Exhibit 2.1.M PDS Partners journal article



PDSPartners

Design Features for a Yearlong Clinical Experience: Measuring Student Learning and Using Performance-based Assessments

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The purpose of this article is to show how a partnership between Monmouth University and Lafayette Mills Elementary School can increase P-12 learning, while simultaneously providing excellent teacher preparation. The primary means for accomplishing this goal is to pilot the design and implementation of a vearlong clinical experience, consisting of an approximately 100-140 hours of clinical work during the first semester and full-time student teaching during the second semester. Two key elements inform the design: 1) assessing the growth in P-12 student learning through an assessment known as Linklt, and 2) providing explicit guidance through performancebased assessments. Integrating these two elements into the design illustrates the second of the NAPDS nine essentials by fostering "a schooluniversity culture committed to the preparation of future educators that embraces their active engagement in the school community."

Partnership

The design and implementation of a pilot for a yearlong experience was made possible through a partnership between Monmouth University and Lafayette Mills Elementary School. Monmouth University is a mid-sized private university in the state of New Jersey. The student population consists of approximately 4,500 undergraduate students and 1,500 graduate students. The School of Education enrollment consists of approximately 420 undergraduate students and 200 graduate students. The School of Education has 26 faculty organized into two departments with programs in teacher education, educational leadership, counseling, and speech pathology. The Office of Clinical Experiences consists of four

staff members, and four advisors who serve the students in the School of Education.

Lafayette Mills School is one of five elementary schools in the Manalapan Englishtown Regional School District. It houses approximately 490 to 560 students each year. Starting in 2011, Lafayette Mills has hosted student teachers and teacher candidates in early clinical experiences focusing on literacy, mathematics, science and social studies. As the partnership developed into a Professional Development School, Lafayette Mills began hosting three to four student teacher candidates per semester. Course work continues to be offered on both campuses with encouragement to the Lafayette Mills teachers to attend classes with the teacher candidates.

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Interns and Internship



Design features CONTINUED FROM PAGE 1

The Yearlong Experience

Yearlong student teaching is a senior year capstone experience that occurs over two semesters. The first semester consists of a minimum of 100 hours of clinical experience followed by a second semester of full-time student teaching. Participating in the yearlong experience provides candidates with the opportunity to attend in-service meetings before the start of the year, be there for the opening of school, and follow the development of children through a full-year of teaching experience. However, designing a yearlong experience involves more than simply placing teacher candidates in clinical settings for longer periods of time. Accordingly, this initiative identified two additional goals: 1) increase P-12 learning and 2) provide more explicit guidance for teacher candidate development through performance-based assessments. These elements are discussed in the two sections that follow.

Measuring Increased Student Learning

Increasing P-12 student learning results in greater buy-in from schools, increased collaboration, and as a result, the most effective teacher preparation. Ultimately, it leads to a shared responsibility between schools and teacher preparation programs for both P-12 student learning and teacher preparation that reflects the second NAPDS Essential: "A school-university culture committed to the preparation of future educators that embraces their active engagement in the school community."

The yearlong experience has the potential to have a positive impact on student learning in three ways. First, extended experiences enable teacher candidates to build stronger relationships with children, use a greater variety of teaching strategies, and thus have a greater impact on learning. Second, encouraging co-teaching facilitates increased student learning by enabling more differentiated and individualized instruction. Third, P-12 student learning can be increased by measuring student growth, then using the results to adjust student learning.

Measuring the growth in student learning can be accomplished in most school settlings, given the level of assessment now conducted in schools. For this project, the primary measure of student learning is a benchmark assessment published by LinkIt. LinkIt is a Common Core Standards-aligned test that is administered in grades 1-5 at Lafayette Mills Elementary. It takes approximately one hour to complete each assessment on a computer, and it is administered three times per year in mathematics and language arts during the fall, winter and spring. Student responses are entered immediately into a database.

LinkIt is a useful tool for conducting an analysis of student growth in learning for two reasons. First, it provides a comparison between mentor teachers with and without student teachers. Second, it provides three assessments of student learning through the year, the results of

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which are immediately available to teachers and administrators. Thus, it can be used as formative assessment data to inform changes in instruction during the year. The principal's policy is to distribute the student teaching placements across the staff, so the above average growth cannot be attributed to the selection of teachers.

The analysis of data reported in this article includes all the mentors of student teachers and was conducted in the two years prior to the initiation of the yearlong experience. The findings justify the use of student teachers in classrooms to increase student learning. An analysis of five teachers with student teachers in the academic year 2013-14 showed that the students of four teachers scored above the school average in both Language Arts and Mathematics. Student growth scores ranged from 1-13% above the school

average. Five of eight student growth scores were 6% or more above the school average in both Language Arts and Mathematics. The students of one of the five teachers had the same score as the school average in Language Arts and were two percentage points lower in Mathematics. See Table 1 for a full comparison.

An analysis of eight teachers in the academic year 2014-15, showed that in nine of fourteen instances the student growth scores were above the school average in both Language Arts and Mathematics. Student growth ranged from 1–6% higher than the school average. In two instances, student growth scores equaled the school average, one in Language Arts and one in Mathematics. In four cases, the student growth ranged from 1-9% lower. See Table 2 for a full comparison.

Table 1: Linklt Results for 2013-14

2013-2014	Language Arts Literacy	Language Arts Literacy School Average	Mathematics	Mathematics School Average
Teacher 1	27%	18%	48%	35%
Teacher 2	22%	18%	26%	23%
Teacher 4	18%	18%	21%	23%
Teacher 6	20%	18%	29%	23%
Teacher 7	14%	13%	26%	22%

Table 2: LinkIt Results for 2014-15

2014-2015	Language Arts Literacy	Language Arts Literacy School Average	Mathematics	Mathematics School Average
Teacher 1	7%	6%	28%	25%
Teacher 2	5%	6%	26%	25%
Teacher 3	15%	20%	42%	42%
Teacher 4	26%	20%	21%	20%
Teacher 5	22%	20%	43%	42%
Teacher 6	14%	9%		
Teacher 7	9%	9%	33%	42%
Teacher 8	23%	20%	17%	20%



Table 3. InTASC Standard 2 Rubric: Learning Differences – One-on-One or Small Group Intervention
The teacher candidate develops differentiated instruction over a series of lessons for an individual student or small group of students who vary culturally/ Inguistically or have special needs. Setting up and managing small group work is a high leverage teaching practice that can be assessed at the Initial/Intermediate and Intermediate levels. The evaluation is based on the candidate's plan, his/her enactment of the plan, his/her assessment of the plan, and the student response. The lesson should provide ample evidence of differentiation for individual students through adaptations to the materials, instruction, and assessment of students.

Criteria (Check all that apply)	Does Not Meet Expectations	Approaching Expectations	Meets Expectations	Exceeds Expectations
Plan: Did the candidate Use data on student cultural, linguistic, or developmental differences to inform the plan? Plan an adaptation to address a specific student need? Provide a justification for why the plan would work?	The candidate has a limited awareness of individual differences in the classroom. The plan does not consider developmental differences among learners. No accommodations are included. The justification for the plan demonstrates little insight into the developmental levels among students.	The candidate demonstrates a growing awareness of individual differences in the classroom. The plan addresses a limited range of developmental levels and does not consider developmental differences among learners. A few accommodations are included. The justification for the plan demonstrates some insight into the developmental levels among students.	The candidate regularly discusses the varying levels of student development with the teacher. The plan includes accommodations for learners based on the candidate's knowledge of individual learners' development (cognitive, linguistic, social, emotional, and physical). Consistent connections are made between the plan for instruction and the existing knowledge about child development.	The candidate regularly assesses individual and group performances in order to design and modify instruction to meet each area of development (cognitive, linguistic, social, emotional, and physical). The plan includes scaffolds intended to increase the learners' development. Deep connections are consistently made between the plan for instruction and developmental theory.
Criteria (Check all that apply)	Does Not Meet Expectations	Approaching Expectations	Meets Expectations	Exceeds Expectations
Materials: Did the candidate Create a set of materials that differentiated instruction to meet the individual needs of students? Create materials that had clear directions? Create materials that were consistent with the learning goal?	The materials developed include significant content inaccuracies that will lead to learner misunderstandings. Materials reflect a onesize-fits-all approach that demonstrates little ability to adapt the lesson to fit individual learners.	The materials developed are accurate and reflect a growing awareness of student differences and capabilities. The candidate uses some data to make instructional decisions. The materials developed are clear and of interest to student learners.	The candidate uses data to plan lessons that are developmentally appropriate, enhance the delivery of instruction, and are relevant to the learning goals. Students stay on task during the lesson.	The candidate develops highly engaging materials to meet the learning needs of each individual. Students appear highly motivated by the candidate's fluid employment of multiple instructional approaches and multiple assessments.
Criteria (Check all that apply)	Does Not Meet Expectations	Approaching Expectations	Meets Expectations	Exceeds Expectations
Instruction: Did the candidate Adapt the lesson to meet the needs of the individual while simultaneously satisfying the learning goals? Use multiple approaches to differentiate instruction?	The candidate's instruction demonstrates very few or no adaptations to meet the needs of individual students. There is little evidence of differentiated instruction. Learning goals are not achieved.	The candidate demonstrates some capacity for adapting individual lessons to meet student needs and is beginning to see more approaches to differentiating instruction. Individual learning goals are sometimes achieved.	The candidate effectively differentiates instruction for a small group of students. Varied approaches are used on a consistent basis and individual learning goals are achieved consistently.	The candidate makes instructional decisions based on each learner's cognitive, linguistic, social, emotional, and physical development. Learners consistently exceed the learning goals.
Criteria (Check all that apply)	Does Not Meet Expectations	Approaching Expectations	Meets Expectations	Exceeds Expectations
Assessment: Did the candidate Create alternative assessments that were appropriate to the learning goals? Assess student thinking at the higher levels of Bloom's taxonomy?	The assessments reflect little differentiation for individual students, primarily target lower level thinking, and do not address higher order thinking.	The assessments show evidence of differentiation. Some of the assessments address higher level thinking skills.	The candidate provides students with multiple ways to demonstrate their learning at the higher levels of Blooms taxonomy.	The candidate uses assessment to maximize the development of knowledge, critical thinking skills, and problem solving and make inferences that lead to the development of new strategies.



Table 3 Continued

Criteria (Check all that apply)	Does Not Meet Expectations	Approaching Expectations	Meets Expectations	Exceeds Expectations
Student Response: Did the students Engage with the lesson and remain on task for its duration? Ask appropriate questions? Engage in thinking at all levels of Bloom's taxonomy?	There is evidence of unhealthy or disrespectful interactions between teacher and learner or between learners. Students don't appear to be motivated. The candidate allows disruptive behavior to interfere with learners' learning.	The candidate demonstrates respect for learners and provides a learning environment that serves primarily to control learners' behavior and minimally supports the learning goals. Students remain on task and the lesson goals are achieved.	The candidate demonstrates rapport with and respect for learners. The candidate provides a supportive, low-risk social environment that reveals mutual respect among learners. Students are engaged and consistently achieve the learning goals.	The candidate is constantly building and nurturing relationships with students, who appear highly motivated and willing to explore the material beyond the learning goals.

Performance Rubrics

The performance of P-12 students is dependent on the performance of the teacher candidates in the yearlong clinical experience. To improve teacher candidate performance, a series of performancebased assessments were introduced into the pilot project. The rubrics address the quality of teacher candidate performance at four levels: Does Not Meet Expectations, Approaching Expectations, Meets Expectations, and Exceeds Expectations. Each rubric is associated with a task such as leading a small group, teaching a repeated activity, assessing higher-level thinking skills, leading a discussion, preparing a professional video, and communicating with a parent. These teaching tasks are aligned with high leverage teaching practices and the InTASC standards. See Table 3 for an example of a rubric to assess the teacher candidate's performance while working with a small group or an individual student,.

The performance rubrics are primarily used as formative assessments. The mentor teacher determines the task to be assessed, such as leading a discussion, preparing a professional video, or speaking with a parent. Then the mentor arranges the time and space for completing the task; supports the teacher candidate in planning and preparing the task; and uses the rubric to observe, evaluate, and provide feedback to the

mentor teacher. The mentor teacher can allow the teacher candidate several practice runs before evaluating or the mentor teacher can provide feedback on each as the teacher candidate completes.

The rubric provides both insight into the substance of the performance and the language to provide explicit feedback. Effective implementation ensures that teacher candidates are exposed to tasks that lead to the development of high leverage teaching practices and a successful performance on the end-of-program summative assessments. Further, they provide mentor teachers with the insight and language needed to provide highly effective feedback.

The rubric was constructed for its ease of use, and therefore, requires a minimal amount of writing on the part of the mentor teacher. Preliminary feedback from teachers indicate that the performance-based assessments are not difficult to use, provide guidance for organizing teaching tasks in a developmental sequence, and serve as a useful scaffold for providing feedback to teacher candidates.

Discussion

The design for this partnership project was based on two principles 1) increase student learning

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and 2) foster teacher candidate development through the use of a performance-based rubric. One of the foci for this project was the collection and analysis of student learning data using Linklt. The findings show that classrooms with student teacher candidates usually promote increased student growth. As a result, many teachers are now requesting a yearlong student teacher candidate for the 2016-2017 school year.

In addition, these findings can help promote the partnership with the school and university communities. They emphasize the importance of P-12 learning and provide a concrete manifestation of the partnership's value to all stakeholders. The data can also provide insights into the effectiveness of the program structure and design. Finally, the data can provide feedback to improve the co-teaching performance of the mentor teacher and the teacher candidate.

The direct result of the yearlong pilot project at Lafayette Mills is fulfillment of the second NAPDS Essential, the creation of "a schooluniversity culture committed to the preparation of future educators that embraces their active engagement in the school community." The Lafayette Mills Elementary School students view the Monmouth teacher candidates as coinstructors with their mentor teachers, and the parents observe the interaction between our two institutions as integral with achievement. The result is a true learning community, consisting of P-12 students, teacher candidates, mentor teachers, professors, and administrators. As Monmouth University shifts to a yearlong student teaching experience, we plan to extend the data collection to include the Directed Reading Assessment and the PARCC test results. We will also continue to review and revise our performance assessments. Our goal is to increase student learning while simultaneously providing high quality teacher preparation

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