

Transfer Student Success on Professional Licensure Assessments for Future Educators

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Abstract: This study examines transfer students in our teacher education programs and their comparative success on the Educative Teacher Performance Assessment (edTPA[®]), a content pedagogy assessment currently required by many states for professional educator licensure and program completion. A two-sample t-test using edTPA scores from 2015 to 2019 revealed no statistically significant difference between the mean total scores of transfer students and non-transfer students on the assessments completed by candidates seeking certification in middle and secondary grade subjects. However, the difference between the mean total scores on the elementary education assessment was significant. A chi-square test of independence also revealed a statistically significant relationship between transfer student status and achieving a passing score on edTPA. Transfer students face unique challenges when attempting licensure exams, including differential preparation in their pre-transfer coursework, as well as non-academic factors, such as employment and family obligations, that may contribute to their differential success. A more thorough identification of the academic and nonacademic challenges experienced by transfer students may reveal the need for and form of additional assistance with the skills required to successfully complete licensure exams in any field.

Introduction

The Educative Teacher Performance Assessment (edTPA[®])¹ is a culminating content pedagogy performance assessment currently required by our state for licensure and program completion of teacher preparation candidates. Developed and owned by Stanford University's Center for Assessment, Learning and Equity (SCALE), edTPA is based on the National Board for Professional Teaching Standards (NBPTS) and aligned with state and national

standards, including Common Core and the Interstate Teacher Assessment and Support Consortium (InTASC) (SCALE, 2020a). To date, 930 educator preparation programs in 41 states and the District of Columbia participate in edTPA, with 19 states requiring edTPA success for professional educator certification and another two states taking steps toward implementation of edTPA as an approved performance assessment as part of program completion, state licensure or program accreditation

¹ edTPA trademarks are owned by The Board of Trustees of the Leland Stanford Junior University.

(AACTE, 2020). The assessment is comparable to practical exams required for professional licensure in engineering, accounting, architecture, pharmacy, medicine, nursing, and law (NYSED, 2015).

Transfer Students and Professional Licensure Exams

Likely due to the relative newness of edTPA, few examinations of candidate characteristics and pass rates exist beyond the SCALE-produced annual administrative reports, which include overall mean candidate data, as well as mean scores for 10 demographic subgroups, none of which indicate transfer student status (SCALE, 2020b). In fact, a review of literature revealed just one external study contemplating the variables that may affect edTPA scores. Gouraige (2016) examined demographic and academic performance variables of pre-service teachers and their overall edTPA scores and found that cumulative GPA and age have statistically significant relationships to a candidate's performance on edTPA; however, besides acknowledging the inclusion of transfer students in his sample and the possible GPA inflation caused by having fewer credits with which to calculate the final program GPA, Gouraige did not analyze transfer student status as a variable.

Used in combination with edTPA, the Praxis® tests, formerly the National Teacher Examination (NTE) system, administered by the Educational Testing Service (ETS) and employed in 46 states for program admission and professional certification of teacher candidates (ETS, 2020), represent the closest approximation to a national educator certification examination. Various studies have found SAT scores and undergraduate GPA to be the strongest predictors of passing the Praxis II² and their state equivalents for licensure (Gitomer, 2007; Hernández, 2018; Holmes, 2011; Susanto, 2001). Hernández (2018) found that, in addition to SAT scores and GPA, an institutionally administered practice exam was predictive of success on the Texas Examination for Educator Standards (TEXES) content exam, and that performance was influenced by transfer student status. On the other hand, Holmes (2011) compared first-time Praxis II pass rates for “homegrown” and transfer students at a university in suburban Missouri from 2005 to 2010 and found no statistically significant difference between the two groups for any of the subject areas except for Physical Education, on which transfer students outperformed their homegrown counterparts.

Like pre-service education candidates, nursing students must also pass a licensure

² The Praxis I® test assesses basic academic skills (reading, writing, and mathematics) and is most often used for program admission, and the Praxis II® tests,

which assess subject-specific content knowledge, general pedagogy, and content-specific pedagogy, are more often used to satisfy state licensure requirements (Gitomer, 2007).

exam, the National Council Licensure Examination for Registered Nurses (NCLEX-RN®), in order to enter the nursing workforce. Nursing students share several demographic characteristics with teacher education students. Many are transfer students or returning adult students who are changing careers or returning to college after several years of absence (Jeffreys, 2007). Moreover, similar to educator preparation programs' use of edTPA scores for program evaluation and improvement, nursing schools rely on first-time NCLEX-RN pass rates as an indicator of program quality and have devised performance prediction and remediation strategies to increase NCLEX-RN pass rates (Simon et al., 2013). Simon et al. (2013) used regression analysis to determine the possible relationship between age, transfer status, clinical course grades and scores on the NLN-readiness exam, a preliminary diagnostic exam administered by the National League of Nursing that serves as a reliable and valid predictor of NCLEX-RN performance. They concluded that preclinical courses, especially biology and chemistry, and the first nursing course were predictive of performance on the NLN-readiness exam, and hence NCLEX-RN success. Most notably, high GPAs and transfer grades on preclinical science courses were positively correlated with NLN-readiness scores. Because students in their nursing program who transferred prerequisite science courses were older than traditional students, these researchers attributed the noticeable success of transfer

students to their age, citing studies that mature learners are not only more "motivated and self-directed in learning compared with traditional students" but also, that older nursing students are more likely to pass the NCLEX-RN (Simon et al., 2013).

Other researchers found no such benefit to transfer credits among prospective nurses. In her study of the retention and success of undergraduate nursing students, Jeffreys (2007) found that, although the mean number of transfer credits of non-graduates was nearly twice that of graduates, there was no statistically significant difference in the mean number of transfer credits among first-time passers of the NCLEX-RN.

Expressing concerns about the academic rigor and grading policies of pre-transfer coursework, as well as the financial burden of transferring from a community college to a four-year institution, as known challenges confronting transfer students, Fortier (2010) examined predictors of first time success on the NCLEX-RN among 175 transfer students in a baccalaureate degree program (BSN) and found that final GPA was the strongest predictor of NCLEX-RN success. Lockie et al. (2013) examined demographic and academic variables, including gender, race, transfer status, course grade in principles of organic and biochemistry, student learning style and participation in supplemental instruction sessions to determine their relationship to students' performance on the NCLEX-RN. Although 62 percent of the 197

undergraduate nursing students in their purposive sample were transfer students, only their chemistry grade, student learning style, and race were predictive of their success on the NCLEX-RN. Chi-square analysis revealed that transfer student status was independent of performance on the NCLEX-RN.

Bauchmoyer (2002) came to a similar conclusion regarding dental hygiene students' performance on the National Board Dental Hygiene Examination (NBDHE) in her study of the relationship between the NBDHE score, pre-admission requirements, the cumulative dental hygiene GPA (CDHY GPA), basic college science requirements, and the site of academic preparation. Paying particular attention to course transfer data and course grades in program prerequisites and basic science requirements, she found that the CDHY GPA was the single greatest predictor of success on the NBDHE (Bauchmoyer, 2002); however, the path of science preparation was important in achieving a high CDHY GPA, as consistency in the site of such preparation was positively correlated to both GPA and success on the NBDHE. Specifically, students who obtained their science preparation through a mixture of coursework from community colleges and four-year institutions achieved a lower mean final GPA than students who completed their science preparation

exclusively at four-year schools (Bauchmoyer, 2002).

Background

The present study examines transfer students in our teacher education programs and their comparative success on edTPA. Our institution is a private liberal arts university in the southern U.S. We are a major educator preparation provider in our state, providing twelve initial certification teacher education programs designed to prepare candidates for professional licensure. Candidates in our state are required to achieve passing scores on their edTPA portfolios,³ content assessments, and ethics program exit tests before they can obtain their teaching certificates. Depending on their previous coursework and field placements, transfer students may experience differential preparation for edTPA, which is intended to assess candidates' readiness for the professional enterprise of teaching through a third-party evaluation of portfolios containing lesson plans, instructional materials, assessments, video clips of classroom instruction, and analytical commentaries. Candidates submitting edTPA portfolios in middle or secondary grades complete three tasks corresponding to the core instructional practices of planning, instruction, and assessment, which are evaluated using fifteen rubrics, five per task. Elementary

³ The scores required to pass edTPA vary and are established by each state's professional standards commission. For our state, the minimum passing

scores are 45 out of 90 for the 18-rubric Elementary Education assessment and 38 out of 75 for the 15-rubric middle grades and secondary subject area assessments.

education candidates have an additional math assessment task evaluated using three additional rubrics.

Significance

We believe that transfer students' performance on professional licensure exams in any field is a crucial indicator of a program's ability to support the academic and practical needs of transfer students, whose pre-transfer coursework may not be aligned with professional licensure exam preparation. We hope to improve us identification of at-risk transfer students—as well as the cognitive and noncognitive factors that predict their success—and design effective intervention strategies. Given both the critical shortage of qualified teachers and nurses and the relative dearth of literature regarding transfer student performance on professional licensure exams, this study seeks to call attention to the need for more research concerning the variables that affect transfer student success on these exams and subsequent matriculation into the workforce.

Methods

This project is informed by a review of our institution's edTPA scores from 2015 to 2019. In order to compare the performance of transfer and non-transfer students, we compiled the raw scores of undergraduate (BSEd) students completing edTPA during their student teaching field experiences and manually identified students with transfer credits from external institutions.

Candidate records were then sorted according to the subject area handbooks used for the assessment. For the purpose of this study, we aggregated the scores from the assessments completed using the fifteen-rubric middle grades and secondary handbooks for comparison to the assessments completed with the eighteen-rubric elementary education handbook. We calculated the total assessment scores for non-transfer students and transfer students in each handbook group. Taking into account the increase in the minimum scores required to pass the assessment, which occurred in 2017, we also calculated the pass rates for transfer students versus non-transfer students.

Results

Of the 737 edTPA assessments attempted between 2015 and 2019 at our institution, 226, or 31 percent, were completed by transfer students. Table 1 shows the average total portfolio score received for transfer student attempts and non-transfer student attempts on both the 15-rubric middle grades and secondary assessments and the 18-rubric elementary education assessment. A two-sample t-test indicates that there is no statistically significant difference at $p < .05$ between the mean total scores of transfer students ($M = 44.37$, $SD = 6.75$) and non-transfer students ($M = 43.74$, $SD = 6.85$) on the 15-rubric assessments, $t(243) = 0.62$, $p = .537$. However, the difference between the mean total scores on the 18-rubric assessment was significant, $t(455) = -2.81$, $p = .005$.

Table 1. Mean Total Assessment Scores on 15- and 18-Rubric edTPA Attempts for Non-Transfer and Transfer Students⁴

	edTPA Attempts (N)	15-Rubric Assessment Attempts N (df)	Mean Total Score on 15-Rubric Assessments (out of 75)	18-Rubric Assessment Attempts N (df)	Mean Total Score on 18-Rubric Assessment (out of 90)
Attempts by Non-Transfer Students	511	198 (185)	43.74 (SD = 6.85)	313 (303)	51.21 (SD = 7.94)
Attempts by Transfer Students	226	60 (58)	44.37 (SD = 6.75)	166 (152)	49.04 (SD = 7.48)
2-Tailed T-Test Results:		$t(243) = 0.62, p = .537$		$t(455) = -2.81, p = .005$	

Table 2. Pass Rates for Non-Transfer and Transfer Students on 15- and 18-Rubric edTPA Attempts

	N15-Rubric Passed Attempts	15-Rubric Failed Attempts	15-Rubric Pass Rate	18-Rubric Passed Attempts	18-Rubric Failed Attempts	15-Rubric Pass Rate
Non-Transfer Students	160	38	81%	254	59	81%
Transfer Students	41	19	68%	119	47	72%
Chi-Square	$\chi^2 (1, N = 258) = 4.16, p = .041$			$\chi^2 (1, N = 479) = 5.64, p = .018.$		

⁴ There is no minimum passing score for each rubric, although a score of 3 generally indicates *proficient* performance, scores of 1 or 2 are considered *emerging*, and scores of 4 or 5 are given for *advanced* performance. Only the total

assessment score (calculated as the total of the individual rubric scores) is used to determine pass/fail status, although the pass rate in our state requires candidates to achieve a mean rubric score of 2.5.

Transfer Student Success on Professional Licensure Assessments for Future Educators

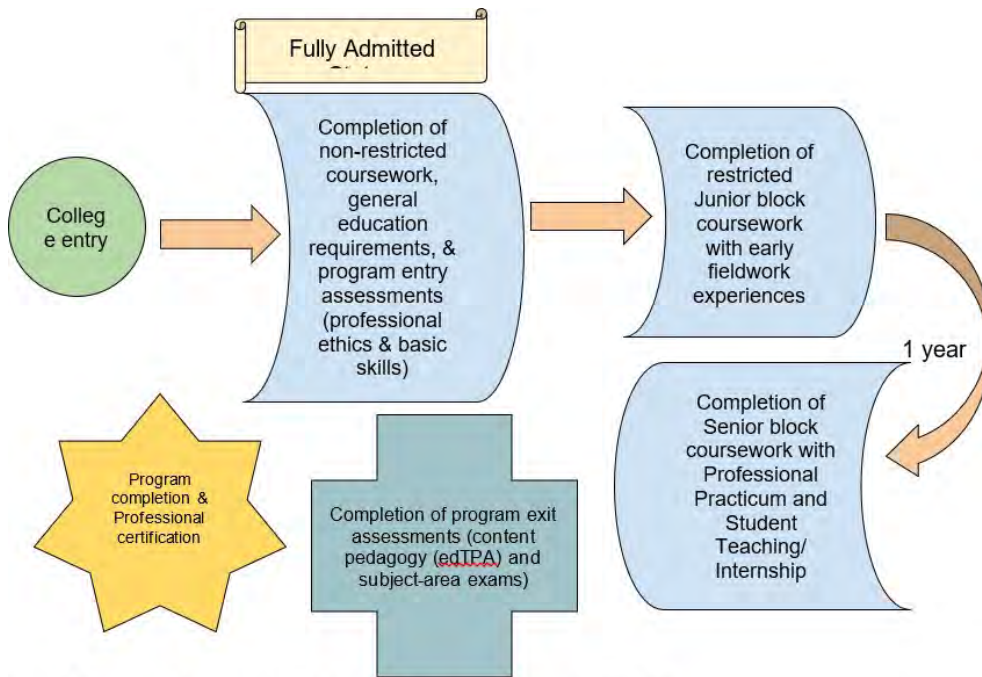


Figure 1. Progression of a non-transfer student from program entry through completion

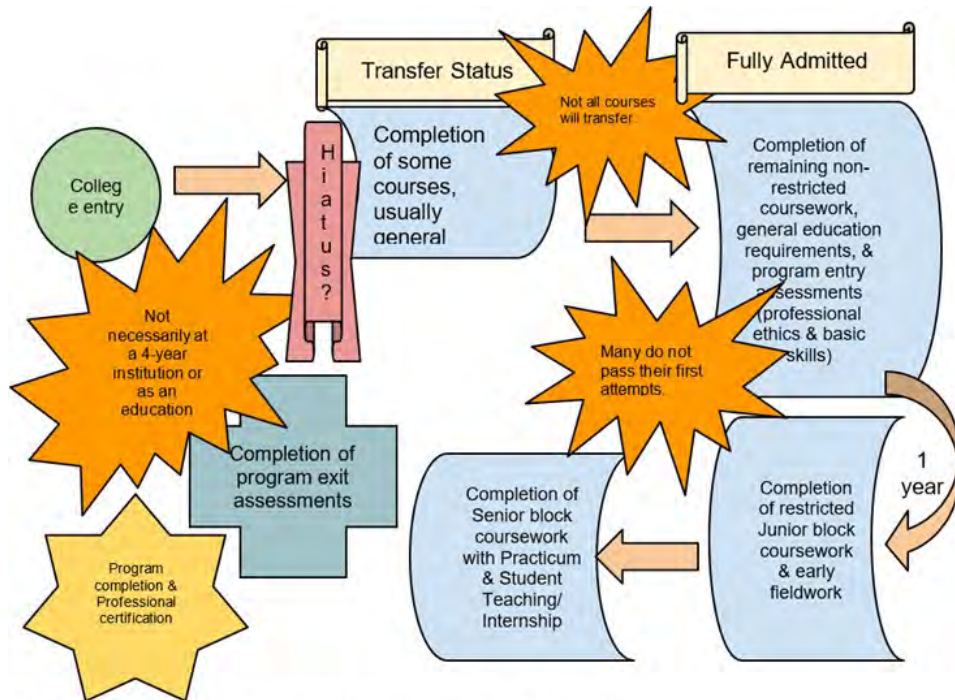


Figure 2. Progression of a transfer student from program entry through completion

A chi-square test of independence was performed to examine the relationship between transfer student status and achieving a passing score on edTPA. The relation between these variables was significant at $p < .05$ for both the 15-rubric assessment⁵ and the 18-rubric edTPA®.⁶

Discussion

Transfer students face unique challenges when attempting licensure exams. Some of these challenges may relate to the differential preparation they experienced in their pre-transfer coursework, which might not have addressed some of the skills needed to pass professional performance assessments such as edTPA®. Because the 18-rubric assessment includes a math assessment task, the difference between the mean total scores might be explained by transfer students' experience with pre-transfer math instruction. Comparing candidates' scores on the pre-admission basic skills examinations might help explain this finding further. A closer examination of the pre-and post-transfer courses taken (and grades received) by transfer students compared to their non-transfer counterparts may provide even more insight into this difference, as well as identify supports that need to be incorporated into the program coursework for all candidates.

⁵ The chi-square statistic with Yates correction is 3.47. The p-value is .062492 (not significant at $p < .05$).

Another variable that likely affects the pass rates and overall scores of transfer students on program-exit professional exams compared to their more traditional counterparts is time. Candidates who enter four-year institutions as education majors generally take four years to complete their programs, resulting in less time elapsing between their coursework and their certification exams. On the other hand, transfer students might have spent years on hiatus working in another field before returning to a different school to finish (or begin) their education programs. These candidates, who may take much longer to complete their programs, might need to refresh their content and even pedagogical knowledge and skills before they can successfully complete their program-exit licensure exams. Figures 1 and 2 illustrate the different paths and obstacles experienced by non-transfer and transfer students. Duggan and Pickering (2008) concluded that "noncognitive factors can be used to predict academic success and persistence for first-year transfer students" and that the barriers to academic success experienced by upper division transfer students differed from those of freshman and sophomore transfer students. We agree that there may be non-academic factors, such as candidates' extracurricular profiles (e.g., employment and family obligations) contributing to their differential

⁶ The chi-square statistic with Yates correction is 5.10. The p-value is .023905 (significant at $p < .05$).

academic success. Such factors may necessitate a comparison of our traditional transfer students to the non-traditional transfer students who complete their programs at our regional academic centers. We currently have an edTPA® coordinator who delivers a series of mandatory orientation seminars for candidates completing the assessment during their culminating field experiences, with individual face-to-face tutoring sessions provided as needed. Although these sessions mostly address the logistical and technical aspects of assembling and submitting their edTPA® portfolios, our candidates likely receive very similar preparation for this summative performance assessment, regardless of their transfer status. Because we are phasing out the preparatory role of the edTPA® coordinator in favor of a more holistic preparation model that includes more intensive involvement of university supervisors and faculty who teach our methods courses, we will need to re-examine the question of differential preparation of transfer students after this transition.

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Conclusion and Next Steps

Based on our findings, there are transfer students who may need additional assistance with the organizational and communication skills required to successfully complete their edTPA® portfolios. An examination of these skills, as well as candidates' extracurricular responsibilities, present possible independent variables to be addressed in future study. We also plan to compare candidates' scores on the pre-admission basic skills examinations and pre-transfer coursework in order to discover their possible correlation to candidates' differential performance on the 18-rubric edTPA. Our goal is to make sure our transfer students have the same chance of success as non-transfer students. We will continue to identify the obstacles that transfer students face when trying to pass their required program-exit assessments compared to our non-transfer students in hopes of offering strategies that will be applicable to transfer students in passing their professional licensure exams required for certification in any field.

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