training, feedback from partners indicated that when they are assigned an intern, the mentor teachers should be refreshed on understanding their roles and responsibilities, intern expectations, and recommit to the principles of cognitive coaching. This need resulted in the creation of an *Extended Training* that helps partner teachers revisit their roles and responsibilities and the ideas inherent in the cognitive coaching process. PDS offers these training sessions in each of the partnership districts shortly before the WSE teacher interns arrive at their school sites to begin their practicum. Training materials offered during the *Extended Training* sessions focus on these aspects:

- *Cognitive Coaching: What Is It?*
- *Asking the Right Questions: The Mark of a Good Coach*
- *At a Glance: PDS Roles and Responsibilities*
- *The new National Educational Technology Standards for Teachers*
- *Thinking Framework for Designing and Facilitating Reflective Site Seminars*
- *Site Seminar Feedback Form*

In Brunswick County, an early commitment to more extensive training of partnership teachers and administrators resulted in a collaborative agreement requiring their teachers to take two graduate level courses focusing on Learning-Centered Supervision (EDN 567) and Practicum in Learning-Centered Supervision (EDN 578). These two courses also are approved by the North Carolina Department of Instruction for teachers to become licensed as mentors.

Two other strong collaborative efforts supporting the principles of the **Learning-Centered Cognitive Coaching Model** program are the *Ideas, Insights, and Challenges (IIC)* conferences held each semester and the *Reflective Site Seminars*. Both of these collaborative structures are based on the belief that the partnership must engage members in on-going professional development and open communication and reflection in order to ensure and sustain continuous growth and improvement. The *IIC* conferences provide a day for dialogue to occur between partnership teachers who are hosting interns and university faculty to address current educational issues and collect relevant feedback informing the practices of coaching interns. Likewise, the required *Reflective Site Seminars*, attended by interns, partnership teachers, administrators and university supervisors expose interns to critical modeling of professional dialogue and reflective practice focused on learning outcomes.

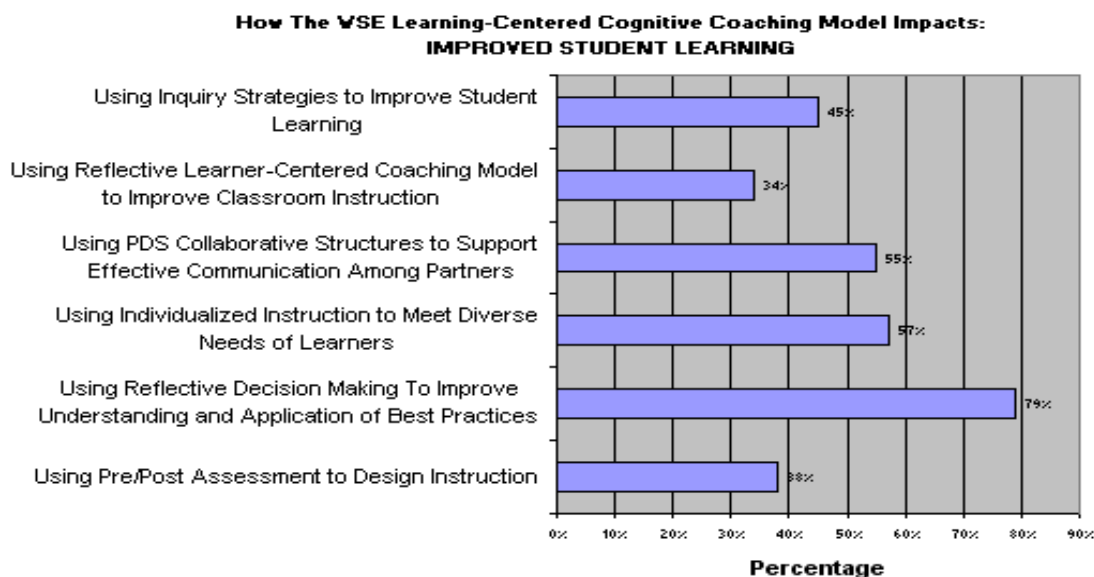
What evidence do you have of the program’s positive impact on teacher candidates or in-service teachers?

An important piece of evidence that supports the positive impact of the **WSE Learning-Centered Cognitive Coaching Model (LCCCM)** on teacher candidates was gathered at a recent *Ideas, Insights and Challenges* conference. Over 100 partnership teachers from 29 schools participated in this day-long conference and were asked to identify specific areas of impact the program has had on:

- Improved Student Learning
- Better Preparation of Prospective Educators
- Inquiry and Assessment Practices
- Improved Professional Development

The following data were collected from all partnership teachers attending the conference. The responses were disaggregated and categories were identified under each area. The figures below show two of the four areas surveyed. Figure 2 displays the percentage of partnership teachers who indicated that the **WSE LCCCM** program has had positive impacts for their candidates in the area of Improved Student Learning.

Figure 2

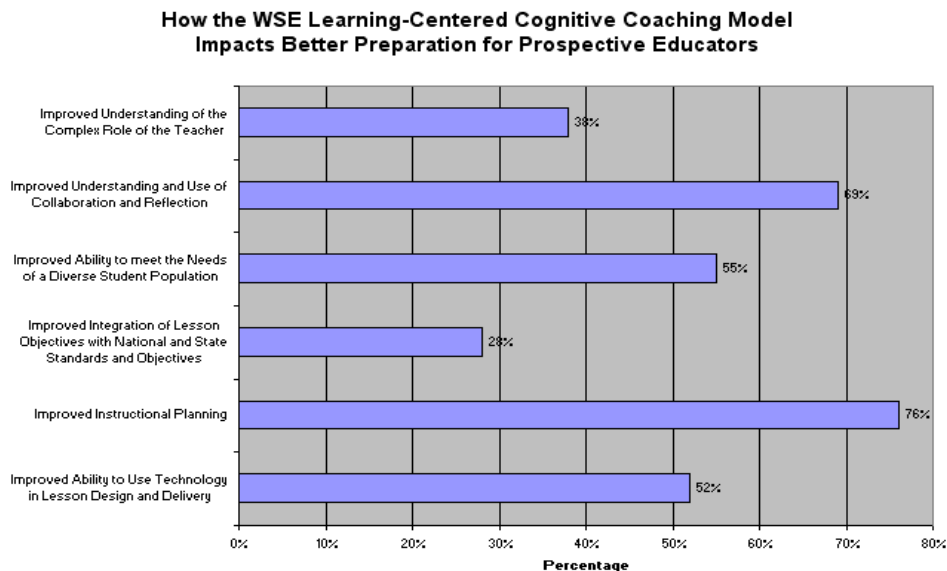


As indicated in Figure 2, partnership teachers’ responses revealed positive connections to the principles of the program and ways the process has contributed to their interns’ ability to improve student learning. The *using reflective decision making to improve understanding and application of best practices* survey item received the highest percentage of positive impact responses from the partnership teachers. Though all indicators supported the principles behind the program, 79% of the survey respondents indicated that the partnership program improved their intern’s understanding and application of best practices through reflective decision making.

Partnership teachers also were asked to determine the impact the **WSE Learning-Centered Cognitive Coaching Model** program had on *helping better prepare prospective educators*. The highest percentage of responses in this impact area was *improved instructional planning*; 76% of the respondents selected this survey item as a direct impact of the WSE Coaching Model. Two

other areas, *improved understanding and use of collaboration and reflection* and *improved ability to use technology in lesson design and delivery* also were high indicators of the program’s impact for better preparation of prospective teachers. Figure 3 displays the percentage of partnership teachers indicating that the **WSE Learning-Centered Cognitive Coaching Model** program has had a positive impact on assisting candidates in becoming better- prepared educators.

Figure 3



As presented in Figure 3, 76% of the partnership teachers surveyed identified *improved instructional planning* as a positive impact of the **LCCCM** program. Sixty-three percent of the survey participants considered the program to have positively impacted the ability of teacher candidates to *understand and use collaboration and reflection*. In addition, 55% of the participants identified an improved ability of teacher candidates to *meet the needs of a diverse student population*. Fifty-two percent of the participants indicated that teacher candidates improved their *ability to use technology in lesson design and delivery*.

Thirty-eight percent of the participants identified *improved understanding of the complex role of the teacher* as a positive impact effect of the **LCCCM** program. The lowest impact effect response category identified by participants was *improved integration of lesson objectives with national and state standards and objectives* at 28%. This indicates a need for increasing training and support services in the area of integration of lesson objectives and standards for both teacher candidates and their partnership teachers.

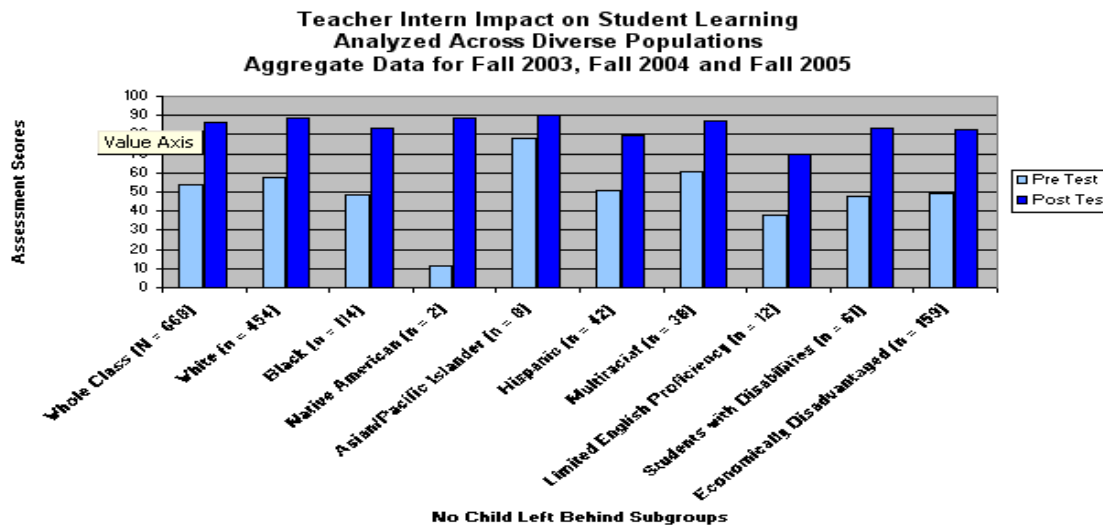
The underlying intent of this **Learning-Centered Cognitive Coaching Model** program is for analytical thinking about student performance to become an automatic self-questioning script that candidates have practiced and have seen modeled by partnership teachers and university supervisors in the cycles of assistance. One of the most powerful impacts on candidate learning in this program is the willingness to take ownership of their own learning. By developing graduates’ cognitive skills and dispositions, this program produces teachers who are committed to improving student success levels and who have the confidence and the skills necessary to positively impact P-12 learning.

What evidence do you have of the program’s graduates’ positive impact on P-12 pupil learning?

Throughout the internship candidates in the **WSE Learning-Centered Cognitive Coaching Model (LCCCM)** program discuss, write and compile documentation about P-12 student learning for their coaching plans and electronic portfolio. This verbal and written dialogue is a highly effective means of developing and documenting student and candidate learning because it provides a vehicle for candidates to analyze their own decisions about student learning and instruction. The coaching plan in particular provides the opportunity to sit with other educators (and alone) to gain some understanding of how students learn and the role of professional decision making and practice in promoting that learning. Both the electronic portfolio and coaching plans help the candidate capture and summarize ideas. The questions raised engage candidates in the critical process of ongoing inquiry so necessary for graduates to possess in their ability to improve learning in their classroom.

The **WSE Learning-Centered Cognitive Coaching Model** program also places strong emphasis on the candidates’ ability to use assessment to guide instructional practice. The **LCCCM** program stresses that formal and informal assessment should be continuous in a classroom and should provide teachers with knowledge about their students that is necessary for planning and instruction. As part of the assessment of candidates’ ability to improve P-12 student learning, early childhood, elementary, middle school, and special education interns are required to prepare a pre- and post-assessment analysis of students’ knowledge in an area using the NCLB subgroups to plot performance (See aggregate data in Figure 4). They are also asked to reflect on how they know and can demonstrate that their students are mastering the skills that they teach.

Figure 4



This *Assessment Data Analysis* is completed and placed in the candidates’ electronic portfolio utilizing *TaskStream* web-based tools. Included in the assessment data are a lesson plan from the skills taught, a student assessment sample, class assessment analysis graph, and a reflection focusing on the question about student learning, the implementation of a teaching plan based on the question, collection of data, and an in-depth analysis and reflection based on the results. One student stated in her reflection:

The most important idea that I learned about assessment during my internship was the fact that assessment can be positive if the teacher makes it positive. I noticed that many teachers bombarded their students with paper and pencil tests and did not take the time to assess informally. Through first-hand experience, I recognized the importance of using a variety of assessment tools AND applying the results to future lesson planning. Without applying the results, the assessment is not useful.

This candidate’s reflection demonstrates that through data collection, analysis and reflection as applied in this **LCCCM** program, candidates’ ability to improve understanding of P-12 pupil learning is positively impacted.

Further evidence of the program’s positive impact on the candidates’ ability to improve P-12 learning across all subgroups of *No Child Left Behind* also is illustrated in Figure 4. This graphic depicts data collected through a random sampling from ten interns each semester for a total of 30 interns using their *Intern Analysis Assessment Project*. The sampling methodology was accomplished by selecting every third intern in the TaskStream listing.

The power to positively impact P-12 learning throughout the subgroups of NCLB through analysis and reflection is evidenced in the following reflection:

After completing this assessment project, I concluded that “research-tested” strategies cannot be applied to students across the board. This is especially true when using graphic organizers to teach information to students living in poverty. The use of this tool is rather difficult because impoverished students structure their knowledge in a much different manner than middle and upper class students do. Research has proven that students in poverty comprehend and retain information when it is presented in stories. This certainly proved true in my class, as students performed at a much higher rate when presented the information in a story. When the same information was presented in graphic organizers, they were unable to apply the knowledge. Perhaps a more accurate way to use graphic organizers in the classroom would be through the use of combination notes.

Clearly this candidate used assessment strategies, analyzed their significance, and reflected on the implications for improving the learning of diverse students in her classroom.

A 2005 spring/fall exit evaluation of WSE interns who participated in the **LCCCM** program clearly documents candidate proficiency in eleven INTASC-related categories of the Performance Evaluation Scale. Grades submitted collaboratively by P-12 teachers and university supervisors document that candidates scored at or above 96% in all eleven categories.

**Internship Final Evaluation
Percentage Score on PDP Categories
Comparison Spring 05 with Fall 05
N=311**

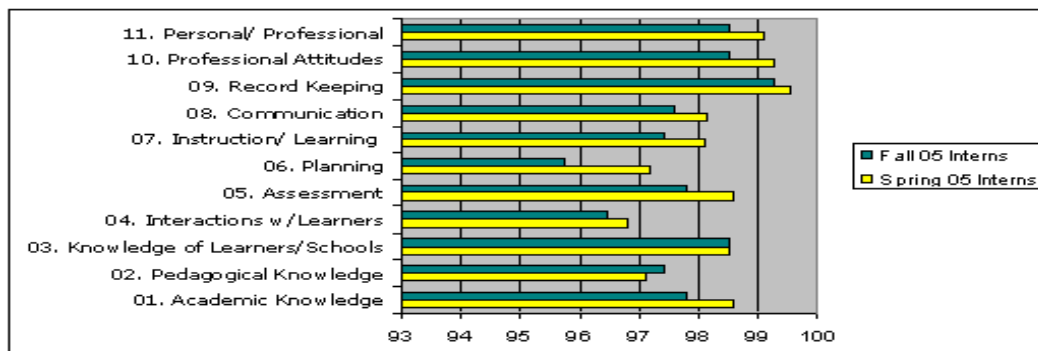


Figure 5

Candidates engage in the process of cognitive coaching on all Performance Evaluation Scale categories and document the coaching cycles through the use of coaching plans. The **LCCCM** program requires continual self-regulation and self-reflection. These metacognitive processes allow candidates to talk aloud about their thinking and their decisions about teaching, thus refining their instructional choices and behaviors. By developing their own cognitive capacities for self directedness, candidates are better able to promote higher cognitive abilities in the students whom they teach.

Partnership teachers trained in the **LCCCM** program validate candidate growth in analytical and reflective inquiry skills required to explore the link between candidate teaching and students' learning. The program has had strong impact on candidates' ability to discover, define, and analyze their students' areas of need. Using the cognitive coaching cycles not only allows interns to benefit from reflective analysis but also allows partnership teachers to reexamine and refine their own behaviors and beliefs. As one P-12 teacher shared,

To me learning-centered supervision is a way to help a teacher candidate reach their potential in teaching and also help me reach mine. Not only does it allow for the one who is being mentored to grow, but it allows for the one who is doing the mentoring to grow as well. Learning-centered supervision is not a one-sided approach to mentoring where the mentors tell the interns what they are doing and if they think it is good or not. It is a system to guide the intern and the mentor through strengths and weaknesses and allows for both parties to take an active role in improving themselves and impacting student learning.

A strong tenet of this program is the belief that "modeling" is the highest form of teaching. Partnership teachers report that as they are trained in this program, they become more keenly aware of their own commitment to improving student success. By reflecting on their learning, they model for candidates the importance of personal growth and continual improvement in becoming highly effective teachers

Based on the data collected at the Spring 2004 conference, a second *Partnership Teacher Survey* was administered during the Fall 2004 conference to 93 partnership teachers from 26 schools in which interns had been placed. The purpose of this survey was to measure teacher perceptions on the **degree of impact** that the **LCCCM** program was having. Among other components, the survey gathered data on teacher perceptions of candidates' ability to improve student learning and the degree of impact (*no impact to very strong*) that components of the program have on candidates' ability to improve student learning. The resulting data illustrate strong support for some of the major components of the **LCCCM** program.

The response results in Figure 6 reveal that 95% of the participants rated impact on *using inquiry strategies to improve student learning* as Moderate to Very Strong. In Figure 7, *using reflective learning-centered coaching model to improve classroom instruction* show that 96% of respondents indicated the impact to be Moderate to Very Strong. Figure 8 responses revealed that 89% of the survey participants rated that *using individualized instruction to meet diverse needs of learners* as having Moderate to Very Strong impact on candidates' ability to improve student learning. In Figure 9, the responses indicated 93% of the respondents perceived that using *pre-post assessment to design instruction* had Moderate to Very Strong impact on student learning by the candidate. The results of this survey strongly support the practices of this program in positively impacting the candidates' ability to improve student learning.

How the WSE Learning-Centered Cognitive Coaching Model Impacts Candidates' Ability to Improve Student Learning

Figure 6

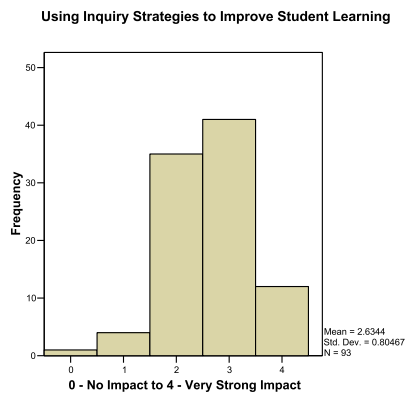


Figure 8

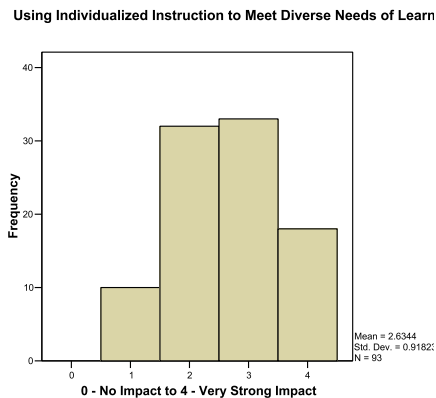


Figure 7

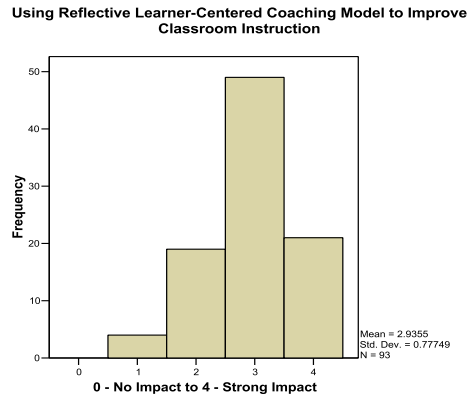
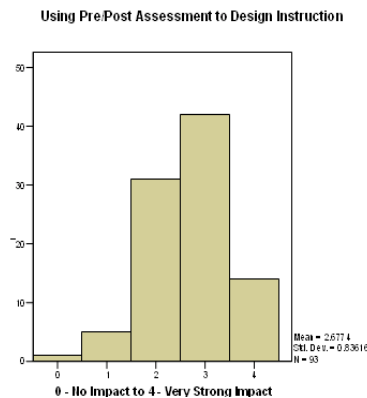


Figure 9



These data clearly indicate the **LCCCM** program's value in assisting educators in meeting the needs of all students.

Over 1100 P-12 partners in over 100 schools have been trained in the **WSE Learning-Centered Cognitive Coaching Model** program. Three hundred interns each year are oriented in this program and placed in schools with teachers and administrators who have been trained in and have formally committed to the principles of **LCCCM**. This program is systemic, sustainable, and replicable. It is not dependent on grant funding but has had consistent leadership with a strong, mutually-conceived mission built on trust that values and respects university and P-12 partners' talents and strengths. It will impact every student and every P-12 teacher who mentors a prospective teacher. All of these educators will be exposed to the knowledge, skills and higher order instructional dispositions necessary to positively impact student learning and their own professional growth. During this period of teacher shortage throughout the country, we **MUST** have programs such as **LCCCM** embedded in teacher education to produce the strongest classroom teachers possible, who are highly competent in assessing and planning for all students' learning. The **LCCCM** program has helped the Watson School of Education and its partners consistently accomplish this goal; other schools of education can succeed in producing accomplished teachers as well if they develop and sustain a similar program.