



COVID-19 and Teacher Preparation: What Washington Teacher Education Programs are Saying About the Impact of the Pandemic on Preparation and the Prospective Teacher Pipeline

Kathryn Choate

University of Washington

Dan Goldhaber

University of Washington
American Institutes for Research

Roddy Theobald

American Institutes for Research

Acknowledgements: We wish to thank Nate Brown and Marcelle Goggins for outstanding research assistance, and Neal Finkelstein, Maren Johnson, Dana Lamb, Alexandra Manuel, Nicholas Gillon, Faye Orosz, Cap Peck, Jayden Rae, Sola Takahashi, Elizabeth Ryan, and Melissa Eiler White for comments on the survey instrument and/or the draft report.

This research was supported by the National Center for Analysis of Longitudinal Data in Education Research (CALDER), which is funded by a consortium of foundations. For more information about CALDER funders, see <https://caldercenter.org/about-calder>.

CEDR working papers have not undergone final formal review and should be cited as working papers. They are intended to encourage discussion and suggestions for revision before final publication. The views expressed here are those of the authors and do not necessarily represent those of American Institutes for Research or the University of Washington. Any errors are attributable to the authors.

Suggested citation:

Choate, K., Goldhaber, D., Theobald, R. (2020). *COVID-19 and Teacher Preparation: What Washington Teacher Education Programs are Saying About the Impact of the Pandemic on Preparation and the Prospective Teacher Pipeline*. Center for Education Data & Research.
<http://cedr.us/papers/working/CEDR%20PB%2008172020-1.pdf>

© 2020 by Authors. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission, provided that full credit, including © notice, is given to the source.

**You can access other CEDR publications at
<http://www.CEDR.us/publications.html>**

Abstract

COVID-19 profoundly impacted teacher preparation during the close of the 2019-20 school year. Based on survey responses from nearly all Washington State teacher education programs (TEPs), we find that the pandemic had predictable but concerning effects on teacher preparation; most notably, student teaching requirements were greatly reduced or waived completely for many candidates. The nature of the feedback that candidates received from field placement supervisors and cooperating teachers also changed substantially as a result of the transition to remote instruction in K-12 schools. Survey responses do not suggest that the pandemic has had an immediate impact on TEP applications or enrollment, but there is still considerable ambiguity about how TEPs will operate going forward; survey responses show a wide range of plans for teacher preparation in the 2020-21 school year.

March 2020 saw nearly all public-school buildings in the United States shut down due to the spread of COVID-19.¹ Though these closures most pronouncedly affected K-12 schools and students, there is also an accompanying and troubling impact on the preparation of tomorrow’s teachers.

Clinical practice (or “student teaching”) is where most teacher candidates get their first formal experiences in front of a classroom of students. In the spring of 2020 these experiences were severely curtailed or altered for tens of thousands of aspiring teachers when schools closed. This in itself is likely to affect the development of teacher candidates’ teaching capacities, as student teaching is seen as “a key component—even ‘the most important’ component of—pre-service teacher preparation” (Anderson & Stillman, 2013, p. 3), and empirical evidence has begun to paint a picture of just how foundational this experience is for the development of teaching skills (e.g., Goldhaber et al., 2020; Ronfeldt et al., 2020).

We will not know for years how this unfortunate national experiment of altering clinical practices in the face of the pandemic affects the development or career decisions of teacher candidates (or others who aspire to teach). But what we can quantify in the short-term is how states and teacher education programs (TEPs) responded to this pandemic. Nearly all states responded to COVID-19 by issuing emergency rules that eased or delayed teacher certification requirements for candidates who were affected by the pandemic. In a member survey issued by the American Association of Colleges for Teacher Education (AACTE) that included TEPs in 47 states, all 188 institutions stated they had at least partially transitioned to online learning for their TEPs, with 98% stating that they were now fully online (AACTE, 2020).

As of early August 2020, there is still considerable uncertainty (and political controversy) about what schooling will look like in the 2020-21 school year. This in turn creates uncertainty about the nature of teacher preparation. In this brief we explore how the pandemic affected teacher preparation, student teaching in particular, in Washington State last spring and what this suggests about the teacher preparation in the upcoming school year. In particular, we describe findings from a survey of Washington State TEPs about how the pandemic impacted the preparation of their teacher candidates in the spring of 2020 and how it might influence their plans for the upcoming year. We document three overarching findings: 1) there were predictable but still concerning effects on the preparation of teacher candidates in the spring of 2020; 2) there was no large change in the short run in the number of individuals enrolled in teacher preparation; 3) there are significant uncertainties going forward about teacher preparation. Below we elaborate on these findings and offer some concluding thoughts after first providing some context about Washington State and the survey.

The Washington State Context and Information About the WA TEP COVID-19 Survey

On March 30th, Washington State was one of the first states to begin school closures. At that time, many teacher candidates had not yet completed their student teaching requirement, which often takes place during the spring quarter or semester and is also connected to the requirement that teacher candidates pass the edTPA, a performance-based, subject-specific assessment of a

¹ All states halted in-person schooling at some point during the spring, and 48 kept schools closed for the remainder of the school year *Map: Coronavirus and School Closures*. (2020, July 28). Education Week.

candidate's teaching portfolio designed to measure the skills and knowledge that all teachers need at the beginning of their teaching career. Recognizing that it a normal student teaching experience would not be possible for graduating teacher candidates, the state's Professional Educator Standards Board (PESB) began modifying guidelines and requirements given the unique situation that teacher candidates set to graduate in spring 2020 faced. Guidance issued by PESB allow TEPs to temporarily make the following modifications to their teacher certification and graduation requirements and TEP admissions process.²

- TEPs can now review a candidate's coursework, field experience, work experience, and alternative learning experience and based on this review, waive or reduce in length the student teaching and course work;³
- Candidates can collect and provide acceptable forms of evidence while teaching in virtual learning environments, registration deadlines are extended, and additional submission windows are offered to satisfy the state's edTPA portfolio test requirement;
- TEPs can recommend emergency certificates if the candidate has completed all program requirements, including coursework and clinical practice, with the exception of one or more of the assessment requirements (edTPA, Washington Educator Skills Test-Basic (WEST-B), WEST-Endorsement, and National Evaluation Series).
- For the admission of teacher candidates, TEPs can offer "conditional acceptance" to teacher candidates who have not taken the basic skills assessment but have met all other admission requirements.⁴

The Washington TEP COVID-19 Survey was administered from April to June 2020 to 29 institutions in Washington State with state-accredited TEPs. The survey was initially sent to the dean or associate dean of the university, but in some cases was completed by an administrator or faculty member. The survey sought to better understand how the COVID-19 crisis is affecting the early stages of the teacher preparation pipeline, what TEPs are doing to respond, what they are seeing in terms of attrition and enrollment in their programs, and their concerns about the upcoming school year.⁵ The response rate was quite high, over 95 percent,⁶ indicating substantial interest in expressing the effects of the pandemic on TEP programming.

² These Washington Administrative Code (WAC) amendments were set to remain in place through mid-July of 2020, though will likely be renewed for the 2020-2021 school year.

³ In Washington State, student teachers are (outside of the modification we described) required to complete 450 hours of clinical practice in the classroom prior to teacher certification.

⁴ Note that the state had earlier, in legislation passed in the 2019 session, modified licensure test requirements such that teacher candidates no longer needed to pass the state's basic skills tests, though they still need to take it or verify that they had successfully completed a basic skills test from outside the state or submit an acceptable ACT/SAT test score as determined by the TEP.

⁵ Input for the survey was collected from the Washington Professional Educators Standards Board, Washington cooperating teachers and student teachers, and University of Washington education professors. The surveyed institutions held a combination of teacher education programs to include traditional and alternative routes to certification, undergraduate and graduate degrees, and certified technical education programs.

⁶ Of the twenty-nine institutions invited to participate in the survey, 28 submitted a response. Twenty-three institutions submitted complete responses, i.e. answered all questions on the survey. Survey respondents held various positions at their respective TEPs: Deans/Directors (18), Associate Deans (2), Professors/Faculty (2), and Administrators (4) (or some combination of these roles).

We organize our discussion around three main findings that we have synthesized from these survey responses.

Finding 1: Predictable Yet Concerning Effects on the Preparation of Teacher Candidates

Not surprisingly, TEPs report that the pandemic had dramatic impacts on clinical practice this past spring. Figure 1 shows that over eighty percent of TEPs reported they had waived or reduced their student teaching length requirements significantly for at least one of their credentialing programs, *even when asked to consider in-person and remote/virtual learning student teaching time as equivalent.*⁷

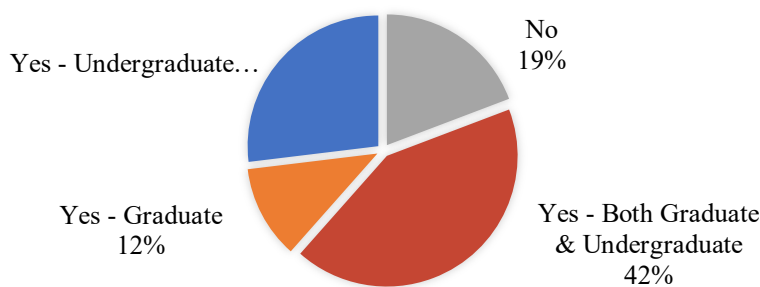
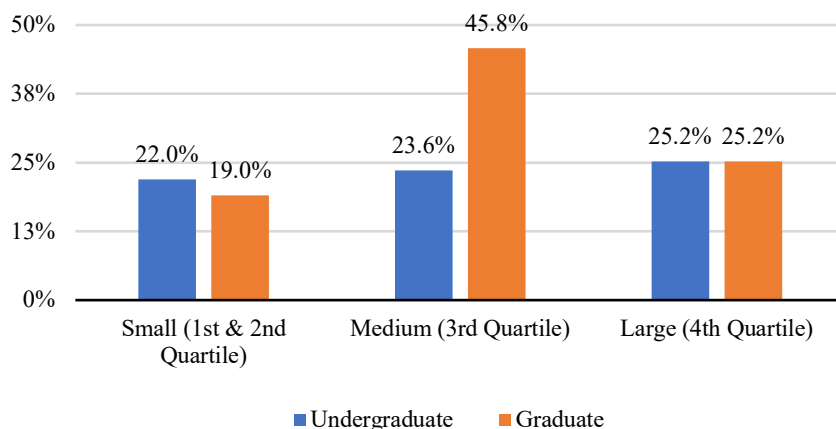


Figure 1. Percent of TEPs reducing or waiving student teaching length requirements

These reductions and waivers are indicative of significant loss of student teaching experiences. Figure 2 shows TEPs’ estimates of *the reduction in required student teaching time* for candidates in their programs last spring. All report reductions in student teaching time of nearly 20 percent or greater, but reductions were significantly larger in graduate level programs, with the average candidate in these programs estimated to have lost nearly a third of their required student teaching time (see Figure 3).



⁷ The programs that answered that they had not reduced or waived their student teaching were mostly two-year colleges that had only recently started teacher credentialing.

Figure 2. Program estimates of reduction in required student teaching time last spring by TEP enrollment size⁸

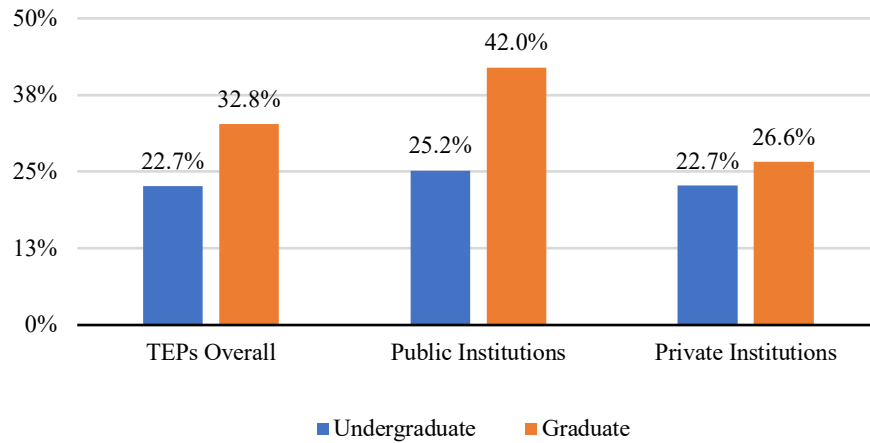


Figure 3. Program estimates of reduction in required student teaching time last spring by school type

Though student teaching continued for teacher candidates in most programs, the nature of it changed substantially. Virtual teaching alternatives were made available on a case by case basis. As shown below in Figure 4, both undergraduate and graduate TEPs reported that a significant percentage of their teacher candidates had switched to a virtual learning student teaching model. Undergraduates at public universities saw the greatest shift to virtual student teaching, while candidates at private universities saw the greatest shift for graduate students.

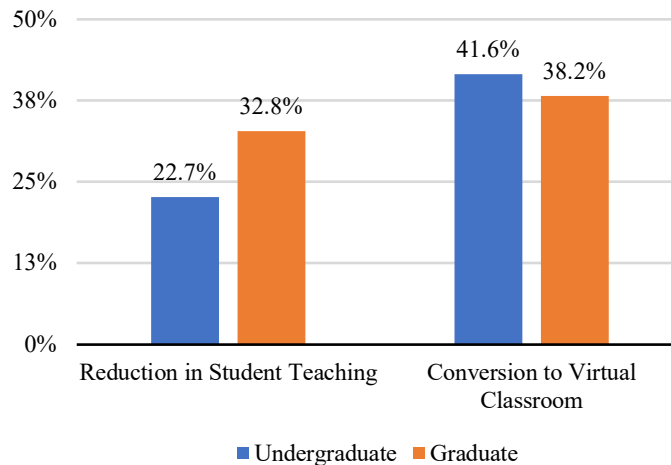


Figure 4. Percentage of teacher candidates with changes to student teaching by program

⁸ Though we can definitively determine whether an institution is public or private, we use our discretion to break TEPs up into size categories. Using Title II 2018 Enrollment Data, we ordered the programs from smallest to largest by enrollment size and split the TEPs into quartiles. Only the TEPs that responded that they had waived or reduced their student teaching length requirements significantly (more than a 10% year-to-year change) due to the impacts of COVID-19 were required to answer this question.

TEPs also reported that the involvement of student teachers in classrooms of their cooperating teachers varied greatly from district to district, “modifications depend on partner districts model for remote instruction. Some candidates are highly involved while others are having limit online interactions. It varies.” This is not surprising given that districts primarily determined how to make changes within their schools in accordance with state guidelines related to COVID-19.⁹

The transition to a virtual student teaching classroom for some TEPs and their teacher candidates was cancelled all together. These TEPs reported that they had to waive the remainder of their teacher candidates’ student teaching experiences as several partner districts were unable to accommodate their candidates. One responding TEP, for instance, noted, “Our candidates student teaching experience ended mid-way through student teaching. Cooperating teachers did an evaluation at the mid-term and evaluated whether or not the candidate was ready to be certified. There was nothing to observe as most of our candidates have had no interaction with mentors since schools have closed.”

Teacher candidates that missed out on student teaching experiences also missed out on clinical feedback ratings from cooperating teachers and field supervisors. This too is concerning as there is growing empirical evidence about the importance of formalized feedback for the development of teachers (e.g., Cohen et al., 2020; Papay et al., 2020; Steinberg and Sartain, 2015; Taylor and Tyler, 2012).

Prior to the pandemic all responding TEPs stated that their teacher candidates received formal feedback through clinical practice ratings from field supervisors, and the majority received ratings by cooperating teachers. But these ratings – traditional in-classroom observations – necessarily changed substantially in the spring. For the teacher candidates that were able to continue student teaching, about 75% of TEPs reported that field supervisors were making modifications to the way they provided feedback to student teachers, from observing and assessing candidates in virtual settings, delivering reflection activities based on content via video-taped experiences, to using ATLAS video cases of National Board-Certified Teachers to observe. We come back to the issue of missed student teaching opportunities and virtual learning in the conclusion.

Finding 2: Minimal Short-Term Changes to Applications and Enrollments

Past crises such as the Great Recession have had far-reaching effects on both the supply and demand of higher education (Long, 2014a). Researchers have speculated that program enrollment may increase as the unemployment rate grows (Long, 2004b), especially among sixteen-to-twenty-four-year-olds due to the lack of employment opportunities (Bell & Blanchflower, 2011). The COVID-19 crisis hit at the very time prospective teacher candidates often are submitting their applications. Yet the survey responses do not suggest an immediate impact on current or future TEP enrollment.

⁹ *Novel Coronavirus (COVID-19) Guidance & Resources* | OSPI. (2020, February 26). OSPI. <https://www.k12.wa.us/about-ospi/press-releases/novel-coronavirus-covid-19-guidance-resources>

Specifically, we asked TEPs if they had seen a significant (“more than a 10% year-to-year change”) change in the number of new applicants to their programs relative to the last couple of years. Fifty percent of programs saw no change. Of those that did see a significant change, undergraduate programs tended to report an increase in the number of applicants, while graduate programs reported a decrease.¹⁰

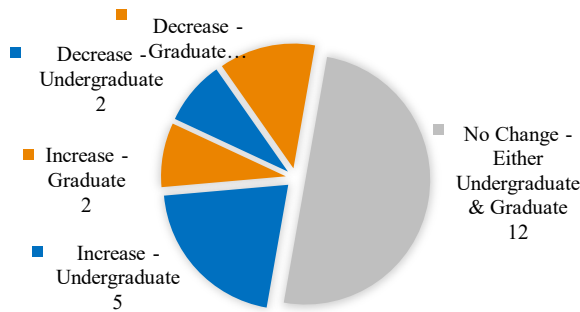


Figure 5. Number of TEPs that saw an increase or decrease in student enrollment by degree type

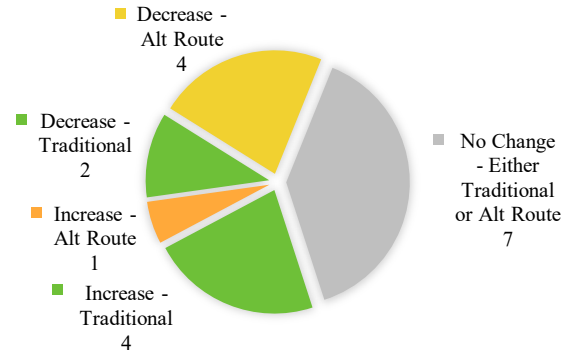


Figure 6. Number of TEPs that saw an increase or decrease in student enrollment by teacher certification route

To gain a better sense of the overall effect on the pipeline of new entrants into TEPs in Washington, we used a question about the extent of changes to applications (for those who reported significant changes) – “To what *extent* has there been a change in the number of applicants to the following programs” – to do a rough back-of-the-envelope calculation of the expected impact on new teacher candidate enrollment in Washington.¹¹ This exercise yields an estimated increase in teacher candidates of about 3 percent, which is well within the recent year-to-year fluctuation in the number of teacher candidate completers in Washington State.¹² Thus there is little evidence of concerns *in the short term* about the supply of new educators.

¹⁰ The survey also asked about changes in applications across program types. Half of the TEPs that responded reported no change, while 21% stated they saw an increase to their traditional programs. Of the five TEPs that stated there had been a significant change to alternative program, 80% said there was a decrease in enrollment.

¹¹ Specifically, for programs reporting significant changes in applications, we multiplied the estimated percentage change in applications times the size of graduating teacher candidate cohorts (“completers”) from individual TEPs, obtained from the 2018-19 Title II reports. Assuming that a similar proportion of applicants end up matriculating into TEPs as in prior years (and ignoring any *differential* attrition out of programs), this yields the net change we might expect in future teacher candidates across responding TEPs. Then, to get a sense of how this compares to the overall number of graduating teacher candidates we divide it by the size of the anticipated number of graduates from the same year of data (2018-19). This exercise assumes there was little change in attrition of teacher candidates out of TEPs due to the pandemic, which is a reasonable assumption given that only one responding TEP indicated a significant change in the number of teacher candidates leaving prior to program completion (and that TEP reported a small decrease in this proportion).

¹² Title II reports, for instance, showed teacher candidate completers in Washington TEPs increased by about 15% from 2016 to 2017, but fell by about 6% from 2017 to 2018.

As noted above, just last year, the state eliminated a minimum passing score for the WEST-B for teacher candidates seeking admittance into a Washington TEP. However, due to COVID-19, applicants in fall 2020 will also not be required to take the test to be granted admission. Recent Washington State guidance now allows TEPs to offer conditional acceptance to candidates who have not yet taken the WEST-B due to many testing sites remaining closed. To understand the extent of these applicants in fall 2020, we asked if TEPs had conditionally accepted a significant amount “more than 10%” of applicants due to the impacts of COVID-19; half reported they had. Small TEPs, as defined above, were more likely to conditionally accept applicants than larger TEPs. What we don’t know is who these new applicants are or what skills and characteristics they’ll bring to their TEP. We return to this point about conditional acceptance and the possible makeup of fall 2020 teacher candidates in the conclusion below.

Finding 3: Significant Uncertainties Going Forward

Teacher education programs are in a bind; they are trying to make changes in the midst of a pandemic, with significant health and schooling uncertainties. In Washington, state leaders have issued guidance for reopening in-person instruction at higher education institutions in the fall, though it will ultimately be up to individual institutions whether college students will be back on campuses in person (Higher Education Re-Opening Workgroup, 2020).¹³ The situation is similarly foggy for K-12 schools. As of early August, the Department of Health in partnership with OSPI has created a framework to aid school administrators and community stakeholders in evaluating the readiness of their school and health systems to monitor and respond to COVID-19 should in person learning begin. The decision is ultimately in the hands of the school administrator (Washington State Department of Health, 2020).

In short, it looks like teacher education is not likely to return to normal in 2020. We asked TEPs about their concerns for the upcoming school year, with questions such as “Describe any new strategies (as a response to COVID-19) your TEP is using to support the development of teacher candidates’ ‘skills’” and “What is the single largest concern that you have about how the COVID-19 crisis will impact your program?” – and their responses can be grouped into three broad categories: 1) implementation of new virtual components into the TEP curricula; 2) the needs of teacher candidates who didn’t have a regularized student teaching experience but are likely to teach in the state’s K-12 schools next year; and 3) the needs of the 2020-2021 teacher candidate cohort who will be prepared in the midst of the ongoing pandemic.

First, the need to implement new virtual components next year was clearly a focus when TEPs responded to the survey. Over ninety-percent said they planned to adopt different approaches to curricula next year, regardless of whether schooling continues in a traditional college/university setting or in a virtual setting. When asked about different approaches to curricula, adding and expanding virtual components was by far the most mentioned strategy, though the specifics of those virtual components was quite varied. For instance, virtual coaching for teacher candidates by cooperating teachers and professors, online education subscription offerings, and online peer support among candidates were all mentioned. Specific examples of technology components that

¹³ Large state schools such as the University of Washington plans to return with a hybrid model of in-person and online schooling, while Washington State University announced that all five campuses will be online for undergraduates this fall semester.

TEPs planned to adopt included online case studies and the use of National Board videos. The TEPs sited online platforms such as Panopto, Canvas, Seesaw and Zoom to assist with the transition to virtual student teaching and teacher candidate observations.

Various respondents also described creating task forces to examine the issue of virtual clinical practice with many preparing for the likelihood of a hybrid virtual-traditional classroom model and trying to build in flexibility. One respondent, for instance, stated: “We are planning different options for our field-based courses. It is not likely that we will be able to bring 15-30 additional adults into schools in the fall. We are planning to do a mix of in-person and virtual coursework as this is the most likely scenario at our institution.”

One TEP also noted the vast amount of new virtual components being put into place due to the impacts of COVID-19, including attempts to expand the use of online platforms like Mursion, *in the absence of any additional funding*: “Providing all virtual classes, virtual coaching, virtual community building, an incredible number/amount of resources for basic living (including grants), increased mental health referrals, virtual support for mentor teachers who need help organizing virtual learning, increased use of non-program video (including subscriptions to libraries like Teaching Channel), development of virtual and in-person edTPA supports for Emergency Certified teachers, additional induction supports for Emergency Certified teachers, Mursion virtual classroom, etc. Again, no additional resources are coming to support these changes.”

The second concern was about the preparation of the spring 2020 graduating teacher candidates who may well be in classrooms this year with less than the typical preparation. As one respondent stated, “The biggest concern I have is for those who graduate with no face-to-face contact with students since March 13, and then get hired and begin their first year of teaching in uncharted territory.”

There was a desire to both support new teachers who may have missed critical student teaching experiences and concern about how they would satisfy deferred state requirements such as the edTPA. One TEP noted that, “Students [working with emergency certificates] who will be teaching online next year who haven't completed their edTPA will need support on how to best complete this.”¹⁴ According to a second TEP, this will be challenging with reduced program funding, “How is edTPA support required by the TEP ‘funded’ for candidates issued emergency certificates when the state is requiring 15% cut to budgets?” As another respondent echoed, “It appears that 40% of new teachers will be working on an emergency certificate and needing to complete the edTPA. How will programs and the K-12 system support them? So far responses are not looking at the system impacts--this is very, very concerning.”

Lastly, TEPs are concerned that even with new virtual components to teacher preparation being put into place next year, candidates from the 2020-21 cohort may not be prepared for face-to-face teaching when they graduate. In particular, there are concerns about the quality of student teaching placements and the challenge of finding high-quality mentors. As one TEP expressed, teacher candidates need to have “that direct contact with students to manage a classroom and

¹⁴ The edTPA is an assessment typically completed during student teaching, and, at the time of writing, it will be required of teachers who did not complete it during student teaching in 2019-20.

plan lessons according to specific student needs when in a classroom.” According to another TEP, “finding high-quality mentors and having high-quality student teaching experiences” was their single largest concern about how the COVID-19 crisis would impact their program. We return this issue of securing high-quality placements and the complementary benefits of cooperating teachers hosting student teachers during the pandemic in the conclusions below.

Conclusions

The local concerns raised by TEPs in this study complement broader concerns about the impact of the pandemic on teacher education. For instance, Goldhaber and Ronfeldt (2020) note that given growing empirical evidence about the importance of student teaching placements for candidate development, “If student teaching experiences are constrained by the pandemic, teacher candidates will lose valuable experiences and schools will lose the opportunity to shape and evaluate prospective hires.”

Addressing these concerns are complex given that field placements rely on the cooperation of local districts and specific teachers within these districts to host student teachers.¹⁵ As of mid-August, districts in only four counties in Washington state have the option of returning to a hybrid model of remote and in-person instruction in the fall of 2020. All other counties will be virtual to start. Beyond that, it is not known the extent to which these districts in either model are willing to participate in field placements for next year.

Given the shifting and uncertain K-12 schooling environment and the myriad pandemic-related logistical issues schools need to address to keep students safe and healthy, it is challenging to consider the role they play in the development of teacher candidates. Indeed, at first blush focusing on student teachers may seem like a significant distraction from this goal. As one respondent stated, “Cooperating teachers are rightly focused on the needs of their students. Student teachers are not a priority right now.”

But beyond the long-term importance of preparing tomorrow’s teachers, it is important to recognize that hosting student teachers may be quite complementary to achieving the short-term goal of educating K-12 students in the midst of the pandemic (Mason-Williams, L., Rosenberg, M., Sindelar, P., & Kimmel, L., 2020). As Goldhaber and Ronfeldt (2020) note, school districts should consider student teachers as “an important pool of additional talent for schools; creative

¹⁵ TEP and district responses are further clouded by budget uncertainties. Nationally, K-12 education relies heavily on local and state governments for the vast majority of their funding, and states also provide substantial funding for public universities that educate the majority of teacher candidates in most states. Of Washington’s 2019-2021 Operating Budget, \$4.19 billion of the general fund was allocated for higher education altogether. Colleges and universities are now facing a number of unexpected expenses from the pandemic. Prorated refunds are being issued to students for room and board, and costs associated with moving to online courses have increased. International students who typically pay the highest tuition are also less likely to return to the States. Though Secretary of Education Betsy DeVos signed the Coronavirus Aid, Relief, and Economic Security (CARES) Act into law March 28, 2020 that provides almost \$14 billion directly to higher education institutions to support these unexpected costs, many TEP leaders worry it isn’t enough. On May 4, in a joint letter to House and Senate Leadership, education leaders and organizations from across the country called for additional COVID-19 education stabilization funds.

deployment of student teachers could provide a major boost as the COVID-19 crisis continues.” Specifically, school systems that are opening in person are likely to need additional competent adults who can assist teachers and help to maintain social distance between students. And in the case of online instruction, it is certainly possible (indeed we argue likely) that teacher candidates are more familiar with education technology platforms than many of the in-service teachers who will have to employ them this fall.¹⁶ This presents an opportunity for reciprocal learning between teacher candidates and cooperating teachers.

Time spent in partnering schools is clearly also beneficial for student teachers, giving them more time to gain experience and complete the state’s edTPA portfolio test requirement. This will avoid the situation that many recent graduates find themselves in; candidates who could not complete the edTPA may obtain an emergency certificate to teach this school year, but they are not exempt from the edTPA to obtain regular licensure. These candidates will therefore need to complete the edTPA on top of “regular” teaching expectations in the first year.¹⁷ As noted above, there are concerns from TEPs about how they will be able to provide support to recent graduates given the financial constraint their institutions are under. It is also worth considering whether deferred requirements could dissuade school systems from hiring teacher candidates who are entering the labor market with emergency credentials as they would run the risk of losing them should the state insist that they have to eventually satisfy regular licensure standards.

And in the case of teacher candidates that do obtain jobs, there are likely to be some with emergency credentials who are judged to be quite effective teachers. Depending on the number of teachers in the workforce with emergency credentials, the state may want to carefully consider how these teachers will be handled over the next few years as at least some successful teachers are likely to fail to pass one or more deferred licensure requirements, despite their success in the classroom.

Our assessment of enrollments in teacher education programs suggests little effect on this early part of the teacher pipeline, but there are several reasons it is appropriate to be cautious about jumping to the conclusion that the COVID-19 crisis will ultimately have little impact on TEP enrollments. First, the pandemic hit at a time period when many applications for the fall of 2020 were already underway or complete, i.e. before the pandemic figured into many of the decisions of prospective applicants. Second, while universities and colleges were optimistic even weeks ago in late June and early July that classes would be held in person (or mostly in person), many have now reversed previous decisions and are instead returning to virtual learning (Nadworny, 2020). This is unprecedented, so we cannot infer much about how a very different college experience might influence college student decisions. There is also evidence that students respond to early career wages and employment prospects when deciding which degrees to pursue (e.g. Long et al., 2015; Nagler et al., 2020; Blom et al., 2015). In the absence of a federal bailout of state and local governments, it is quite likely that we will see significant teacher layoffs. But

¹⁶ Moreover, figuring out if there are productive ways to utilize student teachers is certainly in the long run interests of ensuring the quality of K-12 education given what we know about the crucial developmental role that student teaching plays.

¹⁷ According to the edTPA website, candidates may request a “Virtual Learning Environment” as an alternative arrangement to complete the edTPA. A TEP edTPA Program Coordinator must sign off on a candidate’s request before it is submitted to Pearson, which administers the edTPA. Candidates have 18 months to submit their finalized edTPA portfolio from the date of edTPA registration. This registration date was extended to December 2021.

how desirable the teaching profession looks will also depend on job prospects in other sectors of the economy. In short, we believe all these moving parts make it difficult to predict much at this point about how the pandemic will affect the early teacher pipeline in the out-years.

Finally, the pandemic has aptly illustrated the need to prepare teachers for a world where teachers and students interact in various ways, and not always in the same place. It thus seems prudent, not just for next year, but going forward to make sure that online and hybridized models of education are an important component of teacher education. Regardless of the timeline for a vaccine, as technology improves, there is an increased likelihood that K-12 schooling will increasingly involve elements of online instruction.

References

American Association of Colleges for Teacher Education. (2020, April). *Member Survey on the Coronavirus Impact & Response*.

<https://www.aacte.org>

Anderson, L. M., & Stillman, J. A. (2013). Student Teaching's Contribution to Preservice Teacher Development. *Review of Educational Research*, 83(1), 3–69.

<https://doi.org/10.3102/0034654312468619>

Bell, D. N. F., & Blanchflower, D. G. (2011). Young people and the Great Recession. *Oxford Review of Economic Policy*, 27(2), 241–267. <https://doi.org/10.1093/oxrep/grr011>

Blom, E., Cadena, B., & Keys, B. (2015). Investment over the Business Cycle: Insights from College Major Choice. *IZA*, 9167, 12. <http://ftp.iza.org/dp9167.pdf>

Cohen, J., Wong, V., Krishnamachari, A., & Berlin, R. (2020). Teacher coaching in a simulated environment. *Educational Evaluation and Policy Analysis*, 42(2), 208-231.

Goldhaber, D., & Ronfeldt, M. (2020, July). *Sustaining Teacher Training in a Shifting Environment*. <https://Annenberg.Brown.Edu/>.

https://annenberg.brown.edu/sites/default/files/EdResearch_for_Recovery_Brief_7.pdf

Higher Education Re-Opening Workgroup. (2020, June 24). *Campus Reopening Guide*. [Www.Governor.Wa.Gov](http://www.Governor.Wa.Gov).

<https://www.governor.wa.gov/news-media/inslee-releases-plan-restart-higher-education-fall>

Long, B. T. (2014a). The Financial Crisis and College Enrollment: How Have Students and Their Families Responded? *The National Bureau of Economic Research*, 209–233.

<https://doi.org/10.7208/chicago/9780226201979.003.0007>

Long, B. T. (2004b). Does the Format of an Aid Program Matter? The Effect of In-Kind Tuition Subsidies. *Review of Economics and Statistics*, 767-782.

Long, M. C., Goldhaber, D., & Huntington-Klein, N. (2015). Do completed college majors respond to changes in wages? *Economics of Education Review*, 49, 1–14.

<https://doi.org/10.1016/j.econedurev.2015.07.007>

Map: Where Has COVID-19 Closed Schools? Where Are They Open? (2020, August 7). Education Week.

<https://www.edweek.org/ew/section/multimedia/map-covid-19-schools-open-closed.html>

Mason-Williams, L., Rosenberg, M., Sindelar, P., & Kimmel, L. (2020). *Addressing Shortages of Educators in an Uncertain COVID-19 Landscape: Viewing Teacher Candidates as Assets*. CEEDAR Center.

<https://cedar.education.ufl.edu/wp-content/uploads/2020/06/Addressing-Shortages-COVID-Landscape.pdf>

Nadworny, E. N. (2020, July 22). *Colleges Spent Months Planning For Fall, But A COVID-19 Surge Is Changing Everything*. National Public Radio (NPR).

Nagler, M., Piopiunik, M., & West, M. R. (2020). Weak Markets, Strong Teachers: Recession at Career Start and Teacher Effectiveness. *Journal of Labor Economics*, 38(2), 453–500.

<https://doi.org/10.1086/705883>

Papay, John, Eric S. Taylor, John H. Tyler, and Mary Laski. (2020). Learning job skills from colleagues at work: Evidence from a field experiment using teacher performance data. *American Economic Journal: Economic Policy*, 12 (1): 359-388.

Steinberg, M. P., & Sartain, L. (2015). Does teacher evaluation improve school performance? Experimental evidence from Chicago's Excellence in Teaching project. *Education Finance and Policy*, 10(4), 535-572.

Taylor, E. S., & Tyler, J. H. (2012). The Effect of Evaluation on Teacher Performance. *American Economic Review*, 102(7), 3628–3651.

<https://doi.org/10.1257/aer.102.7.3628>

Trust, E. (2020, May 4). *Joint Letter to U.S. House and Senate Leadership Calling for Additional COVID-19 Education Stabilization Funds*. The Education Trust.

<https://edtrust.org/press-release/joint-letter-to-u-s-house-senate-leadership-calling-for-additional-covid-19-education-stabilization-funds/>

Washington State Department of Health. (2020, August 5). *Decision Tree for Provision of In Person Learning among K-12 Students at Public and Private Schools during the COVID-19 Pandemic*. Doh.Wa.Gov.

<https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/DecisionTree-K12schools.pdf>