

EdD Educational Leadership Admission Policy: Program Access, Equity, and Diversity

Valerie Storey
Franklin University

Professional doctorates are a growth area in academia, specifically the EdD in educational leadership. The proliferation in programs has given rise to concerns relating to variations in program equity, and student diversity. This conceptual study utilizes theoretical critical analysis of extant data to reach conclusions about current admission policy and practices from America's fifty totally online EdD educational leadership programs in relation to program access, equity, and diversity. Considering admission policy and practice serve as functions of gatekeeping for entrance into the program, this conceptual study sought to determine which admission practices facilitate program diversity and identify potential scholar practitioners. Results indicate that the specific measures traditionally used to assess potential applicants (e.g. GRE/MAT) are currently applied in over 50% of online EdD educational leadership programs. Suggesting that more holistic approaches to the admission process have yet to be embraced by EdD online programs. The relationship between program access, equity, and diversity and admission policy and practice is an area needing further research.

Keywords: *Doctor of Education (EdD); Professional Doctorate (PD); Admission Policy; Access; Equity; Diversity; GRE*

The lack of racial and ethnic diversity in graduate education in the United States has widely been identified as problematic (Council of Graduate Schools, 2009). In 2017 African Americans, Latinos, and American Indian comprised 13.31%, 17.79%, and 1.25% respectively of the U.S. population but received 8.8%, 7.8%, and 0.5% of the doctorates awarded that year (IES.NCES, 2020) (see table 1). Racial representation varies by academic study, and in this paper the focus of concern is the EdD educational leadership program where African American, Latino, Asian American/Pacific Island, and Native American are underrepresented (Council of Graduate Schools and Educational Testing Service, 2010; Kaufman et al., 2013; Griffin & Muñiz, 2015). Future graduate students will come from the Gen Z population, ages 21 and below. Our future students are increasingly racially diverse White (50.9%); Hispanic (25%); Black (13.8%); Asian (5.3%); and 2+ races (4.1%) (U.S. Census population, 2019). This upward trend of racial diversity is not a new phenomenon. In fact, in 1987, The National Commission on Excellence in Educational Administration highlighted the need for programs to proactively respond to the nation's increasing diversity by recruiting students of color, reflective of student diversity demographics. Current statistics suggest that there has been little movement to achieving this target over the three decades (see Table 1).

In 2015, the American Educational Research Association filed an amicus curiae brief in the U.S. Supreme Court's reconsideration of *Fisher v. University of Texas*, first initiated in 2008. The Supreme Court's 4-3 decision (2016) upheld the University of Texas admissions policy and affirmed the consideration of race as a factor in higher education admissions. The science presented in research amicus briefs in *Fisher* spoke to the limitations of race-neutral approaches alone. Speaking for AERA, President Levine drew attention to the critical role of rigorous social science research to inform admission policies and developing practices that best foster student diversity and its educational benefits on college campuses (Levine, 2016).

Since 1949, admission policy and practice has been based on two measures of a candidate's academic ability: grade-point averages (GPA) and standardized test scores. Both of these admission practices have been identified by scholars as a hinderance to program diversity (Mountford et al., 2007; Ward, 2007; Griffin & Muñiz, 2015; Posselt, 2015; 2016). Currently, it is not uncommon for doctoral programs in educational leadership i.e. EdD and PhD programs, to have similar requirements for admission (Jones et al., 2019; Storey & Fulton, 2016). This is of concern for two reasons. First, the admission model neglects to take account of the fact that a professional practice doctorate serves a different student body i.e. working professionals, and has different program outcomes from a PhD (Posselt, 2015; 2016; Storey & Fulton, 2016). Second, that the basic assumption behind the traditional admission policy is that students with the greatest academic ability are the most likely to do well in course work and subsequently in a career in academia. Leading to concern that traditional graduate admission policy and practice are more related to a candidate's potential for academic success than for professional practice success. Research in this area shows that although previous grades and test scores are effective in predicting future academic success, the relationship of these measures to career success whether as a scholar or a professional practitioner in the field is negligible (Mountford et al., 2007).

Limited research exists for guiding faculty making doctoral program admission decisions, specifically there is a paucity of guidance for educational leadership faculty in relation to admission practices (Young, 2008; Posselt, 2016). This paper adds to the literature by examining traditional decision-making models commonly used in EdD educational leadership programs, reviews admissions requirements for fifty online EdD educational leadership programs, and provides admission models to address current concerns related to access, diversity, and equity.

The purpose of the present paper was to (1) examine processes of policy development and implementation that led to the current EdD educational leadership program admission policy and practice; and (2) examine how effective admission policies and practices are in promoting program diversity. In both cases the inquiry adopts a decidedly critical approach.

Table 1

2016-2017 Doctor's degrees conferred by postsecondary institutions, by race/ethnicity of student.

Total	% of the population	% of doctoral degrees	Nos of doctoral degrees awarded
White	61.27%	67.5%	107,443
Black	13.31%	8.8%	14,067
Hispanic	17.79%	7.8%	12,493
Asian/ Pacific Islander	5.67%	12.8%	20,344
American Indian	1.25%	0.5%	744
Two or more races	2.62%	2.6%	4,166
Total Doctoral degrees awarded			181,352

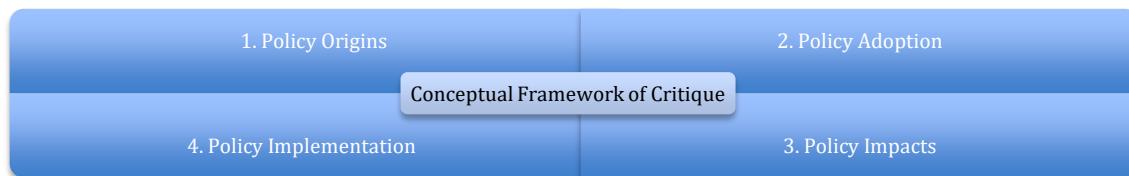
Adapted from U.S. Department of Education, National Center for Education Statistics 2020

Conceptual Framework

The conceptual frame for this analysis integrates stage theory (Blaikie & Soussan, 2000; Levin, 2001) and significant work from the literature describing doctoral programs admission policy and practice. Levin’s (2001), and Blaikie and Soussan’s (2000) four-stages conception of the policy cycle was used as the structural framework for this study (see Figure 1) and the literature describing doctoral programs admission policy as the framework of critique. This model takes account of diverse roles that a range of actors plays in the policy process (Fallon & Paquette, 2009). It also reflects the multi-staged, developmental, and iterative nature of policy making and analysis. The two critical constructs are seen as interlinked and guided the process for: (a) developing research questions, (b) selecting literature and data, and (c) analyzing and interpreting data and literature.

Figure 1

Conceptual Model



Review of Literature

The literature presented here is organized into three areas. The first area discusses the origin and adoption of graduate admission policy and practices. The second area discusses research focused on the impact of traditional admission policy and practices on program diversity, and the third area discusses policy and practice which have been found to be effective in promoting program diversity.

Admission Policy Origins and Adoption

Despite the fact that campuses have central offices of Graduate Admission, admission policy, practices and decisions are often made at the departmental level by committees representing individual programs (Griffin & Muñiz, 2015; Posselt, 2016). Faculty are the key drivers, and while faculty may claim to be guided by ethical goals like rewarding merit and representing diversity, their admissions practice instead upholds the status quo (Hirt & Muffo, 1998; Posselt, 2015; 2016).

Traditionally, departmental admission decisions are grounded on objective indicators such as verbal reasoning scores, quantitative reasoning scores, and analytical writing scores submitted by the applicant as a result of taking either the Graduate Record Examination (GRE) General Test or the Miller's Analogy Test (MAT), and subjective judgments regarding a student's potential based on their past credentials, or anecdotes from faculty recommendations (Young & Young, 2010; Ward, 2007). A typical admission protocol for most educational leadership doctoral programs is to require applicants to submit an official transcript of undergraduate and graduate coursework; information according to academic predictors such as standardized test scores; previous programs grade point average; letters of recommendation; and letter or application or personal statement.

Mountford et al., (2007) point out that whilst these measures are used by many graduate programs, they may not fully capture the skills and dispositions necessary for successful leadership. The results of a meta-analysis (Kuncel et al., 2010) indicate that while standardized tests applied in America (GRE/MAT), are predictors of research productivity, citation count and degree completion, the positive correlation ranging from 0.120 to 0.220 is low. Despite this low correlation standardized tests or intelligence tests have been traditionally used by higher education institutions.

The original purpose of the tests was to determine the mental age of a person (Boake, 2002), not the absolute level of intelligence or the probability of success in academia or professional employment. In particular, these tests measure one or more of the following domains or cognitive abilities: reasoning, spatial ability, memory, processing speed and vocabulary. The measurement of these skills involves the use of the working memory (Kaufman et al., 2013) and consequently the tests do not measure specific knowledge or problem-solving skills or strategies, but the differences between individuals when processing information. According to data from ETS, the test's quantitative score i.e. measuring math acumen correlates closely with gender and ethnicity and that African Americans score 200 points below white people. Giving rise to concerns that such tests may hinder diversity and inclusion efforts. For example, ETS data reveals that members of underrepresented racial and ethnic minority groups score lower on the GRE than white men and Asian men do (Hagedorn & Nora, 1996).

Despite concerns expressed over several decades a review of universities that offer online EdD programs (n=50) suggest that of 56% of the EdD programs require the GRE (or GMAT/MAT).

Figure 2*Online EdD programs requiring the GRE*

GRE Required	GRE Not Required
Andrews University	A.T. Still University of Health Science
Boise State University	Arizona State University
Concordia University, Chicago (GRE/MAT)	Aspen University
Fordham University (GRE/MAT)	Baylor University
Grand Canyon University	Drexel University
Indiana University	Edgewood College
John Hopkins School of Education	Lamar University
Kennesaw State University	Liberty University
Morehead State University (GRE/MAT/GMAT)	Maryville University
Nova Southeastern University (GRE/MAT)	New Mexico University
Regent University	Northcentral University
Sam Houston State University	Northwest Nazarene University
Texas A&M University, Commerce	Rowan University
Union University	St. Thomas University
University of Arkansas-Fayetteville	Trevecca Nazarene University
University of Florida	Trident University International
University of Huston	University of Dayton
University of Illinois (Highly recommended)	University of New England
University of Massachusetts	University of St. Francis
University of Missouri	Vanderbilt University (GRE optional)
University of Nebraska-Lincoln	William Carey University
University of Northern Colorado	William Howard Taft University
University of South Carolina (GRE/MAT)	
University of Southern California (GRE/MAT)	
University of the Cumberlands (GRE/GMAT)	
University of West Florida (GRE/GMAT/MAT)	
University of West Georgia	
Valdosta State University (GRE/MAT)	

Source: 2020 Online Doctorate in Education (EdD) programs guide.

Research and literature highlighting issues of equity and access relating to standardized tests has been in the public domain for decades and yet over 50% of online EdD programs focused on professional practice and the development of scholar practitioners require the GRE/GMAT/MAT. This is in spite of the fact that in 2003, the outcome of US Supreme court cases, *Grutter v. Bollinger* and *Gratz v. Bollinger* clearly affirmed institutional responsibility to develop sound policies and practices that can lead to fair and effective admissions decisions (Mountford et al., 2007). Nevertheless, higher education institutions have a reputation for moving slowly and perception of the prestigious nature of a high GRE as a measure of innate intelligence continues to be prevalent amongst faculty. (Posselt, 2016). Hall (2017) argues that this is a misleading assumption. In a study of 280 graduate students there was no evidence of a correlation between GRE scores and

time taken to complete the degree, and the number of first-author papers the students published. Still, some EdD faculty are loathe to abandon the GRE believing it to be a symbol of program prestige and rigor (Mountford, 2007, Posselt, 2015; 2016).

Policy Impact on Program Diversity

A major concern impacting future educational leadership program applicants is the opaqueness of program admissions criteria, and the lack of clearly articulated guidelines necessary for acceptance (Appleby & Appleby, 2006; Posselt, 2016). Guidance as to recommendation letter content or personal statement is seldom available and admission assessment rubrics indicating weighting given to each program admission criteria tends not to be in the public domain. Faculty are rarely held accountable for the program's admission policy. This is particularly impactful to certain groups of students who do not have a family history, or know few colleagues who have successfully applied and been accepted into a doctoral program.

The literature also suggests that GRE scores of underrepresented students, on average, tend to be lower than those of their peers (Tapia et al., 2003;). This may lead admissions committee members to perceive underrepresented students as less academically skilled than their peers and unable to handle the rigors of the program. Several scholars (Hagedorn & Nora, 1996; Aspray & Bernat, 2000; Tapia et al. 2003) reiterate that GRE scores are standardized tests and as such are imperfect predictors of success for students of color. These scholars recommend that admissions committees place greater emphasis on other indicators of student potential in an effort to increase student diversity. Such an approach increases the investment of faculty time in the admission process and may be consequently unappealing (Griffin & Muñiz, 2015; Posselt, 2016).

Young and Young (2010) in a study of one educational leadership doctoral program found that a level playing field fails to exist for certain national origins (i.e., African Americans and Asians) when this playing field is measured, at least in part, by percentile scores from the Miller Analogies Test (MAT). They compared admission decisions based on gender and national origin and concluded that African Americans and Asians were less likely to be admitted to a doctoral program because of their MAT scores. They recommended that less weight be given to the MAT score and more weight be given to GPA for Asian and African Americans because GPA captures years of experience than one test score.

The financial cost of preparing and applying for a graduate program can be significant. For example, if a prospective program applicant takes a GRE prep course prior to taking the GRE the cost will amount to several hundred dollars, and if a prospective program applicant cancels taking the exam due to feeling unprepared, they will be refunded only half of the original GRE test cost. As the GRE test can be taken once every 21 days, up to five times within any continuous rolling 12-month period (365 days), and scores on specific tests can be saved or cancelled (ETS. GRE, 2020) it places some program applicants at a distinct advantage if they have the financial capital to cover the cumulating costs (Tucker & Uline, 2015). In addition to the test and purchasing practice materials expenditure there is also the program's registration fee to consider. Overall, applying to a graduate program requires a large investment of time, energy, and available funds which can be a prohibitive burden for some prospective applicants.

Effective Policy and Practice in Promoting Program Diversity

Admissions committees autonomy can vary depending on institutional policy and formal law (Posselt, 2016). Nevertheless, over the last four decades there has been a growing discussion of alternative or complementary admission practices that would enable EdD educational leadership programs to attract a wider pool of applicants by reducing barriers that discourage some students from historically underrepresented groups from applying for admission (Tucker & Uline, 2015). One such approach is the developmental two-stage admission model, commonly known as the comprehensive or multidimensional approach. Applicants are first screened by standards which focus on academic competency without consideration for minority status or other background or other personal factors. The second stage of the selection process focuses on the remaining pool of eligible applicants. At this stage, faculty must choose from the subgroup of eligible applicants who will best advance the educational philosophy and objectives of the institution, the profession and society applying both academic and non-academic criteria. Childers and Rye (1987) concluded that a multidimensional approach (e.g., essay activity, structured interviews, small group activities), although time consuming, provided faculty members with a greater chance of selecting students who would complete the degree and afforded students with lower GRE/MAT scores to showcase intangible strengths.

Advocates for comprehensive admission practices include Milstein (1993) who proposed including a written essay and interview focused on leadership and values in addition to traditional measures of prior academic accomplishments; Machell et al., (1994) who promoted structured interviews and other activities related to identifying leadership aptitude; Painter (2003) who advocated for activities that require use of applicants' leadership qualities and potential rather than individual test scores; and Mountford et al. (2007) examined the predictive validity of traditional academic and personal screening practices for admitting students in educational leadership doctoral programs found that personal screening measures such as interviews, writing samples, and problem-solving activities were more accurate predictors of performance the program than traditional measures such as the GRE or GPAs. Although faculty are concerned that writing samples are subject to gaming and also time consuming to review (Posselt, 2016, p.55).

Yet, traditional measures for admission continue to dominate as we have seen from the review of online EdD programs. In their study of EdD educational leadership program admission policy and practices, Tucker and Uline (2015) found that the most common assessment being used for program admission continued to be the GRE at 67%; another 10% of educational leadership programs required the MAT; and 21% of educational leadership programs did not require any exams for admissions. For educational leadership programs, Tucker and Uline (2015) recommend that faculty use a variety of assessment strategies such as demonstrated leadership strengths, interview, and portfolios.

Implications for EdD Educational Leadership Programs

The above critical policy analysis of extant literature and data offers several implications for EdD educational leadership programs. Generally, analysis suggests that professional practice doctoral programs should develop an admission policy that is attentive to considerations of excellent professional practice augmented by scholarly knowledge; and to the development of future education leaders representative of the student body they serve in order to fully comprehend the needs and obstacles marginalized groups of students face daily both at school and in the

community. It is imperative that EdD program admission policies meet this need by ensuring that their admission policy is valid, reliable, inclusive, and without bias.

When an admission policy broadens criteria to include non-cognitive constructs, it will improve practices of educational equity in the admission process (Pretz & Kaufman, 2015). Kuncel, Kochevar, and Ones (2014) suggest that programs assess indicators related to academic coursework, persistence, and motivation because these areas are related to program completion. Marrero (2016) studied 81 doctoral students in a psychology program and noted that the recommendation letter asked the rater to evaluate the candidate's ability on indicators such as academic performance, collaboration, commitment, writing ability, and research potential as opposed to research abilities and work habits which are the traditional character traits required by educational leadership doctorates (Young, 2005, 2007). Tucker and Uline (2015) recommend that faculty use a variety of assessment strategies such as demonstrated leadership strengths, interview, and portfolios. The following admission practices could also be added to this list: stakeholder selection panels, and prior demonstrated leadership accomplishments.

Whilst the two-stage development admission practice is a step in the right direction the two stages should be reversed to place personal criteria before traditional criteria utilizing a tool developed by ETS focused on evaluating applicants' personal attributes. The ETS® Personal Potential Index (ETS® PPI) helps programs make admissions decisions by providing standardized, applicant-specific information on core personal attributes. These include knowledge and creativity; resilience; communication skills; ethics and integrity; teamwork; and planning and organization (ETS. GRE, 2020). The company developed this test in part as a response to calls for alternative measures of student potential for long-term achievement that is not captured by GRE (Miller & Stassun, 2014).

Research indicates that educational institutions have sought to increase the overall diversity of student populations to reflect the overall diversity of society (Hagedorn & Nora, 1996). Yet, in her research on graduate admissions Posselt (2016, p.72) warns that whilst many faculty feel a strong obligation to remediate underrepresentation of African Americans and Latinos in their programs inequality remains. Posselt suggests this is partly due to faculty's entrenched views relating to prestige of high GRE scores, and uncertainty as to legal parameters regarding admission discussions around race. Finally, Posselt found that some faculty felt uncomfortable raising the subject of race, because their colleagues would find it a controversial issue (p.161).

Conclusion

In this study, critical policy analyses was utilized to address two research questions: (1) what processes of policy development and implementation led to the current EdD educational leadership program admission practices; and (2) how effective are the admission practices in promoting program diversity? The findings from this study suggest that despite research showing that traditional admission measures are inadequate for increasing student diversity, and assessing potential program success many programs still rely upon traditional admission criteria as evidenced by the reviewed 50 fully online EdD educational leadership programs.

Continuing the tradition of having the GRE as an admission requirement for a professional practice doctorate may reflect the perception by some faculty that GRE scores are both equitable and effective measures of merit, failing to appreciate that using quantitative measures can disadvantage students from underrepresented backgrounds. Possibly, unintentionally, faculty are perpetuating rather than mitigating EdD educational leadership program diversity. Posselt (2016)

points out that faculty seldom question the traditional admission policy as it successfully mirrors the program's faculty. This is a systemic challenge that according to Posselt (2016) requires a systemic response.

Traditional admission policy should be reviewed and revised to include screening processes focused on identifying student potential to lead educational organizations. Interviews (online or face-to-face), professional practice experience, instructional leadership portfolio, problem solving/communication scenario, and personal information are all appropriate admission practices for a professional practice doctorate.

Educational leadership faculty are charged with a moral imperative to challenge inequities and promote and enact ethical admission practices that increase diversity in EdD educational leadership programs. The challenge to all program faculty whether delivering a face-to-face, hybrid or online program is to implement admission criteria avoiding cultural or racial bias.

References

- Appleby, D. C., & Appleby, K. M. (2006). Kisses of death in the graduate school application process. *Teaching of Psychology, 33*(1), 19-24.
- Aspray, W., & Bernat, A. (2000). *Recruitment and retention of underrepresented minority graduate students in computer science*. Computing Research Association.
- Blaikie, P. M., & Soussan, J. G. (2000). *Understanding policy processes*. University of Leeds.
- Childers, J. H., Jr., & Rye, D. R. (1987). Doctoral student selection in counselor education: A Multidimensional assessment strategy. *Journal of Counseling and Development, 65*, 555-557.
- Council of Graduate Schools. (2009). *Broadening participation in graduate education*. Author.
- Council of Graduate Schools and Educational Testing Service. (2010). *The path forward: The future of graduate education in the U.S.* Author.
- Fallon, G., & Paquette, J. (2009). *Introducing a market element into the funding mechanism of public education in British Columbia: A critical policy analysis of the School* 235-236.
- Educational Testing Service (ETS) Graduate Record Exam (GRE (2020). Graduate Record Exam. https://www.ets.org/gre/revised_general/about
- Griffin, K. A., & Muñiz, M. (2015). Rethinking the structure of student recruitment and efforts to increase racial and ethnic diversity in doctoral education. *International Journal of Doctoral Studies, 10*, 199-216.
- Gratz v. Bollinger (2003). 123 S. Ct. 2411. <https://www.lexisnexis.com/community/casebrief/p/casebrief-gratz-v-bollinger>
- Gutter v. Bollinger (2003). 123 S. Ct. 2325. <https://www.lexisnexis.com/community/casebrief/p/casebrief-gutter-v-bollinger>
- Hagedorn, L. S., & Nora, A. (1996). Rethinking admissions criteria in graduate and professional programs. *New Directions for Institutional Research, (92)*.
- Hirt, J. B., & Muffo, J. A. (1998). Graduate students: Institutional climates and disciplinary cultures. *New Directions in Institutional Research, 98*, 17-33
- Jones, B. E., Combs, J. P., & Skidmore, S. T. (2019). Admission criteria for educational leadership doctoral students in one U.S. doctoral program. *International Journal of Doctoral Studies, 14*, 351-365.
- Kaufman, J.C., Pumacahua, T. T., & Holt, R. E. (2013). Personality and creativity in realistic, investigative, artistic, social, and enterprising college majors. *Personality and Individual Differences, 54*, 913–917.
- Kuncel, N. R., Wee, S., Serafin, L., & Hezlett, S. A. (2010). The validity of the graduate record examination for master's and doctoral programs: A meta-analytic investigation. *Educational and Psychological Measurements, 70*(2), 340-352.
- Levin, B. (2001). Conceptualizing the process of educational reform from an international perspective. *Educational Policy Analysis Archives, 9*(14). <http://epaa.asu.edu/epaa/v9n14.html>
- Levine, F. (2016). Statement by AERA Executive Director Felice J. Levine of Fisher v. University of Texas, Austin. American Education Research Association.

- <https://www.aera.net/Newsroom/News-Releases-and-Statements/Statement-by-AERA-Executive-Director-Felice-J-Levine-on-Fisher-v-University-of-Texas-Austin>
- Machell, J., Berube, W. & Sorenson, D. (1994) Beyond GREs and GPAs: identifying and selecting the new breed. *Planning and Changing*, 24, 240–253.
- Marrero, F. A. (2016). Pre-entry doctoral admission variables and retention at a Hispanic serving institution. *International Journal of Doctoral Studies*, 11, 269–284.
- Miller, C., Stassun, K. A test that fails. *Nature* 510, 303–304.
- Milstein, M. (1993). *Changing the way we prepare educational leaders: The Danforth Experience*. Corwin Press.
- Mountford, M., Ehlert, M., Machell, J., & Cockrell, D. (2007). Traditional and personal admissions criteria: Predicting candidate performance in US educational leadership programmes. *International Journal of Leadership in Education*, 10(2), 191–210.
- National Council of Professors of Educational Administration. (2008). The handbook of doctoral programs: Issues and challenges. OpenStax CNX.
<https://cnx.org/contents/0a4udjqo@3.3:raw58fo-@1/an-empirical-description-of-doctoral-programs-in-educational-leadership>.
- Painter, S. R. (2003). Rethinking higher admission standards for principal preparation programs. *Planning and Changing*, 34(3&4), 197-208.
- Posselt, J. R. (2015). *Inside graduate admissions: Merit, diversity, and faculty gatekeeping*. Harvard University Press
- Posselt, J. R. & Grodsky, E. (2017). Graduate education and social stratification. *Annual Review of Sociology* 43, 353–78.
- Prunty, J. (1985). Signposts for a critical educational policy analysis. *Australian Journal of Education*, 29(2), 133-40.
- Storey, V. A & Fulton, J. (2016). The consequential relationship between doctoral course design and capstone design. *Contemporary approaches to dissertation development and research methods*, 1-16. IGI Global.
- Tapia, R., Lanius, C., & Alexander, B. (2003). *Factors that influence science and engineering graduate student diversity: Results of a Rice faculty survey*. Rice University.
- Teach.com (2020) Online Doctorate in Education (EdD) programs guide. Author.
<https://teach.com/online-ed/education-degrees/online-edd-programs/>
- Tucker, P. D., & Uline, C. L. (2015). The role of candidate assessment within educational leadership doctoral programs. *International Journal of Educational Reform*, 24(3), 248–266.
- University Council for Education Administration (1987). *Leaders for America's Schools. The Report of the National Commission on Excellence in Educational Administration*. Author.
<https://files.eric.ed.gov/fulltext/ED286265.pdf>
2. U.S. Census Bureau (2020). Population estimates show aging across race groups differ.
<https://www.census.gov/newsroom/press-releases/2019/estimates-characteristics.html>
- U.S. Department of Education, National Center for Education Statistics (2020).
https://nces.ed.gov/programs/digest/d18/tables/dt18_324.20.asp
- Young, I. P. (2005). Predictive validity of applicants' reference information for admission to a doctoral program in educational leadership. *Education Research Quarterly*, 29(1), 16-25.
- Young, I. P. (2007). Predictive validity of grade point averages and the Miller Analogies Test for

- admission to a doctoral program in educational leadership. *Educational Research Quarterly*, 31(2), 44–55.
- Young, I. P. (2008). Predictive validity of the GRE and GPAs for a doctoral program focusing on educational leadership. *Journal of Research on Leadership Education*, 3(1), 1-25.
- Young, I. P., & Young, K. (2010). An assessment of academic predictors for admission decisions: Do applicants varying in national origin and in sex have a level playing field for a doctoral program in educational leadership? *Educational Research Quarterly*, 33(3), 39–51.