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Teachers for a New Era at CSUN: Year 3 Report

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Preface

"Teachers for a New Era at CSUN: Year 3 Report" is designed to promote a conversation among participants in the initiative. We wish to thank the many individuals at CSUN who generously contributed their time and thoughtful observations to this evaluation.

Teachers for a New Era at CSUN: Year 3 Report

Introduction

After 3 years of work, Teachers for a New Era (TNE) at California State University at Northridge (CSUN) has made great strides. The initiative has matured into a campuswide reform of teacher preparation. It has evolved even beyond the campus, with efforts that include local K-12 schools and community colleges. Recently, other CSU campuses have begun learning about TNE and the changes under way at CSUN. Given the size and complexity of CSUN, many challenges remain, and much work remains to be done. But the initiative has matured enough that there is now broad consensus among the TNE leadership about the initiative's successes and challenges.

The SRI formative evaluation team has been following the evolution of TNE for the past 3 years. In the first two reports to the Provost, we attempted to answer some basic questions, including: Who are CSUN teacher candidates? Who are the CSUN faculty who prepare the teacher candidates? How familiar are different members of the university faculty with the TNE initiative? How strong is faculty support for the TNE initiative? This year's report focuses less on the successes and challenges and focuses more on the lessons learned through TNE activities. After describing accomplishments from the past year and identifying common understandings gained from the various activities, we identify areas that need further investigation and offer suggestions for future action.

This report is based on interviews with TNE leaders, conducted periodically throughout the year. In addition, we interviewed nearly 30 CSUN faculty and conducted follow-up interviews with about half of them to chart their progress during the year. We also conducted interviews with school principals from the clinical practice sites and conducted focus groups with clinical practice site staff, teachers, and participants. We attended several committee meetings, as well as the 2-day TNE retreat. Finally, we reviewed key documents as they were developed.

The report is organized around the three design principles that have guided the TNE initiative since its inception:

1. *Decisions driven by evidence*: The design of teacher preparation programs should be driven by evidence of effectiveness.

2. *Engagement with the arts and sciences*: Faculty from education and the arts and sciences need to be collaboratively engaged in teacher preparation.

3. *Teaching as an academically taught clinical practice profession*: A strong base of professional knowledge about effective teaching practices exists, but given the nature of teaching, preservice teachers need to acquire this knowledge through clinical practice.

Each section of the report highlights key accomplishments during Year 3 of the initiative, focusing on lessons learned from the activities. It then elaborates on what else needs to be known to accelerate progress. We end each section by presenting suggestions for future action. In the concluding section of the report, we posit a new conception of teacher education that has implications for each of the design principles and the continuing work of TNE.

Decisions Driven by Evidence

As all TNE grantees across the country have discovered, compiling and using data to drive decisions is a very challenging task. Year 3 at CSUN saw significant progress in building data systems and conducting research on teacher preparation. First, a quantitative and qualitative pilot study of CSUN graduates was completed. Second, the development of a data warehouse became a reality. No longer just an idea, university leadership began to focus on the data warehouse, and various offices at CSUN responsible for the gathering and disseminating information became deeply involved with it. We begin this section with a review of the pilot study.

What did we learn from the pilot study?

In Year 3, the TNE evidence team successfully completed a pilot study of the effects of CSUN's teacher preparation programs on its graduates and their students' achievement. By design, the pilot study was exploratory and served mostly to prepare TNE researchers for the task of undertaking a large-scale study in the future. To fulfill its preparatory role, the study needed to provide TNE researchers with experience with databases that will be used eventually in the large-scale study and the opportunity to develop, use, and reflect on qualitative instrumentation for the large-scale study. The pilot study succeeded on both counts.

The evidence team finalized an agreement with LAUSD for accessing individual students' achievement data linked with their teachers at the elementary level. Once LAUSD provided the dataset, TNE researchers added characteristics of CSUN graduates that researchers hypothesized to be indicators of how well prepared graduates might be to teach. Merging the datasets and conducting the preliminary analyses built researchers' capacity for conducting the large-scale study. They were able to identify weaknesses in CSUN's data system that TNE can now work to remedy; for example, they learned that CSUN does not have sufficient indicators of candidates' performance on licensing examinations. They also became familiar with the nature of data in the combined dataset and the steps necessary to prepare such data for analysis. With this experience, researchers will have better data for the large-scale study and will be prepared to work with those data more efficiently.

The evidence team also developed qualitative instrumentation, trained observers, selected a sample of teachers to participate, and collected data. In the process, the researchers learned valuable lessons about the characteristics of teachers who graduated from various programs. For example, many of the teachers in both the traditional and intern paths taught for several years before completing CSUN's preparation programs. Researchers realized that the population of CSUN graduates is quite varied in terms of education and experience, and therefore they need either a more complex strategy for sampling teachers or new strategies for recruiting teachers for the large-scale study. In addition to informing the sampling strategy, piloting the qualitative methods illuminated the extent to which the qualitative instruments provide data that address the

research questions in a rigorous manner and provided the opportunity to revise the instruments accordingly.

What do we still need to know after the pilot study?

Before conducting the large-scale study, the evidence team needs to address several questions raised by the pilot study. The first question is, "How can teachers' CSUN preparation be described accurately?" The pilot study documented the fact that many candidates do not fall neatly into researchers' conceptions of the CSUN preparation programs. For example, many teachers in the traditional program had teaching experience and may, in fact, have been teaching while in that program. As a result, researchers found it challenging to select an appropriate sample for the qualitative study. This finding has even larger implications for the quantitative study. How would researchers classify someone who taught on an emergency permit, then enrolled in CSUN's traditional program while teaching, and finally completed the program as an intern? A reconceptualization of candidates' path will be necessary to avoid either classifying a large number of candidates as ineligible for the study because they switched programs or making groupings of candidates that do not accurately capture candidates' education or teaching experience.

The second major question raised by the pilot study is, "What, other than teachers' CSUN program, accounts for differences in student outcomes?" The researchers are familiar with McCaffrey, Lockwood, Koretz and Hamilton's (2003) review of research on value-added modeling (VAM). The purpose of VAM is to isolate the effects of individual teachers from all of the other factors (e.g., students' characteristics, including prior achievement; the characteristics of students' classes; and school characteristics) that affect student achievement. The statistical models used in the pilot study do not address these other factors adequately. As a result, although one possible interpretation of the findings is that interns are less effective than teachers who earned their credentials through ACT or the traditional program, other possibilities cannot be ruled out. For example, it could be that interns are assigned more difficult students (e.g., those with lower incoming achievement). Or, perhaps, higher-functioning schools are more successful in recruiting fully certified teachers and thus have fewer interns. In this case, the difference in student achievement between graduates of the intern, ACT, and traditional programs could be

explained by differences in school quality. The use of more complex statistical techniques could help researchers explore the likelihood that the differential findings are attributable to differences in program quality, as opposed to other factors.

The third major question emerging from the pilot study is, "How could the qualitative portion of the study contribute to an understanding of the characteristics of effective preparation?" Researchers completed only the smallest pilot of qualitative instrumentation. In examining those instruments, it is unclear which constructs researchers believe are related to teacher quality or how coding schemes would be analyzed to address teacher effectiveness. Without defining the assumptions embedded in these instruments, it is likely that researchers would gather a substantial amount of data but would lack an analytic strategy with which to conduct the analysis.

Suggestions for action based on the pilot study

The evidence team needs to modify some aspects of the work to apply the experience from the pilot study to the large-scale study. We recommend action on three fronts:

1. Researchers should develop a way of thinking about candidates' progress through CSUN preparation program(s) that accurately reflects the varied trajectories of all students.

2. The statistical models used in the pilot study were sufficient for the task at hand— namely, to explore the process of obtaining data and to learn about the nature of the data. Although the most sophisticated value-added models may be beyond the scope of the large-scale study because of their data requirements and statistical complexity, TNE researchers should use of some of the simpler value-added model types in the large-scale study. These types of models produce less biased estimates of the outcome of interest, teacher quality, than those used in the pilot study without requiring substantially more data or statistical capacity.

3. Researchers should use the work on effective teaching conducted under TNE to narrow the constructs on which data are collected. For example, researchers might focus on evidence of teachers' use of pedagogical content knowledge in mathematics instruction. A strong and empirically testable theory of effective teaching should

guide the development of instruments to measure teacher or student behaviors that exemplify good practice.

What did we learn from the development of the data warehouse?

Largely because of the personal participation of the Provost, the development of a data warehouse moved forward during Year 3. Regular planning meetings were held, the Office of Information Technology Resources was brought in to help construct the warehouse, and the Office of Institutional Research and Planning spearheaded a design for the warehouse.

In addition to creating a growing appreciation of the complexity of the task, building the data warehouse highlighted the fact that important information about program inputs, student characteristics, and student outcomes is collected by different parts of the university in different ways. Some of these data are in electronic form, and some are kept on paper records. Thus, a major accomplishment was to determine the kinds of data that were being collected at the department and college levels, as well as in various offices. Cataloguing the data helped reveal what important information needed to be collected in electronic form in the future. In addition, work on the data warehouse demonstrated both the value and the feasibility of creating a central location for information on teacher preparation at CSUN.

What do we still need to know about building the data warehouse?

The development of the data warehouse raised important issues about data collection and use at CSUN. The primary task for the university is to articulate the purpose or purposes of the data warehouse. Although the impetus for the data warehouse was based on TNE's first design principle and a desire to better use evidence for decision-making, decisions about what data to include in the warehouse are still being made. As the name implies, some view the data warehouse as a place to store as much data as possible so that the warehouse can serve many purposes. The credential office, for example, has a long-standing need to improve its record-keeping and data systems. Thus, it has a need for the data warehouse to include all kinds of student information, from student grades and test scores to vaccination records. At the same time, the College of Education has a need to use the data warehouse to meet the National Council

for Accreditation of Teacher Education (NCATE) requirements. Thus, considerable effort is under way to produce electronic versions of paper forms required for NCATE certification.

A more recent vision for the data warehouse, as expressed by the Provost, sees the warehouse as a repository of usable information for researchers. The idea is to create a resource that will draw faculty and students (especially Ed.D. candidates in the soon-to-be-established doctoral program) who are interested in research on urban education. Developing a data system for this purpose will require even closer ties to LAUSD than have already been established and clear formal agreements about data sharing.

It remains to be seen whether these different conceptions of the purposes of the data warehouse can coexist. With a limited set of resources, it is easy to imagine one purpose overshadowing the others. For example, with NCATE deadlines looming, some argue that NCATE is driving the development of the data warehouse.

In addition to the overarching question about the purpose of the data warehouse, a variety of unresolved issues will need to be addressed as the development process moves forward:

1. What is the intersection between the data warehouse and the large-scale study being conducted by the evidence team? Although not part of the proposed Year 4 Work plan, establishing close ties between the two efforts seems important.

2. What controls should be in place to ensure the quality of data in the data warehouse? For example, the effort to digitize forms used by university supervisors and master teachers to evaluate student teachers and include them in the data warehouse is well under way. However, it is not at all clear whether the information on those forms is valid and reliable. Without more formal tests for interrater reliability and ongoing training for supervisors and master teachers, it is not clear how usable the data on teacher quality will be.

3. Given the issues raised by the pilot study concerning teacher candidates' movement in and out of different programs, what additional data on student characteristics are needed?

Suggestions for building the data warehouse

As the development of the data warehouse proceeds, the continuing involvement of the Provost and TNE leadership should help ensure that questions about purposes will be revisited. But building a consensus about the purposes of the data warehouse will require the engagement of the broad community of stakeholders. In addition, expertise beyond the university could help to identify existing data warehouses that have successfully dealt with the issues of multiple purposes and quality control.

Although there are clearly informal connections between the development of the data warehouse and the planned large-scale study, steps should be taken to integrate the two efforts. Just as the pilot study raised questions about the most appropriate unit of analysis (program or path), the large-scale study will no doubt reveal other important issues that are relevant to the data warehouse.

Regarding the quality of data in the data warehouse, the assessments of teacher candidates by university supervisors and master teachers are a key piece of information on teacher quality. There is a need make sure that these measures are valid and reliable if they are to be used for evaluation purposes. In the long run, the assessment instruments themselves will need to be revised as they are tested. As a first step, we suggest that TNE undertake a pilot study of the validity of student teacher evaluation instruments. It may be helpful to conduct this study at the clinical practice sites because they have a need for program evaluation.

To address the information needs for an ongoing analysis of teacher quality at CSUN, the development of the data warehouse needs framework based on a theory of effective teacher development. Such a theoretical framework could help identify the kinds of data that need to be collected but are not currently available. For example, it appears that student scores on the CSET examination are not currently housed at the university, but this is important information if one assumes that these scores are an accurate measure of teachers' content knowledge. Similarly, research shows that school context can have a big impact on new teachers, suggesting that CSUN collect school and other information on its graduates after they begin teaching.

Clinical Practice Sites

CSUN has long had formal and informal working relationships with LAUSD and schools in the San Fernando Valley. However, the introduction of the clinical practice sites at three area schools, Langdon Elementary, Sepulveda Middle School, and Monroe High School, represented a new level of involvement and partnership.

What did we learn from the initial year of the clinical practice sites?

As part of the formative evaluation, we conducted individual and group interviews with faculty, school administrators, master teachers, site directors, and participating teachers. Despite the challenges associated with starting a new program, nearly everyone we spoke with expressed enthusiasm for the clinical practice approach. School administrators described the many benefits of the program for their schools. One principal told us, "What do we get out of this? We're training the next generation of teachers, and we'll be able to hire some of them. It helps to create a culture of supportive education." Others expressed the advantages of having teacher candidates immersed in a real urban school. One master teacher told us that the school has had problems in recent years with new hires and their inability to succeed in a large urban school. As he told us, "Some of these people needed to have student teaching in this culture. What we want to try to avoid—we don't want to have to do on-the-job training of a teacher who has been hired—we'd rather let them make mistakes under the support of master teachers."

Teacher candidates were also positive about their experiences in the program. They appreciated the guarantee that they would be able to earn a credential in 1 year. They especially appreciated that they were in a cohort. Although they believed they had to work harder than if they had followed a traditional route, they valued the learning opportunities unique to the clinical practice site approach. Some candidates noted that it was helpful to observe teachers organizing their classrooms and setting behavioral objectives for students at the beginning of the year. Others felt that becoming familiar with the district's curriculum, especially the Open Court reading program, gave them an advantage over others seeking a teaching job in the district.

These positive reports were due largely to the many hours of hard work by everyone involved in the development of the clinical practice sites. As the initiative matures, it is likely to require less time, but it also is likely to require more resources than traditional routes. Because the clinical practice site programs are very similar to the ACT program, there are probably useful lessons to be learned from ACT in terms of cost. As ACT has done, the clinical practice site programs will need to get the attention and support of LAUSD at both the regional and central offices.

What do we still need to know about clinical practice sites?

The biggest challenge for the clinical practice site program is scaling up. With significant declines in enrollment this fall, recruitment of teacher candidates interested in and able to participate in a full-time program was difficult. TNE needs to determine how to ensure that all CSUN teacher candidates have a sustained and intensive clinical experience. The fact that the majority of CSUN teacher candidates need to earn a living while earning a credential suggests the need for some combination of additional financial support for promising teacher candidates and creative and flexible scheduling of classes at school sites. TNE thus must first answer questions about which resources are available and what support is needed to ensure that all of its students can participate in strong clinical experiences.

In addition to supporting students to participate in intensive clinical experiences, CSUN would benefit from answering questions to strengthen the clinical experience. "What are the key components of clinical practice, and can they be distilled so that they might be more readily available to the typical CSUN teacher candidate?" Addressing this question will require a concerted effort to document the contributions of clinical practice in general and then to identify the most salient features of teacher candidates' experience. We believe the first step is our examination of a small sample of eight students participating in the clinical practice sites this year and a sample of eight students pursuing a traditional route. At the same time, other programs with clinical practice components (such as ACT, Intern, and Blended programs) need to be examined to understand how clinical practice differs across and within programs.

In addition to the need to distill the key components of clinical practice, other questions need to be addressed regarding the new clinical practice sites. First, there is a need to determine the level of support for the expansion of clinical practice sites among LAUSD leadership at the district, region, and school levels, and among teachers. If support is lacking, what steps are needed to build their understanding, commitment, and financial support? Second, there is a need to better determine whether and how well the clinical practice sites are working as a whole. Are teachers being trained better at the clinical practice sites than in other programs? Does the school benefit from the university's presence? Does the school have an impact on faculty and teacher preparation at the university?

Suggested next steps for clinical practice

We suggest charging the clinical practice work group with developing a plan to identify the key components of clinical practice. In addition, university leadership should work with LAUSD officials to build a district commitment to the expansion of clinical practice sites. Specific steps, such as having the Human Resources Department agree to offer early contracts to teacher candidates at clinical practice sites, could enhance the desirability of the program.

As we suggested earlier, there is a need to ensure the reliability and validity of the student teacher evaluation forms used by university supervisors and master teachers. Because of the need of the clinical practice sites to document their progress, we believe that the sites would be a good place to pilot a reliability and validity study. Such a pilot study would require close collaboration between the clinical practice work group and the evidence work group.

Finally, we are aware of the many efforts of Dr. Prosenjak and others to document the progress of the clinical practice sites. However, the many demands of establishing a new program make it difficult to address all the evaluation needs we have identified. We suggest that additional resources be allocated for this task.

Arts and Sciences Involvement

Informal reports from other TNE grantees suggest that getting the active involvement of large numbers of arts and sciences faculty in teacher education is difficult. Although many challenges remain at CSUN, Year 3 seemed to solidify the active involvement of pockets of arts and sciences faculty from across the university. Also, there were efforts made to involve part-time faculty. In addition, TNE partnerships with local community colleges have begun to increase the attention given to teacher preparation among faculty outside of CSUN.

What did we learn from the involvement of arts and sciences faculty in TNE?

The involvement of arts and sciences faculty in TNE has demonstrated that collaborations between faculty from different colleges and departments can add value to the work of improving teacher preparation at CSUN. Faculty interviews revealed many projects under way between arts and sciences faculty and College of Education faculty. Much of the work revolved around understanding and advancing pedagogical content knowledge. However, not all college- and department-level leaders encourage such work. To be fair, this disinterest is not just based on old prejudices about the quality of scholarship in colleges of education; rather, it often arises out of a concern for the other missions of the university. Clearly, more needs to be done to protect and reward arts and sciences faculty, especially junior faculty, who want to contribute to teacher education.

What do we still need to know about the involvement of arts and sciences faculty in TNE?

Despite some pockets of resistance to TNE and the lack of support from some deans, we found numerous examples of faculty who were active in TNE even without support from their department or college. However, we found it hard to predict why some faculty got involved in TNE and others did not. To better understand how to expand arts and sciences faculty involvement, we need to know more about the interests and incentives that led to involvement. Ideally, it would help to map routes that arts and sciences faculty took to TNE involvement.

In addition, as last year's survey showed, there is considerable support and interest in TNE from arts and sciences faculty who are not currently participating. Many of those pointed out that there was a lack of communication about TNE activities and opportunities for participation. Because of staff changes in the TNE office and the press of other priorities, it was not possible to move forward with the TNE Web site, develop a TNE newsletter, or conduct outreach to department heads. Thus, it is important to know whether there is still a strong demand for opportunities to participate and whether various communication and outreach efforts would increase involvement.

Suggestions for involving arts and sciences faculty

Communication is always a challenge in a large university like CSUN, but redoubling efforts to help faculty understand what TNE is all about and how they might participate seems important to the long-term impact of TNE. Highlighting the work of arts and science faculty in TNE through a newsletter or other media would also help other arts and sciences faculty envision how they might get involved. Thus, we suggest that the arts and sciences work group, with the support of the TNE office, document the routes arts and sciences faculty took into TNE and publicize their work to the university community.

Conclusion: Toward a Broader Conception of Teacher Education

As this report makes clear, there is much more to do and much more to be known as TNE at CSUN moves forward. Despite all that is left to do, it is clear that much has been done. Our general impression is that the Carnegie Corporation has made a good investment. At the same time, our 3 years of following the initiative leads us to conclude that a more sophisticated theoretical framework could be useful for moving forward. In this conclusion, we posit one approach.

Teacher education at CSUN and other institutions of higher education is generally thought of in terms of programs. CSUN has various Blended programs, Intern programs, ACT, clinical practice sites, and traditional routes. As TNE works to infuse the three design principles

into teacher preparation, it is increasingly clear that a program lens does not accurately capture how teacher preparation works for most CSUN teacher candidates.

Current research on teacher preparation in New York City (Boyd et. al, 2005), the recent study of the next generation of teachers (Johnson, 2004), and our own study of alternative certification for the Carnegie Corporation (Humphrey and Wechsler, 2005; Humphrey, et. al, forthcoming), are arriving at similar conclusions about teacher preparation. Specifically, these studies are finding that teacher quality results from an interaction between the experiences and aptitude of the candidates, their learning experiences in their teacher preparation programs, and the characteristics of the schools in which they work. Variations of each of these factors define the "path" that a teacher takes into the profession.

In SRI's study of seven major alternative certification programs across the country, for example, we found so much variation within programs in terms of what participants experienced and treatments they were offered that program comparisons became pointless. Further, we found that teacher candidates took a variety of paths into the profession, a finding corroborated by others. The quality of candidates' education backgrounds, their previous teaching experience, their coursework, the quality and intensity of their mentoring, and the kind of school where they worked all contributed differently to a variety of outcomes. For example, educational background and certain kinds of coursework increased their pedagogical content knowledge. Being placed in a good school context had a major impact on their retention and resulted in higher levels of self-efficacy and positive self-reports of their effectiveness. At the same time, we found no significant differences in outcomes when we compared programs.

We believe this broader conception of teacher preparation, one that emphasizes paths into the profession rather than programs, has important implications for TNE at CSUN. Specifically, as decisions are made about what data should be gathered for the large-scale study or included in the data warehouse, identifying individuals' paths suggests a need for data on their previous experience working with students, their educational backgrounds, and a variety of measures of their subject matter knowledge. Similarly, reliable data on their teaching skills and knowledge as they move toward earning a credential are needed to capture the contributions of their

coursework and their student teaching. In addition, data on the characteristics of their first school placements and the mentoring they have received are essential to disaggregating the contributions of all parts of their path into the profession. The point is that all parts of the path into the profession interact to create a more or less effective teacher.

The notion of paths also has implications for the other design principles. As CSUN works to distill the value added by clinical practice experiences it will be important to understand the interaction of clinical practice with other influences. Not all students will need exactly the same clinical practice experience, nor will they experience their clinical practice in the same way, depending on their educational background and previous experience working with students.

Similarly, as arts and sciences faculty work to understand the specifics of pedagogical content knowledge in the different disciplines, an appreciation of the interaction of influences on teacher effectiveness comes into play. For example, strong subject matter knowledge appears to be related to teachers' level of pedagogical content knowledge. Thus, different levels of subject matter competency are likely to require different approaches to teaching about pedagogical knowledge.

With a growing appreciation of the complexity of the paths that CSUN students take into teaching, the concept of paths has far-reaching implications. CSUN students move in and out of programs, start and stop their preparation, and bring a huge variety of experience and aptitude. At the very least, this broader conception of teacher preparation can help move the conversation beyond a concentration on the courses students take to one that factors in the complex interactions of multiple influences that contribute to effective teaching.

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