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School Leadership Review

The international, peer-reviewed journal of the Texas Council of Professors of Educational Administration

Summer 2013

The Beat Goes On!

The Texas School Finance Battle: "Ground Hog Day" All Over Again

Guy M. Sconzo

Do Resources Matter? The Relationship Between Instructional Expenditures and College Readiness Indicators

Treva Franklin and Casey Graham Brown

*Education Cannot Get Where it Wants to Go Because it Cannot
See Where it Needs to Go: Seeing "Learning" in a New Light*

Geoffrey Caine

*Partnering with Districts in Principal Preparation: Key Program Features
in Strengthening Aspiring Principals' Understanding of Issues of Equity and Excellence*

Betty Alford and Stacy Hendricks

Holistic, Ethical Leadership for the 21st Century

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Student Evaluation of Teaching: The Inequity of Faculty Scores in Online Versus Face-to-Face Courses

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Mentoring New Faculty on the Road to Tenure

Fred C. Lunenburg and Beverly J. Irby

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Timothy B. Jones, *Guest Editor*

Pauline M. Sampson, *Associate Editor*

Matthew B. Fuller, *Assistant Editor*

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The editorial staff of *School Leadership Review* seeks high-quality, original manuscripts in consideration for the upcoming publication of the journal. The *School Leadership Review* is an internationally refereed journal sponsored and published by the Texas Council of Professors of Educational Administration and is designed to offer a publishing opportunity to professors of educational leadership across the country on topics related to school administration. We encourage submissions from new professors as well as those with years of valuable experience. Manuscript guidelines are as follows:

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- ❖ Limit the use of tables, figures, and appendices, as they are difficult to import into the journal text layout.
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The Beat Goes On!

One thing Texans can count on for 140 days every odd year is an interesting legislative session. Not only did the 83rd legislative session deliver on interesting, it continues since as of this writing, the second called special session is “in-session.” Whether the children of Texas have benefited from this session I will leave to others to decide.

To be sure, the session has resulted in the legislature getting into new aspects of public education....including the pedagogical decisions of the individual classroom teacher with the prohibition of distribution of CSCOPE lesson plans. If that wasn't enough, on August 12, 2013, a state district court banned the Llano Independent School District from using any CSCOPE lesson plans. This is certainly unprecedented and clearly a new legislative boundary that takes away from the expertise and professional decision making of the classroom teacher and replaces it with legislative expertise. All of this because of a handful of the thousands of CSCOPE lessons were objectionable to some members of the legislature.

With so much excitement going on in our field, Volume 8, Issue 2 has a few more articles for your consideration than usual and I have divided them into three categories, Policy Matters, School Practice and finally our Colleagues.

Policy Matters cannot be discussed without talking about school finance and the latest in the lawsuit dealing with such. Humble ISD Superintendent **Guy Sconzo** contributes *The Texas School Finance Battle: “Ground Hog Day All Over Again.”* **Treva Franklin** and **Casey Graham Brown** add *Do Resources Matter? The Relationship Between Instructional Expenditures and College Readiness Indicators*, to the discussion.

Three articles of interest make up the School Practice section of this issue. International author and speaker **Geoffrey Caine** offers us *Education Cannot Get Where It Wants to Go Because It Cannot See Where It Needs To Go: Seeing “Learning” In a New Light!* Its thesis certainly should give us a moment of pause as we begin the new school year. **Betty J. Alford** and **Stacey Hendricks** contributes *Partnering with Districts with Principal Preparation: Key Program Features in Strengthening Aspiring Principals Understanding of Issues of Equity and Excellence*. Finally, scholar **David Barrett** writes *Holistic, Ethical Leadership for the 21st Century* which is a topic always important to contemplate in our practice.

For our colleagues, two insightful articles are published. **Sam Sullivan**, **Barbara Polnick**, **Lautrice Nickson**, **Robert Manniger** and **J. Yasmine Butler** present their latest data on the controversial IDEA faculty evaluation instrument in their article *Student Evaluation of Teaching: The In-Equity of Faculty Scores in Online Versus Face-to-Face Courses*. Finally, prolific authors **Fred C. Lunenburg** and **Beverly J. Irby** offer mentoring of new faculty guidance in their piece *Mentoring New Faculty on their Road to Tenure*.

I hope you will find these seven articles insightful and particularly relevant as the education landscape continues to change around us. This issue of School Leadership Review marks the end of my two year term as Guest Editor. The honor of serving as editor is clearly a highlight of my scholarly career and I want to thank the Board of Directors of the Texas Council of Professors of Educational Administration (TCPEA) for bestowing that honor. It has been fun and rewarding publishing the four issues that make up Volumes 7 and 8. Kudos and great thanks go

to **Drs. Pauline Sampson, Matt Fuller** and **Kerry Roberts** for their exemplary and dedicated service on the issues. An editor is only as good as the editorial and publishing staff, and these three are the best in the business. It has been my pleasure working with them. Dr. Sampson will assume the position of Editor on Volume 9 and I wish her the best. Pauline will take the journal to the next level as she puts her mark on it. She is an accomplished scholar and I look forward to reading the journal under her editorship. Please join me in wishing her and the new staff to be named our best. The journal is in great hands!

Finally, I want to thank all of you for your support, encouragement, accolades and thoughtful suggestions over the past two years. I have appreciated our members and readership and I hope you found value in everything published as I know your time is valuable. Our field is under scrutiny unlike ever before and we must forge new and difficult conversations to insure our viability and role in the process as ***The Beat Goes On!***

Best wishes for a productive new school year!

Timothy B. Jones, Ed.D.

Guest Editor

The Texas School Finance Battle: “Ground Hog Day” All Over Again

*Guy M. Sconzo*ⁱ

Humble Independent School District

“A general diffusion of knowledge being essential to the preservation of the liberties and rights of the people, it shall be the duty of the Legislature of the State to establish and make suitable provision for the support and maintenance of an efficient system of public free schools.”

The Constitution of the State of Texas, Article 7

Like Bill Murray in “Ground Hog Day,” it was as if I were awakening to start the same day I had experienced the day before, only seven years later. It was time to head to court and testify again in the seemingly on-going constitutional challenge to the Texas school finance system. The names were different, many of the planned witnesses were different, the number of plaintiff groups grew to an all-time high, but the challenges to change an inadequate, inequitable and unconstitutional system of funding Texas public schools remained. The stakes for the children of Texas, and the future of our state, remained as high as ever. As a superintendent in Texas since 2001, I witness on a daily basis the consequences of the state’s failure to adequately and suitably provide resources needed to meet the expectations set for all Texas students.

Seven years earlier, in November of 2005, Judge John Dietz in the Travis County District Court found that over time the Texas Legislature had come to rely too heavily on local property tax revenue, depriving local school districts of meaningful discretion over tax rates. He also found the system to be inadequate in the amount of state funding for Texas public education. The Court found the system in violation of the Texas Constitution. As the third superintendent witness called to the stand at trial, my testimony outlined how Humble ISD had been forced to operate under a tax rate cap of \$1.50 in order to comply with State mandates, standards and expectations for student performance. Humble ISD was unable to generate additional operating revenue to meet increasing State demands.

Judge Dietz’s decision in *West Orange Cove vs. Neely* was appealed directly to the State Supreme Court, and while the justices upheld his decision on the unconstitutionality of a State property tax, the court overturned his ruling that found the system to be inadequate in the amount of State funding provided to schools. The Supreme Court’s decision was based on evidence of continued student progress in Texas Public Schools. Importantly, though, in its decision, the Texas Supreme Court warned legislators about the school funding system’s march toward constitutional inadequacy. The Court stated that structural change was needed and warned the legislature that “it remain[ed] to be seen whether the system’s predicted drift toward constitutional inadequacy will be avoided by legislative reaction to widespread calls for changes” (Thompson & Fraissinet, 2013, p. 3).

ⁱ **Dr. Guy Sconzo** may be contacted at guy.sconzo@humble.k12.tx.us.

In the spring of 2006, the 79th Texas Legislature met in a third special session to address public school finance. And in just a few days ahead of the Court's June 1, 2006 deadline, after which school operations would have been enjoined statewide, the Legislature passed House Bill 1. Initially, House Bill 1 provided increased funding to schools. It compressed local property tax rates by one-third over a two-year period, enacted a new business margins tax to make up the difference of local revenue lost by reduced property tax rates, and created a massive new State hold-harmless provision for school funding, commonly known as target revenue. Target revenue also became a hold-steady provision effectively freezing many districts' funding at 2006 levels per weighted student. House Bill 1 also established a new State tax rate for schools of \$1.00 and gave local school boards the ability to increase that tax rate by \$0.04 by board vote and an additional \$0.13 by community referendum to provide local meaningful discretion.

With a target revenue set below State average and no relief from State mandates, the Humble ISD Board was forced to immediately adopt a \$0.04 increase to the tax rate and, after two years of continual operating budget cuts, turned to the community in November 2008 for a \$0.13 tax rate increase to just barely keep pace with rapid student enrollment growth and inflation. The Humble ISD community approved that tax rate increase request by a 65% margin of support, generating more than \$17 million in operating revenue on an annual basis. However, that was unfortunately short-lived. Within three years the Legislature cut \$5.4 billion from public education, translating to nearly \$26 million lost in Humble ISD operating revenue.

At that point, it became very evident that the Legislature's response to the Texas Supreme Court's West Orange Cove decision drifted far beyond constitutional inadequacy. The State revenue added in 2006 and local revenue raised for Humble ISD in 2008 was gone with the 82nd Legislature's cuts to public education. The new business tax has failed to generate sufficient revenue to make up for the reduction in local property taxes - and the target revenue system adopted by the legislature indeed became a parallel and largely inexplicable funding system for schools.

The alarm sounded in 2011, and I awakened in October 2012 to head back to Judge Dietz's courtroom to testify, this time as the first superintendent called to the stand, in FortBend ISD Et. Al. vs. Scott. Same judge, same legal counsel, same courtroom, same assertions of inadequate funding and statewide property tax, but now, multiple plaintiff groups sharing similar concerns, and declarations of inefficiency, unsuitableness, and arbitrariness. Also different from West Orange Cove, a clear litigation goal was set to attain a funding level for public education that provides a meaningful opportunity for all students, regardless of background or condition, to meet or exceed the significantly higher standards that were set in Texas at the very same time that State funding was significantly reduced. This time, we believe, the evidence demonstrated that continued widespread student progress toward our standards would not be possible without adequate state funding.

Nearly fifteen weeks after my testimony, Judge Dietz ruled in favor of all of our claims. He found that our current school finance system is:

- Inadequate in providing the resources necessary to give all students a real opportunity to graduate from high school ready for college or career;

- Inequitable in bringing all Texas school districts up to the funding levels necessary to meet the State's high standards; and
- Unsuitable to provide local school districts and communities with meaningful discretion to provide local supplementation or enrichment above state requirements.

The evidence at trial showed that despite higher standards and more students from disadvantaged backgrounds, school districts are now getting less money per student than they were at the time of the West Orange Cove trial, adjusting for inflation. The business tax created to bring down local property taxes has continued to fail to generate revenue sufficient to replace lost property tax revenue, creating a structural deficit in our state funding system. And despite the \$5.4 billion in State cuts to public education, the Texas legislature has continued to add requirements for school districts and students, increasing accountability standards and testing requirements. The State's funding commitment no longer matches its plans, and the Legislature has failed to fundamentally change the system in a way that will rationally connect resources to the requirements the State has set. As David Thompson, lead counsel for the Fort Bend ISD Et. Al. plaintiff group, stated,

Judge Dietz's ruling is the logical conclusion to the [State] Supreme Court's 2006 warning that the system already was on the verge of constitutional inadequacy. Since 2006, we have increased standards and cut funding, all while adding hundreds of thousands of students who come to school with more needs and challenges. Some voices are saying we must wait until the [State] Supreme Court rules again until we start to fix this broken system. We respectfully believe that now is the time to begin to address the fundamental question over the resources that are needed to meet our high standards (Thompson & Fraissinet, 2013, pp. 2-3).

As we all continue to wait for Judge Dietz's written findings of fact and conclusions of law, which is the anticipated prelude to the State's appeal of his rulings to the State Texas Supreme Court, we are left with some very significant questions. Will the 84th State Legislature actually provide some additional funding, reduce some testing requirements, and establish broader accountability standards as has been proposed by both the Texas House and Senate? If all of these proposals are enacted, will we have substantially different circumstances for the State Texas Supreme Court to consider from the evidence upon which Judge Dietz rendered his rulings? Will we be any closer to ending the Texas school finance battle and "Ground Hog Day" all over again? Stay tuned. Time will tell.

References

Texas Const. Art § 7

Thompson, D. & Fraissinet, P. (2013). *Trial court rules school finance unconstitutional*. Retrieved from <http://thompsonhorton.com/documents/SFLPressStatement.docx>.

Do Resources Matter? The Relationship Between Instructional Expenditures and College Readiness Indicators

Treva Franklinⁱ
Mesquite ISD

Casey Graham Brown
The University of Texas at Arlington

Public schools face seemingly endless scrutiny. Educators have experienced an increased level of accountability and demand to graduate students who are college ready or well prepared to enter the workforce. The topic of educational funding is often at the forefront of public discussion and debate in Texas. While policymakers recurrently examine the way public schools have been funded (Fermanich, 2009), school district leaders are forced to unrelentingly evaluate and assess the efficacy and results of instructional programs and performance measures. With the push for college readiness for all students, the topic of funding adequacy has continued to be an issue.

The No Child Left Behind Act of 2001 (No Child Left Behind Act of 2011 [NCLB], 2002) required states to create standards for minimum expectations and to annually assess those standards to ensure all students are on grade level and on track to graduate (Green, 2007). The Texas legislature added to the requirements of NCLB with state-imposed provisions of HB1 in 2006, which issued a report card to each school district. The Texas Academic Excellence Indicator System (AEIS) was used to gather and report information from each district based on assessment results as well as economic and demographic information (Texas Education Agency [TEA], 2011b). AEIS report data provided a means to compare the educational success or failure of districts based on assessment data and college readiness indicators.

Texas public school districts have received funding from various sources including state and federal budgets as well as outside and local sources, such as foundations, nonprofit, and parent organizations. Each district decides how to allocate funds for Function 11, which is designated for instructional spending under the guidelines of the Financial Accountability System Resource Guide, the document that prescribes the rules for financial accounting for Texas school districts. The amounts allocated to Function 11 vary greatly from district to district. In spite of greater pressure to increase student achievement and academic readiness, there has been little or no increase in funding sources for school districts.

Because the AEIS includes reporting of districts' financial information, a comparison of district expenditures and student achievement can be made for Texas districts. With economic recovery indicators continuing to show very modest gains, the Texas legislature chose to decrease funding for public schools by more than \$4 billion in 2011. Therefore, a question of major concern to taxpayers, parents, and citizens was whether a correlation exists between instructional expenditures and results on college readiness measures.

ⁱ **Dr. Treva Franklin** may be reached at tfrankling@mesquiteisd.org.

Theoretical Framework

Numerous studies of the relationship between expenditures and student achievement have yielded mixed results. One of the landmark research studies was the 1966 U.S. government sponsored report, *Equality of Educational Opportunity*, later referred to as the *Coleman Report*. The report presented a dismal message concerning the effectiveness of schools and school resources on student achievement (Coleman, 1966). Student background and economic status had greater implications on student achievement than differences in school resources. Differences in schools, and specifically teachers, had a significant impact on student success.

Texas students have a variety of educational needs. Educating students to higher standards translates to increasing overall educational outcomes (Odden, 2001). An increase in standards is not possible without increasing resources provided (Odden, 2001). If all students are to meet the expectation of being college ready, instructional funding must be adequately allocated to meet the needs of the diverse groups that comprise Texas's student population.

College Readiness

For the purpose of this study, college readiness was defined as "the level of preparation a student needs to enroll and succeed—without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program" (Conley, 2007, p. 1). The college ready student is able to understand what is expected in a college-level course, can understand the content, and is able to intellectually problem-solve for the requirements in the class.

The idea of having all students prepared for college has been the goal of high school programs across Texas. One hurdle has been the correlation between enrolling in college and family income and race/ethnicity. Mortensen (2006) reported, "only 47% of recent high school graduates from families in the bottom income quartile (up to \$36,174 annual income) enter college, compared to 83% of students from the top income quartile (more than \$96,560) in annual income" (p. 168).

The topic of college and career readiness has received an increasing amount of attention from educators and policymakers. In 2002, the U.S. Census reported, "over the course of a lifetime a person with a bachelor's degree will earn nearly twice as much as someone with only a high school diploma" (Day & Newburger, 2002, p. 2). Although the research supported the higher earning potential, some students still struggled to adjust to post-secondary life.

Livingston (2011) advocated that high schools do as best they can with the resources they have. He credited teachers and counselors with working to prepare students for success at the postsecondary level, yet questioned why so many are not successful. The solution he offered was for high schools and colleges to work together to establish standards and address the issues. In an effort to prepare students, Livingston urged high school educators and state education officials to coordinate efforts to improve college and career readiness.

Educators have been researching the causes of postsecondary failures to address the college readiness question. Pittman (2011) posited that while academic preparation is of great concern, other just as alarming issues might exist. Employers have asserted that what is missing in job

readiness is "a lack of social, emotional and civic competencies—including a work ethic, a spirit of teamwork and communication skills" (Pittman, 2011, p. 96). These deficiencies have been labeled as *life readiness* skills that have not been developed. According to Pittman, the "distressing number of college students who need remedial courses and the dissatisfaction among business leaders with the preparation of high school graduates has ignited the institutional and political movement to tackle the readiness problem" (Pittman, 2011, p. 96).

College readiness researchers have recognized that not all high school graduates plan to attend college (Gewertz, 2011; Rosenbaum, Stephan, & Rosenbaum, 2010). However, a survey of the research on readiness for entry into the skilled workforce showed that employers want employees to be able to read and communicate well, perform relatively complex mathematical calculations accurately, possess a strong knowledge of basic science, possess a fundamental knowledge of American culture and the world beyond, and be capable of thinking critically and adjusting to rapidly changing work environments (Texas Higher Education Coordinating Board [THECB], 2009b). The college and career readiness standards were created to provide a foundational level of knowledge to enable students to be successful in either arena.

Importance of College Readiness

The author of the *Monthly Labor Review* article, "Occupational Employment Practices to 2014" reported, "approximately 54% of all new job openings in the 2004-2014 decade are projected to be filled by workers with education beyond high school" (Hecker, 2005, p. 76). Recognizing the importance of a world-class education, the 79th Texas Legislature, Third Called Special Session, passed House Bill 1, the Advancement of College Readiness in Curriculum. Section 28.008 of the Texas Education Code reflects the directive to increase the number of students who are college and career ready when they graduate from high school (THECB, 2009a). The TEA and the THECB were given the joint responsibility of developing a college ready curriculum.

A 79th Texas Legislature directive required that the TEA and THECB jointly develop the College and Career Readiness Standards. These standards were to detail, "what students must know and be able to do to succeed in entry-level courses at postsecondary institutions in Texas" (THECB, 2009b, p. iii). The overarching goal was to provide students with a smooth transition between high school and college. Texas was among the first states to begin implementing readiness standards.

In spite of legislation and focus on college readiness, the Texas Education News reported the headline, "A Third of High School 2010 Graduates Were Deemed to Not be 'College Ready'" (Texas Education News, 2011, p. 1). The headline referred to an annual Texas Success Initiative (TSI) Readiness Measures report, which compiled the percentages of Spring 2010 graduates who entered a state public higher education institution without scores deemed necessary for college readiness in math, reading, and writing (THECB, 2011). Of the 280,520 students who graduated in 2010, 48.9% enrolled in higher education in the state. Of those enrolled, 66% met all three TSI requirements; however, the remaining 34% did not demonstrate college-ready competencies. Only 73% met the math standard, 81.6% met the reading standard, and 80.9% met the writing standard. Students not meeting the standard are required to enroll in remediation courses before college credit classes can be taken. Texas Education News reported that over \$200 million per year is spent on developmental (remedial) courses in Texas public colleges.

Expenditures Versus Student Performance

After the landmark Coleman Report in 1966, researchers began a quest to prove or disprove the expenditure versus student performance question. Hanushek (1986) analyzed numerous studies and determined there was no systemic relationship between expenditures and student achievement. Hanushek (1986, p. 1162) stated, "two decades of research into educational production have produced startlingly consistent results. Variations in school expenditures are not systemically related to variations in student performance." Other researchers have shown a positive relationship between funding and achievement (Wendling & Cohen, 1981; Wenglinsky, 1997). Greenwald, Hedges, and Laine (1996) found a strong positive relationship between funds used for instruction and student achievement. Standard & Poor's (2006) released an analysis of data in nine states that were considering a policy that no less than 65% of budget could be spent on instructional costs. No significant positive correlation was shown between the percentage of funds districts spend on instruction and the percentage of students who scored proficient or higher on state reading and math tests.

Methods

The purpose of this mixed-methods study was to examine the issues surrounding college readiness and the impact of instructional spending on preparing students to be academically ready for college-level work. The amount of instructional funds spent in Texas school districts were compared to the results of college readiness indicators as measured by the exit-level Texas Assessment of Knowledge and Skills (TAKS) as reported on the 2011 AEIS report. Qualitative data were gathered to gain knowledge about the perceptions of college readiness advisors concerning student college readiness.

Data Collection

The indicators of districts' instructional spending and the college readiness indicators represented by the class of 2010's scores on TAKS in language arts and math were analyzed. Of the 1,228 Texas school districts, 190 districts were excluded due to not reporting exit-level TAKS results or funding anomalies. Therefore, data from 1,038 Texas districts were used in the statistical analysis. Private, parochial, and charter schools were excluded, as were schools designated as alternative disciplinary campuses or containing only kindergarten through eighth grade.

A phenomenological design (Creswell, 2007) was used for the study's qualitative part. Five college readiness advisors participated in semi-structured interviews. The advisors were selected from campuses in northeast Texas to highlight the impact of a single regional P-16 council. The advisors had the transition of first-year college students as a primary job responsibility.

Data Analysis

Instructional spending was defined as the "district's total actual expenditures for the 2009-2010 fiscal year that were used to fund direct instructional activities" (Texas Education Agency [TEA], 2011a, p. 13). College readiness indicators were grouped together on the AEIS and "help provide a picture of college preparedness at a given high school or for a specific district" (TEA, 2011a, p. 6). The graduate "must have met or exceeded the college ready criteria on the TAKS exit-level test" (TEA, 2011a, p. 6) in order to be considered college ready. The scores were scaled and reported. For college-ready graduates, "the criteria for each are English language arts

≥ 2200 scale score and a 3 or higher on the essay and math ≥2200 scale score on mathematics test” (TEA, 2011a, p. 7). For the purposes of this study, the only indicators correlated to instructional spending were the percentage of students scoring at the college ready graduate level on the English language arts, math, and both English language arts and math tests for the class of 2010. A product moment correlation coefficient, Pearson's r , was used to measure the linear association between the interval variables being analyzed.

Qualitative interview data including transcriptions and field notes were coded to examine the perceptions of the advisor regarding aspects of college readiness. The resulting themes wove together the collective reflections of the college readiness advisors.

Findings

Instructional Spending and English Language Arts College Readiness Measures

To determine whether a significant relationship existed between instructional spending and English language arts college readiness measures the figure indicating total operating expenses for instruction was utilized for analysis. For the class of 2010, the college-ready graduate measure on exit-level English language arts TAKS was the percentage of students who scored greater than 2200 (see Table 1). The mean instructional expenditure was \$4,843.00, with a range for districts of \$1,772.00 to \$14,228.00. The instructional expenditure of many districts fell more than one standard deviation from the mean.

Table 1

Instructional Expenditures and College-Ready Graduates in English Language Arts

	Instructional Expenditures	College-Ready ELA %
Mean	\$4843.00	62.93
Minimum	\$1772.00	9
Maximum	\$14228.00	96
Range	\$12456.00	87
Standard Deviation	\$1192.00	14.83
Skewness	2.66	-0.59

A Pearson Product Moment correlation was used to determine whether a relationship existed between the two variables. The independent variable was the percent of students scoring at the college-ready graduate level on exit-level TAKS. The dependent variable was the amount of instructional expenditures.

The Pearson Product Moment coefficient for the two variables was .0344, indicating a negligible to low correlation and not meeting the threshold for statistical significance. Therefore, there was no statistically significant relationship evidenced between instructional educational spending and college ready graduate measures reported on the AEIS. The practical significance of the correlation was negligible (Ravid, 2011). The coefficient of determination indicated that less than 1% of the differences in the instructional expenditures could be associated with the college-ready English language arts exit-level TAKS results.

Instructional Spending and Mathematics College Readiness Measures

To determine whether a significant relationship existed between instructional spending and the mathematics college readiness measures, the data from 1,038 Texas public school districts were examined. Data analyzed included the amount for total instructional expenditures and the percent of students deemed college ready by scoring 2200 or higher on the exit-level math TAKS exam. The mean district instructional expenditure was \$4,829.00; expenditures ranged from \$1,772.00 to \$14,228.00 (see Table 2). The mean college-ready graduate percentage on exit-level math TAKS was 60.

Table 2

Instructional Expenditures and College-Ready Graduates in Math

	Instructional Expenditures	College-Ready ELA %
Mean	\$4829.00	60
Minimum	\$1772.00	8
Maximum	\$14228.00	97
Range	\$12456.00	89
Standard Deviation	\$1165.00	15.72
Skewness	2.59	-0.57

The r-value reflecting the correlation between the instructional expenditures and the college-ready graduate scores on exit-level math TAKS was 0.0845, thus it was determined that a statistically significant correlation did not exist between instructional expenditures and the college-ready graduate results on the exit-level math TAKS. The practical significance of the correlation was low (Ravid, 2011). The coefficient of determination, $R^2 = 0.0071$ indicated less than 1% of the differences in the instructional expenditures could be associated with the scores of the college-ready graduates on the exit-level math TAKS results.

Instructional Spending and College Readiness Measures

Data were analyzed to determine whether a significant relationship existed between instructional spending and both language arts and math college readiness measures. The independent variable was the percentage of students scoring 2200 or above on the English language arts and math exit-level TAKS exam, indicating college readiness. The mean district instructional expenditure was \$4,829.00, and ranged from \$1,772.00 to \$14,228.00. The instructional expenditure of many of the districts fell more than the one standard deviation from the mean. The mean college-ready graduate percentage on both exit-level TAKS for English language arts math was 48.04 (see Table 3).

A Pearson Product Moment correlation was used in order to determine if a relationship existed between the two variables. The r value, reflecting the correlation between the instructional expenditures and the college-ready graduate scores on both exit-level English language arts and math TAKS, was 0.1102; therefore, it was determined that a statistically significant correlation did not exist between instructional expenditures and the college-ready graduate indicators on both the exit-level English language arts and math TAKS. Additionally, the practical significance of the correlation was low. The coefficient of determination, $R^2 = 0.012$, indicated

that approximately 1% of the differences in the instructional expenditures could be associated with the scores of the college-ready graduates on the exit-level English language arts and math TAKS results.

Table 3

Instructional Expenditures and College-Ready Graduates in English Language Arts and Math

	Instructional Expenditures	College-Read Both ELA & Math %
Mean	\$4843.00	48.04
Minimum	\$1772.00	4
Maximum	\$14228.00	92
Range	\$12456.00	88
Standard Deviation	\$1192.00	16.11
Skewness	2.66	-0.14

Perceptions of College Readiness Advisors

The perceptions of the college readiness advisors who were interviewed provided insight about the phenomenon of college readiness (Gall, Gall, & Borg, 2007). The advisors were responsible for the transition of incoming freshmen into the college world and worked extensively with college readiness issues.

The themes that emerged as the essence (Creswell, 2007) of the interviews corroborated the issues in college readiness literature. Themes included defining college readiness, failure of the NCLB of 2001 legislation, number of students entering college who are academically unprepared, implications of funding, and additional steps that need to occur in order for students to be successful in college transition.

Conley and McGaughey (2012) emphasized the significance of “all students being college and career ready is one of the most discussed issues in policy circles and secondary schools these days” (p. 28). The college readiness advisors repeated the sentiment. Lack of academic preparation in the areas of math, reading, and writing was a concern for the advisors. Additionally, the skill of critical thinking was discussed as an area in which students entering college were not prepared.

All participants had decisive responses regarding personal definitions of college readiness and referred to college readiness as being multi-faceted. Participants discussed the academic preparedness and social/emotional aspects of college readiness. The advisors’ definitions of college readiness mirrored current definitions (Bill & Melinda Gates Foundation, 2011; Conley, 2007).

Participants were not exceedingly familiar with the particulars of NCLB of 2001 legislation. One participant shared, "I think the idea was about giving everyone the same opportunity. . . even with that there are huge discrepancies." Another termed NCLB "a disaster" and noted that it seemed the legislation lowered the bar. Her university raised admission requirements and did not consider for admission students in the lowest quartile.

Academically Unprepared

The advisors repeatedly reported students' academically unpreparedness for college. All advisors focused on math as the area in which students were most unprepared. Several referenced the change in graduation plans at the state level and were hopeful that requiring four years of math, science, social studies, and English language arts would make a difference for incoming students. One participant asked when students who fell under the requirement of four years of core courses for a *recommended* high school graduation plan would graduate. The advisor was not aware that the students had entered college in the fall of 2011.

Implications of Funding

Of the five participants interviewed, only two seemed to understand public school funding. One participant shared, "We will always have wealthy school districts that have more money than they know what to do with and. . . districts that struggle for every dime."

Participants also addressed the issue of priorities; one participant shared, "budget and legislation determine the priorities regardless of the institution." The perception was that funding choices had implications for districts. One participant stated, "Certainly what districts spend relates to student achievement. Could school districts do better with their funding? Possibly. Our county does a good job with what they have. They have different challenges." The educational funding issue continues to be a source of frustration and confusion for educators (Coalition to Invest in Texas Schools, 2012).

Additional Steps Needed

Participants shared ideas regarding additional steps that should be taken to help students become college ready. One participant shared that districts "could do more to prepare [students] socially. They can have. . .workshops during their senior year after school or during their electives to incorporate some of the expectations." Another advisor referenced the *disconnect* between high school and college and the differences between the expectations of the two entities.

Advisors addressed the need for a support system. "Any learning environment can improve. Working together with colleagues to get better is critical," acknowledged a community college advisor. Another participant believed that "the bigger issue is the support from home."

Advisors discussed the need for a viable curriculum that leads to college readiness. A participant addressed the need for "a more rigorous curriculum and encouraging students to take Advanced Placement classes."

Conclusions

It was concluded that no statistically significant relationship existed between instructional spending amounts by Texas school districts and college readiness indicators of English language arts and math as measured by TAKS exit-level results. The findings were supported by previous educational spending and student achievement research (Coleman, 1966; Hanushek, 1986; Standard & Poor's, 2006) in which no statistically significant relationships were found.

The interviews conducted with college readiness advisors echoed issues documented in the research surrounding college readiness. According to the report, *Beyond Rhetoric: Improving College Readiness Through Coherent State Policy*, "improving college readiness must be an essential part of national and state efforts to increase college degree attainment" (National Center for Public Policy and Higher Education, 2010, p. 2). The article's authors described a disconnect between public schools and higher education. This disconnect was mentioned by the college readiness advisors interviewed. The authors attributed the disconnect to each entity's "deeply held philosophical and educational values" (National Center for Policy and Higher Education, 2010, p. 6). As reported by the advisors, there is work to be done in the area of college readiness. The collaboration that needs to occur between P-12 and higher education is at a critical level to ensure students are successful in the transition to college.

Implications for Practice

Legislators have placed curriculum standards at the center of improvement efforts. The inconsistencies from state to state have been viewed as a deterrent to systemic improvement of college readiness. The result has been the common core standards. Those standards define college and career readiness as "the ability to succeed in entry-level, credit-bearing, academic college courses and in workforce training programs" (Rothman, 2012, p. 13). As of February 2013, Texas had not adopted the common core standards.

The issue of funding is of critical importance in the arena of college readiness. As one participant shared, "Budget always has an effect. Budget and legislation determine the priorities regardless of the institution." Texas school districts continue to pursue the concepts of equity and adequacy for all students. The TEA "administers billions of dollars in both state and federal funds that support a variety of programs to benefit public education" (TEA, 2012, para. 1). The goal of the legislature's funding system must be to allocate funds to schools for the preparation of students and creation of a system to ensure that students are college or career ready upon high school graduation.

Summary

The passage of the federal NCLB Act of 2001 (2002) placed demands on educators across the nation to produce higher and higher levels of student achievement. Those expectations, in addition to the demands from state legislators and higher education institutions, have made student achievement a priority in all states. The addition of legislative action advocating a P-16 focus for the TEA and the THECB has led to heightened importance of college readiness. The current level of educational funding makes it necessary for school districts to more closely scrutinize what will yield returns in the area of student achievement. Legislation that emphasizes college readiness only increases the responsibility of school districts to produce graduates who are ready for the rigors of college.

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Education Cannot Get Where it Wants to Go Because it Cannot See Where it Needs to Go: Seeing “Learning” in a New Light.

Geoffrey Caineⁱ
Caine Learning

Begin with the end in view.
~Stephen Covey (2004)

The real voyage of discovery consists not in seeking new landscapes
but in having new eyes.
~Marcel Proust (2002)

Educational leaders and teachers are in a no-win situation. That is because most of the current tools and programs for improving education, ranging from the Common Core State Standards to iPads, cannot work. At least, as currently conceived.

One reason? It has to do with our enormous collective incapacity or unwillingness to re-examine fundamentals. Particularly the many meanings of the word “learning.” I suggest that we will only be capable of dealing adequately with the vast range of issues in education, from standardized testing to how school systems can be improved, when we are really clear about what it means to learn. It is not a matter of more research. Indeed, as a person who has struggled to synthesize the various sciences of learning for more than 25 years, I take a deep breath when anyone promotes a program or strategy using the phrase “research says.”

Science has not always been a friend to education. In part, “what the science says” has changed dramatically over the years. And in part, even today, scientists do not agree with each other, no matter how certain they all seem to be. (I have extensively examined the science of learning from the perspective of education. See Caine and Caine, 1994, 2001, Caine et. al., 2008, Caine and Caine 2011).

The essential point here is that the word “learning” is overused, very poorly understood and multiply ambiguous. The issue has been examined in a variety of ways at both a theoretical and practical level. It’s misuse is, perhaps, the single biggest obstacle to improving education because it means that the underlying purpose of what we are trying to accomplish is not clear, no matter how much we use terms such as “high standards” or “21st century skills.”

I want to explore the issue by adopting an approach that goes at least as far back as the 1956 framing of Bloom’s taxonomy (1984). It seems to me to be self-evident that educators need to be clear about learning objectives, and several attempts have been made over the years to unpack these. They range from the reworking of Bloom (Anderson & Krathwohl, 2001) to other efforts. These include the SOLO taxonomy (Biggs & Collis, 1982), Webb’s Depth of Knowledge Guide (2009), and a variety of attempts to map these objectives onto differing ways to use technology (e.g. Carrington, 2013).

ⁱ **Mr. Geoffrey Caine** may be reached at geoffrey@cainelearning.com

Why, then, do these efforts not really “take” on a large scale? When educators, researchers, scientists, policy makers, the business round table, non-profits, and others use words such as “learn” or “understand” or “career ready,” what makes us think that they – and we - are all talking about the same thing, or that they – and we - actually have an adequate understanding of what these words and terms mean?

My experience goes back to the publication of our first book *Making Connections: Teaching and the Human Brain* (Caine and Caine, 1991, 1994). It was a best seller that pioneered the synthesis of neuroscience and psychology as foundations for understanding teaching, and is still used around the world. My wife and I were extremely proud of what we conceived of as our contribution to education. And then reality set in. It slowly became evident that people who loved the book were using it to support fundamentally different approaches to teaching and education. They used the same words to mean totally different things and to support radically different practices!

The same words do not mean the same things. And what some say about what they do (e.g. “teaching for meaning” or being “learner centered”) may be totally unrelated to what others say who are using the same words, and also be totally unrelated to what the science “says” as viewed through the eyes and ears of different scientists, and different educators with competing interpretations of what the science means. No wonder that it is extremely difficult to improve schools in the long term, let alone make good decisions about such matters as implementing new technologies.

There’s More to Test Results Than Meets the Eye

One way to illustrate the confusion that is rampant in our taken-for-granted language is to look at how educators and policy makers assess educational success. Education, within and beyond the formal system, is largely driven by test scores, in the belief (sometimes) that high test scores represent high standards. For instance, the US often compares its scores on international tests (such as PISA or TIMSS) with countries that seem to do very well, such as South Korea and Finland, which ranked 2nd and 3rd on the PISA results in 2009 in reading and math (Organisation for Economic Co-Operation and Development, 2009).

The problem? The countries with which we compare ourselves are different! *Nations (and regions and schools and families) can generate similar results on test scores by operating in very different ways.* The scores on standardized tests represent the results of what the systems do, and the systems are doing different things.

South Korea uses a traditional instructional approach and a traditional way of managing education. The focus is on the transmission of information and the teaching of skills by direct instruction with some problem solving, intensive study and practice, and enormous family and social pressure on students to study, memorize, and intentionally aim for high test scores and “do well.” The pressure is so great that a 2011 survey reported that South Korean children are the least happy in the developed world (Yonhap News Agency, 2011).

Finland focuses on equity – it cares for the wellbeing of students and provides them as much as possible, with a level playing field from the point of view of health and general welfare. In addition, a somewhat more experiential approach to teaching is favored. All teachers are expected to have at least a master’s degree. The goal is for educators to use problems, projects, and other processes to teach for real understanding more than for memorization. The overall atmosphere and culture is both rigorous and relaxed. Results on test scores are largely a non-issue (See Wagner, 2013). And so when Finland did so well on PISA 2000 many people initially thought that the results were an error!

When results on tests can be generated in vastly different ways, it means that the same test scores don’t actually reveal the same things. And so test scores are useful, but only in the context of the larger program of which they are a part. The reason is that all the variables of a program, both direct and indirect, work together to generate outcomes. If we miss some of them, we may end up shooting ourselves in the collective feet.

This does *not* mean that only experiential education “works” or that direct instruction is “bad” or that standards and tests should never be used. It means that everything that we do in schools is grounded in a set of ideas about how to get from here to there. So this is an attempt to generate some more clarity about where we are, where we actually want to go, and about what it really takes to get there from here.

Learning Objectives Reframed

In 1956, a committee of colleges led by Benjamin Bloom (Bloom, 1984) suggested that there were three types of educational domains. These, it was believed, would clarify the learning objectives that educators set for students.

- The *cognitive domain* dealt with mental and intellectual functions. As initially formulated these were a sequence of knowledge, comprehension, application, analysis, synthesis and evaluation.
- The *affective domain* dealt with feelings and attitudes. And
- The *psychomotor domain* dealt with physical skills.

These three domains are loosely thought of in terms of *knowing/head*, *feeling/heart* and *doing/hands*. The domains were reworked in 2001 (Anderson, & Krathwohl, 2001). Nouns became verbs. And the sequence for the cognitive domain was remembering, understanding, applying, analyzing, evaluating and creating.

The first weakness in the system was in the separation of the three domains. They are separate in some ways, but they are also connected. In my view, the best way to view the science of learning is to see that the body, brain and mind function as a whole system. Thus neuroscientist Damasio (1994) said that each of us interacts with our environment as an “indissociable whole.” More specifically, in addition to cognition being an intellectual process:

- *We think with our feelings* (Ariely, 2010; Damasio, 2010). That means that the way one feels about any idea or process impacts what it means and how deeply we understand it. So one of my favorite headlines of all times was in the Los Angeles Times many years

ago. It was about a Nobel winning scientist and was titled “The man who loved molecules.”

- *We think with our bodies.* Scientists call this embodied cognition (Shapiro, 2010). That means, in part, that sensory and physical experiences impact understanding. So students may gain a deeper sense of both friction and gravity when they are pulled along a corridor on a blanket and are then asked to compare that with being pulled along on a skateboard.
- *We think together.* Scientists (Lave & Wenger, 1991) call this situated cognition. We all make sense of things through the ways in which we talk about and deal with them socially and collectively. A classic example is the way that the behaviors and symbols used in texting have been co-created by the millions of people for whom texting is now a way of life.

There is more than this, as we have demonstrated over the years with our brain/mind principles of natural learning (Caine and Caine, 1994; Caine et. al. 2008). However, there is enough here to show that learning is not a mechanical nor only an intellectual process. It is partly like what happens in a chemical factory. Or, indeed, in the complex and messy dynamic inside each one of us as we digest a meal. All the parts of the system play a role – the mental part of it is in a constant interactive dance with physical movement, emotional energy, and the ongoing connections with other people and the larger world.

So what is the practical implication? On the one hand, the entire personal, social and physical system of any individual is engaged in learning. On the other hand, the various aspects of these systems interact in different ways and in different combinations. So the sort of outcome that is generated depends on how, more precisely, head and heart, brain and body, individuals and groups, interact. And because so much of that happens without being noticed, or is almost invisibly shaped and manipulated by the system in various ways, we end up with outcomes that may be totally unrelated to what we think and believe we are achieving.

Objectives and Outcomes Viewed Through the Lens of Natural Learning

Without going in depth into the details, I want to spell out a set of learning outcomes that vary according to how the different subsystems of body, mind and context work together. These will be presented in linear form, but they are not linear as will hopefully become evident. They vary, rather, from simple to complex. I will also describe some of the processes that go into producing them. That will lead to some brief observations about how to assess teaching, and so to some suggestions about what is needed to use technology effectively and raise standards.

Some learning outcomes:

- Memorization, acquiring information, and shallow understanding.
- Getting it! Solid understanding.
- Developing situation lenses and real world competence.
- 21st century skills: Some of these are timeless executive functions of the human brain.
- Creativity and generativity: Developing *new* knowledge, *new* skills, *new* lenses.

1. Memorization, Acquiring Information, and Shallow Understanding

Much information can be grasped superficially, which is why we called it surface knowledge. It consists of facts, routines, and the skeleton or bare bones of concepts. So one can talk about who invented peanut butter (Fisch & Mcleod, 2007), exports and imports, the plot of a novel, how to measure the speed of a falling stone, or the three branches of government.

This can be shaped and presented in ways that map onto some predigested patterns in the minds of learners. So the notion of “government” makes some sense to anyone who lives in a place where other people make the rules and decide between right and wrong.

What Do and Can Teachers Do to Generate this Outcome?

Material can be presented creatively using all the senses. Stories can be told that are interesting or worrying or heart warming. Students can play games, both traditional and online, and use other strategies ranging from mnemonics to visualization, as aids to memory. Videos, applets and a host of websites can be used to present information and processes graphically and entertainingly. There are a multitude of ways for students to connect in the physical world and online, discuss things and study together. Different versions of the flipped classroom can be used. And a significant amount of time can be spent in explanations, organizing material, trying to solve problems and generally just working through the first layer of understanding. There is practice and rehearsal of various kinds. And all of this can now be supplemented by a host of applications and additional uses of technology.

In general this is a teacher directed and controlled process, with two points of note:

- What is personally meaningful to students is usually irrelevant. Irrespective of what might be going on in the hearts and minds and lives of students, when it’s “time for math” in school, that is what they do. Some processes, such as the flipped classroom, allow for a more self-paced approach, but this is still within the confines of what teachers are asking for. So emotional engagement is generated artificially by the amount of fun that can be built in, by how much students and teacher care about each other and so on. The various subsystems of body, brain and mind are harnessed in the aid of memory.
- Memorization and the building of knowledge scaffolds can, nevertheless, be immensely valuable *in a larger context*. So students may memorize the bones of a skeleton as a basic scaffold that becomes absorbed with more subject matter expertise in biology, and actors have to memorize their lines as one aspect of their job.

Assessing teaching. *If the processes described above adequately represent the sorts of things that teachers or the school spend most time doing, then they are teaching for the acquisition of information and shallow understanding. It simply does not matter what else they say or think that they are doing.*

2. Getting It! Solid Understanding

Grasping concepts and underlying ideas is extremely important, as Resnick (2009) suggested in her notion of the *Thinking Curriculum*. These ideas are the foundations upon which genuine competence and expertise are built. As a minimum, getting there calls for sustained rigorous thinking. This involves going in-depth into the various features and elements of a concept or idea or body of formal knowledge or process. There might be:

- Ways to organize information and material;
- Summaries;
- Ways to compare and contrast concepts and ideas;
- Use of analogies, metaphors and different perspectives;
- Socratic questioning;
- Problem solving;
- Seeking and receiving explanations from others;
- Using and testing models and simulations;
- Conversations and discussions;
- All supplemented and sometimes driven by a vast array of technological tools and resources such as videos, multimedia presentations, social networking, and more.

It used to be thought that rigorous intellectual processing was enough, but following from the science referenced above, it is now known that more is needed. For instance:

- *Personal purpose and interest matter.* The brain/mind organizes meaningful and meaningless information differently. Passion and purpose aid intellectual understanding. This means that the student's authentic questions must be allowed, voiced, heard, and dealt with. What, specifically, do the students themselves find interesting and which to explore further? What do they find confusing that needs to be unpacked, clarified and reframed?
- *The brain/mind processes parts and wholes simultaneously.* That is one reason why incorporating content into meaningful and interesting projects is a powerful aid to understanding. Whether a student is writing an article for a local paper, test firing a rocket on the school grounds, or simulating an election, a coherent and meaningful context contributes enormously to understanding.

What Do and Can teachers Do to Generate this Outcome?

Teachers guide and facilitate all this activity. They support, lead, challenge, process, ask questions, set and orchestrate contexts, introduce and monitor projects, and generally push and encourage students to go beyond their current understandings. It is in the context of doing all of this, sometimes in the flow of the event and sometimes in more focused and rigorous sessions, that the intellectual and analytical processes described above should be brought to bear. The key to success lies in the balance between orchestration and going with what happens. The power of good project based learning supported by direct instruction is that the project itself becomes a natural organizer for all the processes as well as all the content.

Assessing teaching. *Teachers and schools that engage in most of the processes and practices listed above are, if they are doing it well, teaching for solid understanding. This is one of the strengths of the Finnish approach. However, if there is no rigor, if authentic student questions and interests are disregarded, if projects are fragmented and too tightly packaged and controlled by teachers, if there is little or no active processing, if there is no emotional engagement, if there is no physical action other than talking and writing, then for the most part, solid understanding is not developing, no matter what teachers and administrators think they are doing.*

3. Developing Situation Lenses and Real World Competence.

When a person grasps a concept deeply, it can be used in routine real world contexts. Thus, a student would be able to use a spreadsheet, write an article, and assess at least some of the forces acting on some ice as it is thrown against a wall.

Real world competence calls for more. It is the ability to spontaneously see larger patterns play out in unexpected and complex environments. It is all well and good to be able to explain how racism and power have played a role in political events. It is a different thing altogether to see racism and power play themselves out in a current election in which one might have a vested interest and be involved. Similarly, one might be quite good at explaining how an economy works according to different theories. Something profoundly different is needed to see, say, the complex current of market forces, regulation, and media spin in the economy to which one is subject, particularly, say, if personal career or investment decisions have to be made .

Traditionally these differences are thought of in terms of transfer of learning, and so the advice to educators is to teach for transfer. This has a semblance of truth but misses the larger point. Real world competence is dynamical knowledge, and is different in its core from theoretical understanding. You cannot transfer what has not yet been adequately grasped.

The key to success in the real world is being able to *read* that world, to see what is happening. So every subject, in essence, can provide a new set of lenses – these could be called situational lenses. In everyday language, a person will start to “get a feel” for a subject or skill or occupation. When a felt meaning (Caine, 1994, Gendlin, 1981) develops, a person not only knows some math, he or she can think mathematically; not only know some history, but thinks historically.

Those situational lenses have to be generated inside a person. For them to develop, all the subsystems of body, brain and mind need to interact while content is used in the course of many, complex, real world experiences. That is because, as mentioned above, a human being - body, brain and mind - interacts with its environment as an indissociable whole (Damasio, 1994). The power of experience is that it reshapes and reforms and transforms intellectual knowledge into perceptual knowledge – the situational lenses mentioned above – by engaging all the subsystems interactively and simultaneously. It takes a lot of complex, ongoing experience, with many iterations and variations. There needs to be real world feedback, and detailed guidance and coaching in real time. And the experience needs to be processed, both informally over, say, a cup of coffee and more formally with a coach or teacher.

What Can Teachers Do?

There are three critical elements. One is to ensure that students are immersed in projects that are adequately complex. There must be enough time for events to play out realistically; there must be enough space for events to be experienced adequately; there should be enough social interaction for the multitude of small details that occur in everyday life to be present and to impact the projects; and the project should be complex enough for hard thinking to be needed and tough decisions to be made. A second element is to ensure that there is adequate reflection and processing so that the experience can be “mined” for all that it contains. And the third is to maintain an atmosphere of relaxed alertness because high functioning is virtually impossible when students and educators are in survival mode (Caine et. al., 2008).

One example is great service learning where students embark on, say, community projects over weeks and month. Another is one of ecological and environmental projects, such as growing gardens to feed students and the community, promoted by the Center for Ecoliteracy (2013). A third consists of the complex blends of arts, science and humanities used in multiple ways by High Tech High (Wagner, 2008; Caine & Caine 2011; High Tech High, 2013).

Within the context of these projects there is the need for analysis of ideas, reading of research and texts, sessions of rigorous thinking, guidance and coaching in the art of doing lab work and acquiring other skills, recording results, and making authentic presentations to others (because sometimes the key to developing understanding and showing it lies in the capacity to explain things to others and deal appropriately with their responses).

One further point needs to be made about the use of technology. Teachers who are teaching for the development of situational lenses do not primarily look for applications and tools to support student thinking *about* content. Rather, the technology is now embedded in the project itself, as students generate databases, communicate in multiple ways as part of the path of discovery, and develop models and simulations to help them accomplish their goals. So by and large technology is not used at this level as a teaching tool but as an essential ingredient in the project itself.

Assessing teaching. It may not be necessary for every single teacher to embark on all of these activities. However, if a school, and teachers working together, do these sorts of things described above, then they are working towards generating real world competence and dynamical knowledge in students. If the sorts of experiences and processes described above are not taking place, situational lenses are not being developed, and real world competence is not being created. Naturally there are huge variations. There are differences between novice and expert performance. And so on. But the overall dynamic is very clear.

4. 21st Century Skills

Some skills, particularly having to do with information technology and navigating through an overabundance of information and opinion, are 21st century in essence. Others, such as the need to plan, work with others, delay gratification and make good decisions, have no business being called 21st century skills. They are timeless. They have been essential components of mature

human functioning for millennia, and are part of what are now known as the executive functions of the human brain. It is an indication of how dreadfully primitive education has been that they are now being touted as something new.

The way to look at these skills and capacities is in terms of the different sorts of outcomes mentioned above, specifically the last one. There is simply no point in talking about 21st century skills if they are not available for use in unanticipated events in real time. That means that for them to be adequately developed, students need to be involved in authentic, adequately complex situations, in which the skills are naturally called into play, and where authentic feedback is received in meaningful contexts. Within this context, there will also be a need for classroom sessions with discussions, role playing, processing of experience and so on. But for living skills to be developed, they have to be lived.

This is another reason why good project based learning is so important. Students have no choice but to work together, make a huge number of decisions along the way and receive real world feedback in real time, plan and be exposed to the strengths and weaknesses of their plans, and develop some capacities to understand themselves and develop some self-control. Indeed, it is partly because the executive functions are so fully engaged that solid understanding and situational lenses develop.

What Can Teachers Do?

A good teacher/mentor/ coach is a vital aspect of this aspect of personal development. The teacher sets or helps to generate a good context, models the skills and capacities in operation, provides some feedback (the situation providing the rest), and helps a student work through his or her own strengths (in the same way that student athletes work with coaches to examine tapes of their own performances). The key is that the various skills are modeled, coached and processed frequently across subject areas and in authentic situations so that students acquire the skills and the situational lenses necessary for seeing where the skills are needed. Knowing that one “should” plan one’s time, for instance, is radically different from being able to plan one’s time when a real deadline is approaching.

Assessing teaching. Good teachers incorporate 21st century skills throughout their work in a school and beyond. They live them, model them, and coach them across subject areas in real time. (And, of course, they, like all of us, fall off the wagon regularly and simply have to climb back on).

If there are no authentic opportunities for students to work with the skills, poor or no feedback in real time, little or no real world modeling of the skills, and little or no coaching in real time as well as in programmed classroom sessions, then for the most part, 21st century skills are not being taught or developed by educators, irrespective of what they think they are doing.

5. Being Creative and Generating New Knowledge

By and large, orthodox education looks backwards. It seeks to impart knowledge, skills and understandings previously developed by others and now incorporated into the standards. And

yet we should be preparing students for a world yet to come. As Fisch and Mcleod (2007) first said,

We are currently preparing students for jobs that don't yet exist, using technologies that haven't been invented, in order to solve problems we don't even know are problems yet (min. 6:42).

Creativity and generativity refer to living into what is not yet known in ways not yet invented. In essence, students make real discoveries and develop genuinely new tools. This is not black and white, of course. When a new technology is developed, the developers use what they already know. For instance, in one science course at HighTech High, the students were using their school lab and online communication tools for the purpose of developing new markers for meat, in order to assist game wardens in Africa who needed more tools to defeat poachers. They used orthodox lab skills, relied on previously established communication processes, and blended complex but traditional fields of study, in order to create something new and useful (Edutopia, 2011)

The key is that the whole process is forward looking. Rigor and thought are applied to new problems with solutions not to be found in text books.

What Can Teachers Do?

The key here is teaching that blends the teachers' own real world competence with a sense of inquiry and a willingness to allow students to pursue *their* own interests, and challenge and question the taken-for-granted content of the standards and texts. Recently, for instance, a 14 year old made news around the world by discovering that the magnets in the ipad2 could stop heart defibrillators. Her father, a doctor, helped, but it was her idea and her research (Cortez, 2013). The philosophy that underlies the sorts of things that elite students do for science fairs needs to permeate everyday education everywhere. New means new, not the old dressed up as new. As part of this rigorous and experimental attitude, mistakes are welcomed as the basis for deeper learning. This calls for a huge shift in the view that educators have of what they are doing. And that means that the most important thing for educators to do is to do some deep self-examination.

Assessing teaching. *Experiments and projects with outcomes that call for new methods and new ideas are evidence of creativity and generativity. When there is an atmosphere of fear, of getting it "right" at all costs, of necessarily complying with what someone else has said and done, then there is not much creativity and generativity, no matter how much "fun" students seem to be having in class.*

Some Thoughts on Practical Implications

Here are some conclusions, that we have worked out in more depth elsewhere (Caine and Caine, 1997, Caine et. al., 2008).

1. *There is a very rough continuum of instructional approaches that map onto the increasing complexity of learning outcomes. At one end is direct instruction accompanied by rote practice. Next is more complex instruction that calls upon students to act and think and think and move, but driven almost exclusively by what a teacher thinks is important or interesting. Beyond that are the complex learning environments calling for complex outcomes in which learners are immersed under the care, guidance and coaching of educators, and where the key driver is what students themselves care about and want to discover or master. Each of these is important, and each of these includes but goes beyond the ones that occur before them on the continuum.*

This is my take on the legacy of Dewey, who expressed the vital nature of experience in education (Dewey, 1997). It seems to me that Bloom's taxonomy was heading in precisely the right direction, but that Dewey had a much better grasp of the complexity of learning environments that are needed for complex learning outcomes.

2. *Complex instruction (CI) is largely sabotaged by the system constraints in place in education today, and that includes most current reforms.*

- CI is destroyed by the fragmentation of time and subject areas. In part this is because the flow and structure of complex projects become impossible.
- The focus of CI is narrowed by an emphasis on only one type of outcome (standardized tests results). The key to deeper understanding, real world competence and so on is the demonstration of these skills and capacities in the real world in real time. When the demonstrations are curtailed or ignored, student attention is devoted to compliance.
- The dynamism of CI is leached out when authentic students' interests and questions are ignored. Passion, perseverance, motivation, skill development, deeper understanding and increased competence depend upon actual questions being answered and actual responses to actual performance. This is the governing dynamic of online gaming and of the social networking in which students of all ages indulge all the time.
- The efficacy of CI is destroyed when the developmental nature of natural learning is totally subjugated to bureaucratic timelines designed to control the flow of students through the system. The reason is that competence and insight can be guided, but results cannot be manufactured, and insights only happen when they happen.

3. *Although the power of new technologies offers huge possibilities, much of it will be nullified in the formal education system by traditional modes of thinking.*

More specifically, educators will never get where they want to go if they don't know and understand where they need to go. One of the really sad scenes that permeates education today is to see so much money spent on so much technology that represents new and faster ways of doing what has always been done.

Contrast this with the fact that, as I write, I have taken a few minutes to link to a Google+ Hangout in which the actors from the most recent *Star Trek* Movie are talking with NASA astronauts, one of whom is on the space station, about the ways in which science fiction is becoming our everyday reality. This hour long event, live or replayed, could be used to enhance any subject or subjects, ranging from literature and history to biology and math.

Technology by itself can simply be an administrative convenience. And, at the same time, it is changing the dynamic of the culture itself. As an absolute minimum, we need to see in it the possibility of teaching and facilitating learning to pursue the higher levels of outcome described above.

Revisiting Standards and Test Scores

We are now in a position to revisit the dilemma posed by the two contrasting ways of generating high test scores represented by South Korea and Finland.

One way is direct. The desired objective is largely to generate high test scores. This goal is of very little intrinsic interest to most students, where even most of those who want to score highly have very little interest in most of the content. That is why a command and control environment operates, where test scores are the be all and end all of every aspect of schooling, and the students will be made to pursue them.

The second way is more complex. It is messier. It goes deeper and wider and wanders off in a variety of directions. While there may be a command and control fallback position (there are some behaviors, for instance, that simply are not acceptable), in general the entire environment is more self-directed and more self-organizing. Test scores are NOT the focus. Solid understanding, real world competence, development of the executive functions, and generativity and creativity, are the goals. But testing in the course of the process can be a very useful tool. And in general, it just so happens that students from these environments do well on standardized tests anyway.

Getting There from Here

Getting there is immensely difficult. It calls for ways of thinking and system qualities that are conspicuous by their absence in our culture, although there are enough examples in the US and around the world to show that it is possible. Examples (see Caine and Caine, 2001, 2011) include High Tech High, Bridgewater Elementary and a middle school in South Australia, Reggio Emilia in Northern Italy (perhaps the best early childhood education system in the world), and superb home schooling, often called unschooling, such as that modeled by the Colfaxes of California.

In the short term, I suggest a transitional approach. Make sure that all professional development is grounded in a coherent philosophy, aiming at least at solid understanding. And implement programs that aim higher but can still operate within the current system. One is the work on brain based teaching and natural learning being carried out by Professor Tim Jones and his colleagues at the Sam Houston State University (Jones, 2013). Another is the work being carried out through the Natural Learning Research Institute and with what we call the Guided Experience to Instruction, the Executive Director of which is my wife, Dr. Renate Caine (Caine and Caine, 2011, www.nlri.org). Both of these intentionally work with and seek to capitalize on the ways in which the human brain/mind learns naturally. And both make high standards a

priority, although high test scores tend to follow. A third is to look at some of the great material on project based learning (The Buck Institute, 2013; Edutopia, 2013) or service learning.

The Art of Learning Together

I would also make an examination of the fundamentals the central thrust of your professional learning community for, say a year (For our approach to PLC's, based on what we call process learning circles, see Caine and Caine, 2010). Generating data simply does not matter very much until the fundamentals have been mastered and enough common understandings about learning objectives and the essence of great teaching have emerged.

A Final Word

Whatever system changes and programs of professional development are selected, it is my deepest hope that the decisions are grounded in well thought out understanding of how people – students and adults – learn, and in a clear grasp of useful learning objectives. Getting there from here is difficult at the best of times. It is important, then, to know where “there” is.

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Partnering with Districts in Principal Preparation: Key Program Features in Strengthening Aspiring Principals’ Understanding of Issues of Equity and Excellence

*Betty Alford*¹

Stephen F. Austin State University

Stacy Hendricks

Stephen F. Austin State University

The need for increased numbers of students of all ethnic groups to access and succeed in postsecondary education is a 21st century reality (Swail, Cabrera, & Lee, 2004). As Swail, Cabrera et al. (2004) reported,

The act of going to college and earning a degree is more important than ever to today’s youth and our society. . . . Unfortunately, access to a postsecondary education is not equal in America. Students historically underrepresented at the postsecondary level – students of color, those from low-income backgrounds, and first-generation students- are still less likely to prepare for, apply for, enroll in, and persist through postsecondary education. (p. iv)

For example, Latinos are one of the fastest growing ethnic groups, but only 19% of Latinos have completed an associate’s or higher degree (Excelencia in Education, 2010). While the number of Latinos accessing college is growing, a disparity still exists between minority group enrollment in college and white student enrollment (Swail et al., 2004). The principal has a key role in schools of creating the conditions wherein all students can be successful and access the next step of postsecondary education whether through a community college, a technical program, the military, or a university (Kaser & Halbert, 2009). As Kaser and Halbert (2009) stated, “Leadership creates the conditions in schools where all learners grow, progress, graduate, go on to some form of postsecondary learning and lead productive lives” (p. 20). Educational leaders can play key roles in advocacy for student success, recognizing inequities where they exist and working to overcome the inequities (Anderson, 2009; Papa & English, 2011).

Just as leaders establish the conditions that foster success in schools (Bellamy, Fulmer, Murphy, & Muth, 2007), educational leadership preparation programs establish the conditions that foster leadership development through the program design and delivery (Darling-Hammond, LaPointe, Meyerson, Orr, & Cohen, 2007). Leadership development can be enhanced through school-university partnerships (Darling-Hammond et al., 2007). In preparing leaders equipped with the knowledge and skills to address issues of equity and excellence, Nunez and Oliva (2009) maintained,

It appears that addressing entrenched community problems, such as those about college access, requires new approaches to collaboration that involve creating cultural norms that

¹ **Dr. Betty J. Alford** may be reached at bettyjanealford@gmail.com.

are neither K-12 nor higher education, but something else – some sort of third perspective and organizational culture that is co-created by multiple stakeholders in multiple and disparate contexts. (p. 3)

Universities have been criticized as lacking currency in preparing educational leaders who are equipped with the knowledge and skills to meet the needs of diverse student bodies (O’Neill, Fry, Hill, & Bottoms, 2003). Studies that identify ways that university programs foster leadership development to meet all students’ needs are limited; exemplars are needed (Cambron-McCabe & McCarthy, 2005).

Purpose of the Study

Beginning in 2011, an Educational Leadership Principal Preparation Program at a regional university partnered with two districts with a primary goal of producing principal program graduates who have the leadership capacity to support each PK-12 student’s academic success which includes appropriate preparation for ensuring students’ access and success in postsecondary education. This aspiring principals’ program was a new initiative that built upon other university-district partnership initiatives of this Principal Preparation Program that were developed during the last ten years to strengthen the academic preparation of all students as leaders for equity and excellence. A central goal of this initiative was to eliminate inequitable practices and processes by focusing on the preparation of aspiring principals as part of a university preparation program that would sustain and enhance campus initiatives to meet the academic needs of English learners and to strengthen a college-going culture in schools. The purpose of this study was to identify key features of this school university partnership in the preparation of aspiring principals as leaders for equity and excellence.

Conceptual Framework

As a foundation for this study, the current roles of school leaders, benefits of school-university partnerships in leadership development, and action research as a tool for leadership development were explored. Through this investigatory process, the faculty at the university level as well as the school district were impacted.

Current Roles of School Leaders

Educational leaders for social justice recognize their roles in creating the conditions for success for all students of all ethnic groups and income levels (Papa & English, 2011). For too long, a culture of high expectations has not prevailed in all schools, and mindsets of the importance of effort to success have not prevailed (Kaser & Halbert, 2009). However, as Kaser and Halbert (2009) pointed out, “Our strongest leaders are working hard to close any gaps in performance and are deeply concerned about the needs of their most vulnerable learners” (p. 35). Educational leaders who promote the academic success of all students establish structures for collaborative planning of engaging instruction in all classes while also planning and implementing support systems for student success (Papa & English, 2011). They engage parents and other community members as partners in promoting the academic success of all students (Anderson, 2009). They value cultural differences and provide respect for each individual (Lindsey, Robins, & Terrell,

2003). They serve as moral and ethical leaders who model principles of equity and excellence in exemplifying as Starratt (2004) suggested the virtues of responsibility, presence and authenticity. They establish collaborative cultures wherein trust and professionalism are nurtured and learning for all is a reality (Knight, 2011). In short, they make key differences in students' lives by promoting and modeling learning and professional development on an ongoing basis.

Benefits of School-University Partnerships in Leader Preparation

As Jacobson, Orr, and Young (2008) identified, "Through joint effort and informed action, preparation programs and districts can improve the quality and effectiveness of school leaders for the schools (and students) who need effective leadership most" (p. 2). In achieving high student performance for historically underserved student populations, interventions to provide enhanced opportunities to learn and support systems for success are crucial (Contreras, 2010). Preparation programs are needed that provide "future leaders with high-quality training and internships that reflect the realities education leaders face in the field" (The Wallace Foundation, 2012, p. 14). For, as Young (2009) emphasized, "We know leadership matters" (p. 2).

School principals are in the unique position to influence hiring practices, the quality of instruction, and levels of student support that can contribute to greater student success (Knight, 2011; Reinhartz & Beach, 2004). As Hambrick Hitt, Tucker, and Young (2012) stressed, "Given the sweeping influences of effective educational leadership, our schools, teachers, children, and communities deserve highly qualified, rigorously prepared leaders" (p. 1). School-university partnerships provide ways to strengthen principal leadership preparation (Darling-Hammond et al., 2007; Hambrick Hitt et al., 2012). Problem-based learning strategies, such as, action research "link classroom learning and educational theory with the practice of leadership in the local school setting" (Holter & Frabutt, 2012, p. 255). As educational leaders, action research is a powerful professional development process for school improvement (Knight, 2011).

Action Research as an Improvement Tool

While Johnson (2008) defined action research as a "planned methodical observation related to one's teaching" (p. 29), Anderson, Herr, and Nihlen (1994) emphasized their hope that practitioner researchers would be viewed as "critical change agents within their school" (p. xvii). In their book titled *Studying Your Own School*, practitioners were urged to pose inquiry questions regarding educational practices "using their own site (classroom, institution, school district, community) as the focus of their study" (p. 2). This broader definition included research to understand problems of practice in multiple contexts as well as in an individual's classroom.

As stated by Stringer (2007), action research is defined as "a systematic approach to investigation that enables people to find effective solutions to problems they confront in their everyday lives" (p. 1). Although there are many reasons to conduct action research, educators tend to use the research for school improvement purposes such as instructional practices, curriculum, behavioral issues, and professional development (Johnson, 2011). Thus, practitioners, such as teachers, counselors, administrators and other school stakeholders, use action research to investigate and determine best practices, which will improve student learning and achievement for all (Goldys, Kruff, & Subrizi, 2007; Hendricks, 2006; Johnson, 2011).

Additionally, educators may use the action research to collaborate with others and develop their own personal growth while recognizing that there are barriers and benefits to action research as a school improvement process (Johnson, 2011).

Barriers to action research. When conducting action research, there will be barriers that exist. Although time is the largest concern, other concerns include lack of resources, difficulty formulating research questions, personnel resistance to change, and additional questions or concerns related to the use of human subjects (Hansen & Brady, 2011; Johnson, 2011). Calhoun (2002) concurred that time is a barrier stating, “It’s a challenging task to help staff structure action research into their work and the work of the organization” (p. 24). However, both Johnson (2011) and Calhoun (2002) agreed that the benefits of the action research were well worth the time spent overcoming the barriers. Not only does action research provide one with professional expertise in a particular area, but it also offers information to ensure academic success for all students (Johnson, 2011).

Benefits of action research. Gilles, Wilson, and Elias (2010) concluded that action research was a powerful agent for change. They contributed the ongoing success of the action research to several factors. First, the principals valued and supported the process of the action research. Furthermore, the induction program paired with the action research provided a unique collaboration of all teachers. Gilles et al.(2010) indicated, “As trust deepened among teachers, they shared more research practices that informed their teaching” (p. 103). Studies have shown that inquiry and reflection are a huge component of successful action research projects (Calhoun, 2002; Holter & Frabutt, 2012; Johnson, 2011).

Collaborative action research between school teachers and university faculty could provide significant information regarding real life situations. West (2011) described how university faculty could provide expertise in the field of research. In turn, the teachers would become more proficient in their inquiry process and add to the body of knowledge in their field of study. If administrators or teachers are not research savvy, Calhoun (2002) agreed that university faculty could provide research assistance. Miskovic, Efron, and Ravid (2012) found that the school teachers often needed “a sounding board, practical suggestions, and reassurance that what they were doing was indeed a legitimate action research” (p. 10).

As university faculty, it is important to construct learning opportunities that involve action research to allow teachers and future administrators to gain meaningful knowledge and enhance their professional practice to ensure success for all students (Miskovic, Efron, & Ravid, 2012). According to Gilles et al. (2010), “Grass-roots classroom research within a university induction school-partnership is a powerful agent for change” (p. 104). As issues, problems, or particular practices are studied over-time, the information gained can be used to improve practice. As Anderson (2009) stressed, “Part of the task of practitioner research is to strip away the unexamined theoretical baggage that has accumulated around almost everything we do in schools” (p. 5). In short, practitioners can solve the more difficult educational problems through action research which can be used as a tool for fostering social justice to eliminate inequities in schools.

Methodology

A principal preparation program partnered with school districts in preparing aspiring principals who would have the knowledge and skills to foster conditions in schools to (a) ensure success for English learners and (b) to strengthen a college-going culture. Two U.S. Department of Education grants served as support for the aspiring principals' program. One of the grants primarily focused on preparing educators to more fully meet the needs of English learners while the second grant primarily focused on increasing the number of students from traditionally underrepresented groups accessing and succeeding in postsecondary education. A key component of each of the grants was an emphasis on achieving equity and excellence for all students. In 2011, these two partnership grants were funded and included an aspiring principals' program in order to enhance leadership development within the districts, sustain the partnership efforts, and continue the increased focus on equity and excellence for all students.

This qualitative study was designed to identify key features of the school-university partnership in preparing the aspiring principals to meet the needs of English learners and of increasing the preparation of all students for postsecondary education. Specifically, the research question was, "What were key features of the school-university partnership in principal preparation that most impacted students' understanding of their role as advocates for equity and excellence?"

Data sources included focus group interviews, open-ended aspiring principals' response surveys, action research projects, and course observations. Four focus group interviews were conducted with approximately seven students in each focus group. Forty-five aspiring principals were also surveyed with open response questions from two cohorts, and forty-two action research projects were reviewed as further data sources. Field notes from course sessions over a two-year period for two different cohorts were another source of data.

Data from interviews were transcribed and analyzed to discern themes through open and axial coding (Marshall & Rossman, 2006; Merriam, 2009). Trustworthiness of the data was maintained through peer debriefing, member checks, and an audit trail (Lincoln & Guba, 1985). All data were maintained in a secure cabinet in the co-researchers' offices. All data were considered in presenting the findings through the key themes that emerged (Creswell, 2009).

Findings

The aspiring principals identified action research projects focused on issues of equity and academic excellence, a cohort design, panel presentations by principals in the field, and requirements of service on data teams as the key features of the school university aspiring principals' program that most impacted their development as leaders for equity and excellence in partner schools. The students also identified benefits of each of these program features.

Students identified that a key feature of the school university aspiring principals' program was the assignment of action research to address issues of equity and excellence in meeting needs of English learners and in increasing the preparation and access of all students for postsecondary education. Practical benefits of the action research projects were shared, such as, gaining information to advocate for dual language classes at the pre-K level, understanding ways to

prevent drop-outs, and understanding ways to prepare more students for postsecondary education. Examples of actions taken included starting a mentor program, sharing English learner strategies with the entire campus, and implementing technology to provide more student engagement. Writing the action research projects was referred to as “stressful” in that, for many students, it was their first experience in writing using the APA format for citations. However, all agreed that the process was helpful in accessing data and providing “an avenue to be proactive to see changes to meet the needs of all students.” Although participants shared that writing the action research literature review was “really hard work,” the action research project assisted in studying the effectiveness of practices to ensure equity and excellence. As a student explained, “The action research helps you as a leader to be able to go back and implement what you learned.”

Another key feature of the design of the school-university aspiring principals’ program that was identified by students included a cohort face to face model of course delivery. Benefits of the power of the cohort design in forming a network that provided support were repeatedly shared. The students voiced the long-term benefits of the cohort experience in identifying individuals at multiple levels of elementary, middle, and high school who would remain a support even when the preparation program ended. The diversity of grade levels in the cohort was beneficial. A representative comment was, “I’m at the primary level, and I had no idea what was going on at the high school level. I’ve learned a lot from this cohort.” As a student shared, “I have learned so much from different people in this program. They have given me insight, feedback, and support.” Several students referred to the cohort through the metaphor of a family. As a student explained, “It almost feels like you are a family because you do care for each other, and you want everybody to succeed and finish.”

A third key feature of the school-university aspiring principals’ program identified by the students was the inclusion of multiple panel discussions by practicing exemplary principals who addressed issues specifically related to the principal’s role as a leader for equity and excellence and an advocate for each student’s academic success. The students also cited benefits of the panel presentations by practicing principals as helping them hear authentic “real-life situations.” That the panels were diverse was pointed out as a particular benefit in helping the students to see how leaders met challenges in different contexts. However, participants were also impressed that all panelists discussed the importance of making decisions based on “what’s best for students.”

A fourth key feature of the school university aspiring principals’ program identified by the students was the requirement that they participate in school data teams. Understanding ways to disaggregate the data was cited as very useful. As a student shared, “Before, the charts were just numbers, but now I actually understand the data, and I am able to serve as a leader for my grade level.” The school data teams included faculty members as representatives on campus data teams, and participants expressed benefits of this joint collaboration in strengthening attainment of multiple perspectives. The data teams focused on targeted English learners’ academic success as well as on monitoring advanced course selection and support processes to ensure that students from traditionally underrepresented groups were being encouraged to participate and succeed in advanced placement and dual credit courses. Repeatedly, participants discussed that they grew in their ability to “see the big picture.” Instead of viewing information at a classroom level, for

example, school-wide data helped them to see needs across grade levels. They gained a “campus view” and in doing so, were able to discern “critical needs” of the campus.

Conclusion

This study examined a redesigned principal preparation program that used a targeted action research project assignment as a vehicle for aspiring principals to delve deeply into issues of equity and excellence. Studying practices to prepare more students to access and succeed in postsecondary education and to prepare more teachers to specifically meet the needs of English learners were topics selected by students. Particularly, action research on these issues of equity and excellence deepened students’ knowledge and skills as leaders of social justice and served as a powerful tool in the process of school improvement.

Faculty members considered, “Would entire cohorts have selected topics pertinent to meeting needs of English learners or of fostering a college-going culture to enhance the preparation of all for postsecondary education without the explicit assignment of these broad topics for action research projects to address?” Having taught in a principal preparation program for multiple years, our experience suggested that the students’ selected topics would have been much more diverse and generic if the assignment had not focused on these issues of social justice. In reading the action research projects, a key benefit of the projects was the depth of investigation through the literature review that was required as a component of the project. Requiring a thorough investigation of the topics stretched students to consider deeply explicit needs for principal leadership as advocates for equity and excellence in schools. Investigation of social justice issues as a vital part of principal preparation was enhanced through the specific nature of this assignment. In addition, the cohort design provided an effective instructional mode for in-depth discussion of topics pertinent to leadership for equity and excellence. Further, the practicing principals who served as resources for class sessions raised issues related to leadership for equity and excellence and fostered deepened analysis of the principal’s role as an instructional leader for all students. Campus field experiences of analyzing data pertinent to issues of equity and excellence further developed the students’ understanding of social justice.

School leaders are needed who will advocate for all learners and seek ways to meet the needs of all learners in order for them to succeed to optimal levels (Anderson, 2009; Papa & English, 2011). As the demographics in the U.S. continues to diversify, school leaders who understand deeply ways to meet needs of English learners are needed. In turn, in response to changing needs in the workforce in an increasingly global economy, principals who can foster a college-going culture and implement ways to prepare students more fully for postsecondary education are also essential.

This study supported that school-university partnerships can prove beneficial in principal preparation to meet these current needs. The focused action research, cohort design, panel presentations and opportunities for dialogue with outstanding practicing principals, and data analysis team participation were all beneficial program features.

Benefits of a school-university partnership in preparing aspiring principals who have the knowledge and skills to sustain and strengthen a college-going culture in schools and meet the

needs of all learners including the English learners were identified. Without explicit attention to issues of social justice, inequities in the academic preparation of students will continue (Papa & English, 2011). Leadership matters (Leithwood, Seashore, Louis, Anderson, & Wahlstrom, 2004), and preparing aspiring principals to better meet the needs required in the 21st century are essential (Young, Crow, Murphy, & Ogawa, 2009). This study illuminated key features of a school-university partnership that can assist in reaching this goal.

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Holistic, Ethical Leadership for the 21st Century

David C. Barrettⁱ

Mesquite ISD

Texas A&M University-Commerce

The New Oxford American Dictionary (2001) delineates two definitions for a leader: “1) The person who leads or commands a group, organization, or country; a person followed by others. 2) A short strip of nonfunctioning material at each end of a reel of film or recording tape for connection to the spool.” How often does the latter definition seem more applicable for many of our educational leaders than the former? What are the philosophical foundations of leadership? What does a modern, ethical leader look like? These are just a few questions that will be explored in this article. The challenge beset for the educational leaders of the present and the future is one that will require a bridging and blending of old and new paradigms. A mere paradigm shift may not be sufficient—the term shift is still too mechanistic and linear to adequately describe this new approach. Rather, the modern ethical leader must create a paradigm blend. In the circular way of knowing, akin to the epistemology of the Lakota Sioux (Stolzman, 1986), this article will explore four aspects of modern educational leadership. First, the criticisms and attacks on the educational system will be addressed. Second, the aim of education will be analyzed through three lenses: axiology, epistemology, and ontology. Third, systemic education will be discussed. Fourth, the role of the modern/future educational leader will be explored: specifically regarding the need for him/her to address the concerns of the critics and bridge the divide between two paradigms of education. This essay is a brief exploration that delves into the shortcomings of the modern educational system, the core purposes of education, systemic educational paradigms, and the role of the 21st century ethical leader. The author’s goal is not to provide answers, nor propose a prescription for ethical leadership. Rather, the intent is to aid in focusing the direction which leaders must follow in order to be effective in this millennium. Similar to the manner in which Descartes shared his method of inquiry, the author will share part of his experience in learning and growing as an educational leader. “Thus my purpose here is not to teach the method that everyone should follow in order to conduct his reason correctly, but merely to show how I have tried to conduct mine” (Descartes, 1637/1980, p. 2).

In the end, this exploration may amount to nothing more than what Nietzsche characterized the nature of philosophy to be: “Little by little I came to understand what every great philosophy to date has been: the personal confession of its author...” (Nietzsche, 1998, p. 8). However, it is the hope of the author that through his confession and scholarly exploration of the nature of leadership that something will be contributed to the greater whole. Indeed, this may be precisely what leadership is.

The Attack on American Public Education

Public education has constantly incurred criticism and controversy even during the days of the one room schoolhouse romanticized on *Little House on the Prairie*. For example, the role of religion, funding, equity, qualified teachers, and discipline were all divisive issues in the late 18th

ⁱ Dr. David C. Barrett may be reached at d Barrett@mesquiteisd.org.

century (Hlebowitsh, 2001). Further, a historical overview of this system reviews a host of inequalities, ineffective practices, and other blemishes. Indeed, the Roman Catholic school system was founded by Bishop John Joseph Hughes as a response to the anti-Catholic and anti-Irish sentiments that were so engrained in and perpetuated by the U.S. public schools in the 1800's (Concannon, 2003).

The present criticisms, modern variations of these long-lasting complaints, were largely evoked 30 years ago when the federal government issued "A Nation at Risk" in 1983. This modern attack has fueled mistrust and generated a large blame game with many participants: parents vs. teachers, teachers vs. administrators, students vs. teachers, educators vs. politicians, etc. A dynamic much like Senge (2006) described in the business scenario known as "the beer game."

Gross (1999) echoes the attacks of A Nation at Risk and purports to "prove conclusively that the education of American children, from kindergarten through 12th grade, is a poorly cast and poorly delivered product." (p. 12). Much of the division among educational pundits is illustrated by Gross's choice of language. The view of education solely as a product, without respect for it as a process, is a major source of the problem. Moreover, there are several fallacies with the assertion by Gross and other reformers that education should return to the "old rigor" of the past. This exploration is not intended, however, to languish in an argument attacking the attackers and defending the present system. Indeed, the author recognizes many of the valid criticisms espoused by Gross and others. These criticisms highlight the need for new educational leadership in the 21st century. Indeed, the symptomatic arguments themselves aren't even as important as the two disparate perspectives which are the focus of this exploration. The proffered solution here is substantively different from that espoused by Gross and other traditionalists who want to take education back to the "good ol' days," back into a safe, dogmatic, black and white view of the world. Through an exploration of the original intent of education, its underpinning philosophies, and new findings in science and technology, this paper will examine what is required of educational leaders in order to expand the educational system and learning and teaching inherent in it rather than contracting it. Core, long-term solutions are needed, not faddish, or quick-fix reforms. As the attacks and criticism of education highlight, there is a strong need within education which leadership must rectify.

The Aim of Public Education

Learning is innate; it is natural. Humans are hardwired to learn. Indeed, it could be argued that there are two primary drives for education: survival and curiosity. The first drive is rooted in survival; the goal is to generate a citizen who contributes to society and the workforce. The second drive is rooted in more abstract thought and the brain's natural instinct to ask "why?"

Joldersma (2011) discussed the first drive and used the term *conatus* to describe humankind's striving to live. This striving is the primordial need for understanding. Certain knowledge must be passed on to one's offspring in order to help them survive. As Christian (2011) illustrates, learning is necessary to survival; survival depends on knowledge that is passed down or learned through experience. This is true whether we are speaking of a bass darting under a rock retreating from an approaching shadow, a fawn lying motionless in the grass when it hears a rustling of leaves, or a man learning to swim or studying the slide-rule – knowledge and know-

how mean survival. Thomas Jefferson viewed public education as the means of satisfying this educational need in America. In order to sustain a healthy democracy, the citizens must be educated and informed. Jefferson promoted the idea of free, universal public schooling as essential to an enlightened citizenry (Hlebowitsh, 2001). Similarly, John Dewey echoed this sentiment over 100 years later when he spoke of the importance of studying history and civics, “Knowledge of the past is the key to understanding the present. History deals with the past, but this past is the history of the present” (Hlebowitsh, 2001, p. 175). Dewey’s progressive school movement also helped facilitate the accomplishment of both aims of education. His vocational schools taught students practical life and job skills. Meanwhile, students were engaged, challenged, and encouraged to explore and learn for knowledge’s own sake.

While Plato certainly understood this aspect of education – his utopian republic was based on a survival of the fittest model – he also described what could be called a higher purpose of education, “The ultimate end of all education is insight into the harmonious order (cosmos) of the whole world” (Cornford, 1941, p. 88). Learning as a means of satisfying curiosity also seems to be innate. It seems that since the dawn of humankind, people have looked for ways to explain the unexplainable. Every culture has a creation myth. Every culture has found ways to explain the seasons, dramatic changes in the weather, and other aspects of nature and reality. While the first drive is a more mundane and preliminary goal: survival – both physical and social. The second goal is more abstract and deals with facilitating the understanding of the understanding – to borrow a phrase from the Lakota Sioux chief, Leonard Crow Dog.

These aims seem to be successive in nature and are likely akin to Maslow’s hierarchy of needs. Before teaching a pupil the “understanding of the cosmos” it would behoove the teacher to educate the pupil in the ways of physical and social survival. A person is less likely to be interested in the nature of the universe when he or she is unemployed and starving. The question for the present educational leader is this: what purposes (if any) are we fulfilling with our present system? Are we meeting the survival needs of our students? And, are we encouraging students to gain that ultimate understanding? How does public education balance these two drives? As ethical educational leaders, how can we balance this yin and yang within the realm of public education? Given the legal and historical foundations for American public education, what are the philosophical underpinnings that continue to guide and shape it?

Philosophical Underpinnings: Ontology, Epistemology, and Axiology

Hodgkinson (1996) wrote that the study of philosophy is technically and conventionally divided into three parts: ontology, epistemology, and axiology. It is through these three lenses that this article examines those philosophies which have shaped, and continue to shape, our modern educational system. These lenses can even be viewed as successive in nature.

Ontology, also known as metaphysics, explores the nature of reality. It asks the question: What is real? This question, which has been wrestled with throughout the ages, seems to be becoming even more difficult to answer. New technologies persistently challenge our notion of what is real. When the ancients gazed at their navels, they did not have to consider virtual reality, nanotechnology, or more and more advanced computers and robots. With the creation of smarter

computers and robots that learn and perhaps even experience emotion, this age-old question becomes ever more complex.

Moreover, advancements in the human genome project, cloning and medicine generate further ontological and ethical questions regarding the nature of life, the existence of God, and our role in the universe. For Deists such as Voltaire, these advancements may not cause concern since their belief in God is based upon reason and not on faith (Durant, 1961). For others, such scientific advancement negates the existence of God. Yet for many, the existence of God is not a matter of reason or proof but of faith. The questions of the existence of a supreme being and the nature of this being (should one exist) have perplexed philosophers, scholars, and people in general throughout the ages. It has also been a topic of intense controversy. This controversy is oft manifested in public education today within the issue of the science curriculum. What should schools teach: intelligent design, creationism, or evolution? This ontological debate was even the cover story for *Time* (November 13, 2006) aptly titled, “God vs. Science: A spirited debate between atheist biologist Richard Dawkins and Christian geneticist Francis Collins.”

So, what is real? Is reality merely electrical impulses and glandular secretions in our brain? Is reality objective or subjective? Perhaps reality is elusive and evolving. Once one thinks he or she has a full grasp on it, new, contradictory information will be found. Even mathematics, once the lifeboat for consistency in a seemingly inconsistent world is changing. Indeed, it almost ironic that Bertrand Russell turned to mathematics to find clarity, simplicity, beauty and order to explain a reality that was too messy in appearance. Now, new findings in math over the past century are “even weirder than physics” (Lanier, 2006). Twentieth century mathematicians like Kurt Godel, Alan Turing and Gregory Chaitin have demonstrated that the more math one learns, the weirder it gets. Math is becoming seemingly more mystical in nature; precisely what Russell was simultaneously condemning and drawn toward.

Russell stated, “Do not fear to be eccentric in opinion, for every opinion now accepted was once eccentric” [as cited in Arnold (2004, March), p. 80]. An excellent example of this is the Ptolemaic notion that the sun revolved around the earth. Based on observation, this was a very logical assumption of reality. Copernicus, however, postulated the eccentric opinion that the earth revolved around the sun. His opinion was so eccentric, in fact, that he was excommunicated from the Catholic Church and even served time in jail. Now, thanks in large part to the work of Galileo, Copernicus’ heliocentric theory is commonly accepted.

Plato’s allegory of the cave is a good example of his ontology and epistemology. All that we can know of reality are shadows of the true form. Henri Bergson echoed this sentiment when he wrote that knowledge of reality is hindered by the mind’s habit of chunking, classifying, and chopping reality into fragments (Christian, 2011). Time is a prime example of this. Think of daylight savings time and the practice of “falling back” in autumn. Does the sun come up earlier because people set their clocks back? Of course not, but daylight breaks earlier according to one’s watch. Bergson purported that reality is a continuum in motion, a continuous flow. Scientific (objective) views of reality are merely snapshots of the truth. These photographs aren’t real, they are only an abstraction of reality. Reality isn’t a series of pieces, it is the motion in its entirety.

Another obstacle to the quest for a definite truth, is that there are always exceptions to rules. No matter how much people try to order, structure, predict, and standardize the universe, there is always an exception – even in the animal kingdom (ergo the duckbill platypus). Life will always persist despite humanity's best efforts to control and stifle it (think of the image of a flower growing up through a crack in the concrete). Christian (2011) wrote that in order to know reality we must metaphorically turn off the artificial lights and allow the stars to shine. Reality merely is.

Perhaps Plato's allegory of the cave is a self-imposed state. Perhaps the chains that bind could be broken and those individuals could truly see what creates the shadows. In his famous poem *The Marriage of Heaven and Hell*, William Blake (1975) wrote, "If the doors of perception were cleansed, everything would appear to man as it is, infinite. For man has closed himself up till he sees all things through the narrow chinks of his cavern" (Blake, 1975, p. xv). Has humanity's rejection of the Garden of Eden (by eating the fruit of the Tree of Knowledge of Good and Evil) limited our perspective?

Are those people who think they can absolutely identify reality the ones who have truly lost touch with reality? Buddhist philosophy addresses this. There is a saying in Buddhism, "If you see the Buddha on roadside, kill him." This saying is actually very Socratic. The Buddhists believe that once you have formed an idea of what the Buddha is, you must destroy it to allow for new understanding. Similarly, Socrates taught that when we think we know everything, we are fools. The more we learn, the less we know.

Immanuel Kant also explored this dilemma. "Things which we see are not by themselves what we see... It remains completely unknown to us what the objects may be by themselves and apart from the receptivity of our senses. We know nothing but our manner of perceiving them..." (Durant, 1961, p. 170). The aim of Kant's philosophy was to move beyond what he viewed as the traditional dichotomy between rationalism and empiricism. The rationalists (e.g. Descartes) tried to show that one can understand the world by careful use of reason. The empiricists (e.g. Locke), on the other hand, had argued that all of our knowledge must be firmly grounded in experience. Kant asserted that both approaches had failed because both were based on the same false premise: we can bring ourselves to understand the world. This is not the crucial question, Kant argued, rather one must frame the epistemological problem in an entirely different way. Instead of trying, by reason or experience, to make our concepts match the nature of objects, one must allow the structure of our concepts shape our experience of objects. This is the purpose of Kant's *Critique of Practical Reason*: to show how reason determines the conditions under which experience and knowledge are possible (Munzel, 1998-1999).

While Plato asserted that humans are born with all knowledge and that learning is merely recollection, John Locke asserted the opposite. A newborn baby is a *tabula rasa*, a blank slate upon which experience leaves its mark. The realist and positivist philosophers tended to lean in the direction of Locke with their thinking. Francis Bacon built upon Aristotle's method of classification and helped create the system of epistemology known as the scientific method.

Contrary to this approach by the realists and positivists, is that of philosophers such as Henri Bergson and Thomas Merton. Bergson wrote about a deeper kind of knowledge that he called

intuition. Similarly, Thomas Merton (1948) – whom this author asserts could be described as a modern idealist – wrote in his autobiography, *The Seven Storey Mountain*:

...all men who live only according to their five senses, and seek nothing beyond the gratification of their natural appetites for pleasure and reputation and power, cut themselves off from that charity which is the principle of all spiritual vitality and happiness because it alone saves us from the barren wilderness of our own abominable selfishness. (p. 133).

This quote resonates strongly in antithesis to the many works of the realists, especially when one considers just how ambitious and power hungry Francis Bacon was.

So, what is real, true, and good? To answer these questions the idealist philosophers Plato and Descartes both delved inward. “I made up my mind one day also to study myself and to spend all the powers of my mind in choosing the ways which I ought to follow. For me this procedure was much more successful, it seems, than if I had never left either my country or my books” (Descartes, 1637/1980, p. 6). Did scholars take his relative perspective of what truth/reality is for him and impose it on the rest of the world? It obviously resonated at the time: the world was dangerous and mysterious. This model provided comfort and safety: just as naming things gives us a sense of control over them.

While this method worked for Descartes in the 17th century, it does not fully stand up to modern tests. Descartes’ internal search is only half of the equation, the search must be within and without – similar to Buber’s (1958) concept of I & Thou. Important information can be garnered from both processes. Descartes’ journey led him to the famous discovery, “*Cogito, ergo sum*” (“I think, therefore I am”). A more relevant phrase may be, “I think *and feel*, therefore I am.” This approach may be more balanced, just as Thomas Merton (1958) wrote:

Living is not thinking. Thought is formed and guided by objective reality outside us. Living is the constant adjustment of thought to life and life to thought in such a way that we are always growing, always experiencing new things in the old and old things in the new. Thus life is always new. (p. 19)

Merton’s words are reminiscent of the four things that Wheatley (2006) discussed that all living things do, specifically self-renewal and self-transcendence.

While the phrase, “I think and feel, therefore I am” may be more balanced it may also fall short of adequately describing one’s own existence. For, as Wolinsky (2003, p 8) argues, “the ‘I’ is a by-product of these [social] structures, and the ‘I’ does not exist separate from them. The self is a conglomeration of structures. *AND there is no self that is separate from these structures!!!*” Wolinsky’s words provide a nice segue to the discussion of systems thinking.

New Science & Systems Thinking

“To understand is to perceive patterns” Isaiah Berlin (Kim, 2006, p. 74). In the introduction, this article asserted that education needs more than a paradigm shift, it needs a paradigm blend. The

word paradigm comes from the Greek word *paradeigma*, which means pattern. Our brains naturally perceive these patterns and are highly complex adaptive systems (Jones, 2013a). The manner in which we (as an educational system) perceive patterns must dramatically alter in order to better correspond with how our brains naturally function and with what systems theory and complexity theory have demonstrated for over 30 years. Senge (2006) described this type of shift/blend as *metanoia*, which means a shift of mind. Even in 1975, Capra lamented the lack of such a shift despite emergence of new scientific findings, sadly that status quo largely remains,

I believe the world-view implied by modern physics is inconsistent with our present society, which does not reflect the harmonious interrelatedness we observe in nature. To achieve such a state of dynamic balance, a radically different social and economic structure will be needed: a cultural revolution in the true sense of the word. The survival of our whole civilization may depend on whether we can bring about such a change. (p. 307)

Research in the world of quantum physics and even biology is revealing a greater interconnectedness among all living systems. Cartesian mechanism was purposeful in bringing us to this point, but the model breaks down (no pun intended) with findings at the sub-atomic level. It is a model that has run its course and must now be integrated into this new understanding. This will be difficult for many individuals and organizations as it is a world-view that is deeply entrenched in our way of knowing.

Our intellectual capacity for abstract thinking has created a fragmentation that is not only superficial it is deeply engrained within our modern epistemology. The social construction of race is a prime example (Omi & Winant, 1998; West, 1993). There is no biological foundation for more than one human race. Yet, our culture is so attuned to making this delineation that even the mandates of *No Child Left Behind* disaggregate test scores along these lines as part of its accountability system. Capra (1996) elaborates on this phenomenon and argues that this false view of the world has disconnected us with nature and with our own humanity. We must reconnect with the experience of the entire web of life. As Lynn Margulis articulated, “Independence is a political, not a scientific, term” (Capra, 1996, p. 296).

Similarly, Theobald (1997) advocates for this perspective as necessary for redeeming public education. He utilizes the term *intradependence* to describe our connection to community and place. These perspectives, however, fly in the face of the American cultural myth of rugged individualism. This perspective requires that one view humanity as a part of nature rather than its master. This is a fundamental shift of mind contrary to the backbone of our culture’s worldview. A worldview based on a logic premise with strong roots in the philosophies of Aristotle, Descartes, Bacon, and Locke. “Henceforth, the earth was there for any person with the wherewithal to use it profitably, and this, Bacon and Descartes argued, was how it should be” (Theobald, 1997, p. 70). It is a classical dichotomy of Cowboy versus Indian. The rugged, mechanistic individual who “ain’t askin’ nobody for nothin’, if I can’t get it on my own.” (Daniels, 1974) versus the systemic member of a community who lives more according the natural rhythms of the earth. The strong advocate of private property rights versus the person who believes that land belongs to the creator. The modern, ethical leader will need to address these opposing views in a manner benefiting to the greater whole.

The Role of the Modern Ethical Educational Leader

“Where you come from is gone, where you thought you were going to never was there, and where you are is no good unless you can get away from it” (O’Connor, 1952, p. 165). America’s educational past is gone. The goals for this system are largely antiquated and out of touch, and the present system is not only broken, it is breaking those within it. The challenge beset for today’s leader (and tomorrow’s) is to bridge the divide between the entrenched mechanistic and dualistic paradigms in which the American Public Educational System is rooted and the new paradigm which is more systemic and holistic. This must be accomplished in order to prepare our students for the present and the future. Starratt (2004) addresses this very need and describes the virtues of responsibility, authenticity, and presence as essential for the modern educational leader.

The present system isolates teachers and students into what amounts to a series of one-room schoolhouses under one roof (Jones, 2013b). This is a major concern associated with *No Child Left Behind* and the increasing correlation of test scores with accountability. Cochran-Smith (2006) described this as a major worry: viewing teachers as saviors,

some policymakers are positing teachers as *the* determining factor in students’ success while ignoring other complex variables: school resources, leadership, and investments in teachers’ capacity building and professional development, not to mention such student related factors as family structure, economic status, housing, health, and employment. But the problems of schools are much bigger than teacher quality, and the problems of society are much bigger than imperfect schools. (p. 24)

As educational leaders we must focus on a two-pronged approach to education: 1) pass on knowledge essential for survival (in our current society) and 2) evoke learning that is more insightful and intuitive – akin to Plato’s ultimate aim for education.

The modern leader will need to create a shared vision. A simple ‘vision statement’ or mission statement is not sufficient. This shared vision must be palpable. This vision must help the learning organization self-organize, self-renew, and self-transcend. This shared vision must have a life of its own, a living system which is greater than the sum of its parts. Great leaders have had a great vision. Senge (2006) uses *Spartacus* as a good illustration of a leader who inspired others with a loyalty not to him but to a vision. Chief Black Elk was a leader of the Oglala Sioux whose authority came from his vision for his people (Niehardt, 1961).

How does the modern leader create this shared vision? How does one avoid becoming a useless strip of film? Just as our epistemological and ontological understandings are hindered by perception, perspective also creates an obstacle with sharing one’s vision. The modern, systemic leader may relate to the character Meg in Madeleine L’Engle’s *A Wrinkle In Time* (1962) when he or she tries to create this shared vision with those who cling to the Cartesian value system. Meg tried to explain light and dark to an alien creature who lacked the sense of sight. “How can you explain sight on a world where no one has ever seen and where there is no need for eyes?” (p. 174)

Bushman (2006, p. 60) asked this question in the context of teacher evaluation, “How could I get teachers to see what I saw daily?” To answer this, he developed a more collegial walk-through model that was less hierarchical resulting in a much more beneficial system of evaluation. Bushman (2006) essentially integrated a concept that many businesses have begun to institute: a flattened structural model rather than a top-down structure (Friedman, 2005). Indeed, B.F. Skinner’s *Walden Two* (1948) was a utopian society built upon a similar organizational structure.

One method of sharing vision may be simply to be *real*. Raiten-D’Antonio (2004) used the children’s story of *The Velveteen Rabbit* as a guide to help herself and her clients become real. To be real is to strip away those doors of perception of which William Blake (1975) wrote. To be real is to embrace the natural flow of life, to practice the Taoist philosophy of *wu-wei*, which means to refrain from action which is contrary to nature (Capra, 1975). To be a *real* leader is to act as more of a facilitator. A real leader will create a shared vision, rather than impose his or her vision on an organization. A real leader will remove the barriers that prevent the natural flow within the organization. The real leader will reshape the images of the traditional roles of students and teachers, of classrooms and schools. The real leader will need to lessen the barriers between schools and communities. As Johnston (1984, p. 367) wrote, “We should see the walls of the school becoming more permeable.” Schools should be seen more as community resource centers. The real leader will need to reconnect the fragments created by the mechanistic system of education.

Systemic thinking is the current zeitgeist in physics, biology, mathematics, business, psychology, counseling, and social work. Perhaps, even, the greater use of qualitative research in education is a reflection of this zeitgeist, this effort to become real in an increasingly unreal world. Public education as a whole has yet to embrace this zeitgeist, however. The real leader must help education shatter tradition in order to maintain continuity with its origins and goals of the past. Indeed, it is the only ethical thing to do.

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Student Evaluation of Teaching: The Inequity of Faculty Scores in Online versus Face-to-Face Courses

Sam L. Sullivan

Sam Houston State University

Barbara Polnick

Sam Houston State University

Laurice Nickson

Sam Houston State University

Robert Maningerⁱ

Sam Houston State University

J. Yasmine Butler

Sam Houston State University

Researchers have conducted a multitude of studies over the last century on Student Evaluations of Teaching (SET); however, very few have been conducted in the new digital age (Loveland, 2007). More work is in progress as researchers try to define the differences in student responses and thoughts about the online teaching environment. The unfortunate side of this can be the administrative decision to use a one-size-fits-all mentality when many authors including Dziuban and Moskal (2011) have outlined several research-based alternatives for evaluation of online instructional effectiveness. SETs are important to faculty because they often are the determining factor in merit pay and tenure/promotion. Faculty use SETs to guide decision-making about their curriculum and instructional strategies used to deliver the course (Sheehan & DuPrey, 1999). The power of the SET is recognized as a driving force in academia. What are often not discussed are the differences between SET for face-to-face courses versus SET for online courses.

The large difference in the number of online courses versus face-to-face courses offered can complicate this issue. The growth in the number of online classes is on the increase and poses challenges for administrators. Deans struggle with hiring faculty with online teaching experience, and they must incorporate new training and faculty incentives. In addition, problems arise associated with the comparison of traditional and online teaching in terms of workload, compensation, and evaluation (Loveland, 2007).

The differences in student evaluations of teaching effectiveness between face-to-face classes and online classes are apparent. Most institutions of higher education use student evaluations to measure faculty effectiveness; sometimes SET is the only measure of teaching effectiveness employed (D'Apollonia & Abrami, 1997). If all other resources of measure are equal, then administrators rate faculty for merit, tenure, and promotion exclusively on student evaluations.

ⁱ **Dr. Robert Maninger** may be reached at rmm023@shsu.edu.

However, the question is whether face-to-face class responses and online class responses can be adequately measured by SET.

Problem Statement

The original purpose for implementing student evaluations in higher education was to improve instruction, and these evaluations were considered private between professors and students (Algozzine et al., 2004). Many institutions of higher learning established evaluation instruments to help professors focus on providing quality instruction to their students. This instrument was ideal because, at the time, there were only traditional classes. Currently, student evaluations are not being used to solely improve instruction, and they are certainly not kept private between professors and students.

The Individual Development and Educational Assessment (IDEA) is an instrument used by administrators at institutions of higher learning to assess professors who teach in both traditional and online class settings. In theory, this is an evaluative instrument that should be used to evaluate professors. However, the reality is that the student evaluations used to assess traditional classes do not align specifically to issues addressed in online teaching. The following are questions from the IDEA instrument that students complete to evaluate their professors. These questions are used to appraise professors regardless of the setting in which instruction takes place (Benton, Webster, Gross, & Pallett, 2010): a) displayed a personal interest in students and their learning; b) explained the reasons for criticisms of student academic performance; c) explained course material clearly and concisely; d) introduced stimulating ideas about the subject; e) involved students in “hands on” projects such as research, case studies, or “real life” activities; f) asked students to help each other understand ideas or concepts; and g) encouraged student-faculty interaction outside of class (office visits, phone calls, e-mail, etc.).

Online professors scored lower in the above mentioned areas as compared to professors who taught traditional classes. There is speculation that scores in these areas were lower for online professors because students expect many of the aforementioned elements to occur only in a traditional class. Perhaps scores would have been higher for online professors if questions were reworded to align with online teaching standards. One of the first questions on the IDEA form asks how the course is taught; however, the options offer “distance learning” not “online.” There is an arguable difference between these two terms; certainly distance learning is not the same thing as online.

In addition to the evaluated instrument not corresponding with online class presentation, the other concern is the low response rates which cause online scores to be invalid. According to Benton et al. (2010), on average, the proportion of students responding to the paper version of IDEA is higher than the online version. The overall mean student response rate for online survey delivery declined from a high of 56% in 2002 to 51% in 2008. The general decline has been somewhat more dramatic for scores related to online courses (Benton et al., 2010).

Scores from student evaluations are used to decide how much merit pay professors receive as well as if professors will obtain tenure and promotion. Because student evaluations are often used for high-stakes personnel decisions, it is vital that they accurately assess teaching

effectiveness (Kelly, Ponton, & Rovai, 2007). In order to protect the validity of faculty evaluations, the instrument used to evaluate professors should correspond with either traditional or online classes. Part of the disparity in online scores can be traced to lower response rates. Higher response rates can increase the total pool of student scores and decrease the risk of bias from students who are highly motivated to respond with overly positive or negative views (Faculty Senate University Affairs Committee, 2012).

The problem addressed in this study is the possibility that the evaluation instrument used for merit, tenure, and promotion for traditional and online professors is not equitable. Therefore, professors in a College of Education at a regional institution in Texas hypothesize that there is disparity within many departments. Professors who teach in departments with a large number of online classes are receiving lower student evaluation scores. Consequently, the purpose of this study is to examine the degree to which a student evaluation system (IDEA) is an equitable instrument for measuring teaching effectiveness in online versus face-to-face classes.

Literature Review

In his analysis of the research conducted on student evaluations of teaching, Aleamoni (1999) reviewed over 150 studies spanning a 75-year period, and found 16 myths that have remained myths over time. These myths, contrary to the research available, are often accepted as true among higher education faculty. Aleamoni (1999) makes two points that are specifically relevant to this study: (a) student ratings tend to be stable and result in substantial correlations both over time and across the same instructor, and (b) student ratings can be useful to the instructors for the purpose of enriching and improving their courses as well as to document instructional effectiveness for administrative purposes. Since this research was published, recent studies have been conducted regarding these myths and the results were similar. Specifically, Balam and Shannon (2010) found that although student ratings on single general items are accurate measures of teaching effectiveness, faculty still believed that student ratings were invalid and unreliable. Not all researchers agree regarding the accuracy of student ratings. Marsh (2007), for example, found that ratings could be biased and subject to external factors over which instructors may have little control.

Even if student evaluations are effective measures of teaching effectiveness, issues still exist regarding their use in higher education. There are opposing views of the usefulness of student course evaluations to assess teaching effectiveness. Aleamoni (1999) asserted that there was a downside to using student evaluations to improve teaching effectiveness including misuse and misinterpretation. Specifically, when administrators use the ratings for punitive purposes, faculty often find ways to undermine their use, causing many to doubt the credibility of the process (Aleamoni, 1999).

When analyzing studies published within the last ten years, the researchers found that data on student evaluations of teaching addressed a wide variety of areas. These include factors related to a) effective teaching (Balam & Shannon, 2010; March, 2007); b) personal characteristics of instructors (e.g. gender, position, age, and rank) (Isely & Singh, 2007; Kogan, Schoenfield-Tacher, & Hellyer, 2010; Kozub, 2010; Kyriakides, 2005; Slocombe, Miller, & Hite, 2011); c) student characteristics (e.g. gender, age) (Heckert, Latier, Ringwald, & Silvey, 2006; March

2007); d) impact upon tenure, promotion, and merit decisions (Irons, Carlson, Kirk, & Monk, 2011); e) grading and student evaluations (Addison, Best, & Warrington, 2006; Bembenuddy, 2009; Centra, 2003; Germain & Scandura, 2005; Heckert, Latier, Ringwald-Burton & Drazen, 2006; Isely & Singh, 2005; Liegle & McDonald, 2004); f) course difficulty (Heckert, Latier, Ringwald-Burton & Drazen, 2006); g) use of student evaluations to improve instruction (Finelli et al., 2008; Hallinger, 2010; Read, Rama, & Raghunandan, 2001); h) online technology (Hossain, 2010; Keefe, 2003; Lan et al., 2003; Tallent-Runnes et al., 2005); and i) evaluations across disciplines (Kember & Leung, 2011).

Measures of Effective Teaching

If student evaluations are to serve the purpose of providing feedback to instructors for improvement, then these evaluations should be tied to measures of effective teaching. Research on how students evaluate teaching is important to analyze when trying to address a problem such as the one in this study—the equitable use of student evaluations in online versus face-to-face courses as measures of teacher effectiveness. When administrators use teacher effectiveness as one of the components for determining merit, tenure, and promotion, the need to understand these SETs across all delivery methods (online and face-to-face) is critical. While student evaluations of instructors have been found to be either highly reliable or at least moderately valid in measuring student perceptions of teachers (Aleamoni, 1999; Centra, 1993; Hobson & Talbot, 2001), certain areas can be quite challenging in online courses, such as organization, rapport, and technology challenges. These topics have been found to have a moderate to high impact on how students evaluate instructors (Jirovec, Chathapuram, Ramanathan, & Rosegrant-Alvarez, 1998; Tang & Chamberlain, 2003).

Students' perceptions of organization such as understanding exactly what they need to do can be impacted by students' abilities to interface with the online platform and maneuver in and out of different resources in online courses. Two other areas that are closely linked to perceptions of teaching effectiveness are how much students feel they learned in the course (Bard, 1997) and how much they feel they were stimulated by the class (Remedios & Lieberman, 2008; Tang & Chamberlain, 2003). These factors may impact online courses more than face-to-face courses. Additionally, Centra (2003) found that students were quick to rate instructors lower if the courses seemed too easy or too difficult. In the case of online courses, the technology as well as the content can shape students' perceptions of course difficulty. Lastly, the degree to which instructors are motivated, answer questions, and treat students courteously are factors linked to measures of teaching effectiveness which can also be challenging to address when courses are not conducted in person (Tang & Chamberlain, 2003). Often communication via e-mail or course feedback on assignments may seem less emotional and defining precisely what is courteous and motivating to an individual student in this environment can vary widely.

Other Factors Related to Student Evaluations of Online Courses

Two areas impacting the validity of evaluations of online courses (outside of teaching effectiveness) relevant to this study include: (a) low returns and non-response bias, and (b) factors on evaluation instruments which do not align with online instruction. While we found several studies addressing the first area, the second is in need of further exploration.

Low return response and non-response bias. Professors of online classes are often concerned that face-to-face classes are less likely than online courses to suffer the effects of non-response bias because most students are assumed to be in attendance when in-class evaluations are conducted. Thorpe (2005) reported that some studies have found several factors that might influence an individual's decision to complete an online survey, including familiarity with the internet, the ease of completing the survey, and concerns for privacy and confidentiality. In their study of 2,057 student evaluations from 32 instructors over two semesters, Stowell, Addison, and Smith (2012) reported that online evaluations had a significantly lower response rate than classroom evaluations. In contrast, other studies have found that there was no significant difference in using a paper-based method or the web-based evaluation process in terms of non-response bias (Thorpe, 2005).

Factors on evaluation instruments not aligning with online instruction. The IDEA instrument used in this study has several items that instructors in online courses often find more challenging to replicate in online classes versus those conducted face-to-face. For example, students are asked to rate the degree to which their instructor encouraged student-faculty interaction outside of class as well as to rate how well their instructor fostered collaboration by asking students to help each other understand ideas or concepts. There is some research emerging that would alter or completely create alternative ways to evaluate peer learning and evaluation, for example, as well as collaborative learning outcomes as they are structured in online courses (Gazi, 2011). The expectations for organization and relevance of content may be even higher for students in online classes. Jones (2012) found:

Students in online courses want high quality and rigorous courses that are well developed and organized, and that provide them with engaging learning experiences. Students expect their online instructors to develop and deliver challenging and worthwhile courses that offer alternatives to the traditional classroom, but not at the risk of losing high-quality learning experiences (p. 56).

Results

The data reported were from the 2012 spring semester of the College of Education at a regional institution in Texas and were collected from the Institutional Research database. Data from previous semesters were available, but there was no distinction between a course taught and evaluated online versus a course taught face-to-face and evaluated online. Starting with the spring 2012 semester, this delineation could be made and provided a more realistic data set for face-to-face and online courses. We calculated the total number of course offerings by department (Curriculum and Instruction, Educational Leadership and Counseling, Health and Kinesiology, and Literacy, Language and Special Populations) and separated these according to mode of delivery (face-to-face or online). We also calculated the number of courses below the 65% response rate, the average response rate, and the average class size. See Table 1 for the representation.

Table 1
Response Rate

Department	Total	Face-to-Face			Total	Online		
		<65%	Avg %	Size		<65%	Avg %	Size
C&I	59	2	87	25	23	9	66	22
ELC	61	1	90	12	38	19	63	14
HK	98	21	74	37	9	9	43	32
LLSP	93	4	86	24	28	15	66	23
Means	77.8	7	84.25	24.5	24.5	13	59.5	22.75

Note. More face-to-face courses offered, but with near equivalent numbers of students in each. Response rates are the notable differences between categories.

We then ran a one-way ANOVA between groups and found that only one factor had a significant difference ($p < .05$). Table 2 details the “average response rate by percentages” comparison.

Table 2
ANOVA One Way

	SS	df	Mean ²	F	Sig
Between Groups	1225.125	1	1225.125	14.197	.009
Within Groups	517.750	6	86.292		
Total	1742.875	7			

Note. This demonstrates a statistically significant difference ($p < .05$) between the average response rate of online versus face-to-face courses.

After running the one-way ANOVA, we calculated the four major general categories (Progress on Relevant Objectives, Excellent Teacher, Excellent Course, and Summary) for final scoring on the IDEA data report using the raw data category. The data below represent a reporting of each department in the College of Education, displayed by both face-to-face and online classes. The percentages reflect the number of courses that were at or above the IDEA database average across all the institutions served by IDEA (Benton et al., 2010). There were no statistically significant results, but the differences in means are worth reporting (Table 3).

Table 3
Percentage of Classes at or Above IDEA Database Average

Department	Progress	Face-to-Face			Progress	Online		
		Teacher	Course	Summary		Teacher	Course	Summary
C&I	83	76	80	80	83	70	74	83
ELC	85	77	80	84	71	66	74	76
HK	89	83	87	89	89	78	89	89
LLSP	74	63	72	72	75	68	75	75
Mean	82.75	74.75	79.75	81.25	79.5	70.5	78	80.75

Note. This details the four major general categories reported by IDEA; Progress on Relevant Objectives, Excellent Teacher, Excellent Course, and Summary.

Although Table 3 may not include any statistical significant results, it is noteworthy that all of the mean scores for online courses are below the mean scores of the face-to-face courses. This should allow points of discussion later. The largest deficit from face-to-face appears in the Excellent Teacher category.

Discussion

There are multiple layers of concern to discuss, but relative to this research, the field does narrow. One concern would be the use of the same evaluation form for an online course and a face-to-face course. Because these formats are so different, some consideration should be given to changing the actual tool to better represent the course delivery. Our research highlighted a statistically significant difference in regard to response rate between online and face-to-face courses. New ways to encourage online students to respond should be investigated. The hesitancy to “bribe” a student to complete the evaluation is understood, but other considerations should be investigated. There should be consideration by department chairs and college deans for a formula approach to weight the scores of an online course to better represent consistency between online and face-to-face evaluation scores, especially when merit, tenure and/or promotion are being considered. Faculty should be provided with more training and information about how to teach online so that courses provide a deeper sense of community for students. Faculty should also receive training on how to better communicate the evaluation process to students.

Conclusion

The study of online instruction in higher education is in its infancy. The research on student evaluation of teaching (both past and current) is at times conflicting, offering challenges to instructors whose careers depend on these measures. This is especially difficult for instructors who teach online, where issues regarding students’ relationships with their instructors, students’ abilities to understand and maneuver through the organization of the online course, and students’ perceptions of how well their teachers engaged them in both learning and collaborating with others, can be significant factors when evaluating teaching effectiveness.

Overall, the findings of our research suggest that an assessment should be developed to measure teacher performance and effectiveness in online settings exclusively. Given that the IDEA does not correlate with the best practices of online teaching environments, instructors miss out on valuable feedback that could potentially inform their course revision decisions and, subsequently, enhance the quality of digital classrooms. Additionally, assessments such as IDEA should not be used as the sole or prominent indicator of teacher effectiveness – particularly when instruction takes place solely online. Using an invalidated instrument to make decisions regarding high stakes matters such as merit pay, promotion, and tenure seems at best, absurd.

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Mentoring New Faculty on the Road to Tenure

Fred C. Lunenburgⁱ
Sam Houston State University

Beverly J. Irby
Texas A&M University

One of the first mentoring steps is to help new faculty members determine how many articles can be published from their dissertations. We contend that any dissertation of seminal importance can produce multiple journal articles. For example, the literature review may be suitable for publication if it is a critique of the literature with major issues raised on the specific topic of interest. If the new faculty member did not conduct a critique of the literature, then that may be a suggestion; and as that is done, references can be updated as well. The dissertation may have resulted in a specific intervention that is worthy of a manuscript. In that manuscript, recommend to the mentee that the researched intervention should be described in detail and could be submitted to a journal related to the intervention. For example, it could have been a mathematics intervention that worked well in a secondary school program. Such a description may be helpful to secondary school administrators and could be shared via a journal supported by the Texas Association of Secondary School Principals. Such suggestions from the mentor constitute the beginning of a publication plan for tenure for the new faculty member.

Mentors must also support the new faculty member in appropriate publishing behavior. According to Lunenburg and Irby (2008), multiple papers may be derived from the dissertation that describe independent parts of the total document. They did not recommend creating several publications based on the results from a single database. This practice constitutes duplicate publication (Cone & Foster, 2007). We recommend that the mentor and mentee review the *Publication Manual of the American Psychological Association*, Sixth Edition (2010) for further discussion of this matter. The mentor should also discuss the conventions of publishing in terms of authorship that grows out of the dissertation. Suggest to the mentee that he/she contact the dissertation chair to discuss who would be appropriate to include on the articles that emerge from dissertation research.

Mentors Can Help Early-Career Faculty Members Select a Suitable Journal

Helping early-career faculty members determine where to send their manuscripts involves three important factors: (a) selecting a journal that matches the topic, (b) selecting a journal that matches career goals, and (c) selecting a journal that is appropriate for the study (Lunenburg & Irby, 2008). First, mentors should help the new faculty members find journals that publish the types of articles that match their dissertation or research topic. Journal requirements should be reviewed with the mentee as specific journals will focus on a particular type of article it publishes, such as empirical articles, theoretical articles, or practitioner articles. For example, within educational administration, *Educational Administration Quarterly* publishes primarily empirical research. *The Journal of Educational Administration* publishes primarily conceptual and empirical studies. *Educational Leadership* publishes primarily applied articles on

ⁱ **Dr. Fred C. Lunenburg** may be reached at edu_fcl@shsu.edu.

educational leadership and education, as well as some empirical articles with definitive implications for practice. Read the journal's mission statement with the new faculty member and review its guidelines for manuscript submission. In addition, peruse the contents of the primary journals in Educational Leadership (of course, as we often state—educational leadership/administration deals with everything from finance to curriculum development) to get a feel for the type of articles published in them.

Second, the new faculty member's career goals will determine the most suitable journal for manuscripts. For example, if there is an interest in working as an administrator in higher education, then publishing in a journal that focuses on practitioner articles might be helpful to that career goal. However, if there is an intention to build a career in a research university, the new faculty member should conduct research and submit manuscripts to prestigious empirical journals. Those prestigious journals will be noted by specific university department guidelines in most cases; it is important for the mentor to share that information. Academic departments in research universities will consider, in most cases, journal articles published in top-tier journals. As a mentor, it is critical to make certain that the mentee knows the rules—written and unwritten—on what the tenured faculty and university policy require.

Following are several Tier 1 journals in educational administration for mentors to share with new faculty. This is not an exhaustive list. (See Table 1.)

Table 1
Sample Tier 1 Journals in Educational Administration

<i>Educational Administration Quarterly</i>	<i>Review of Research in Education</i>
<i>Journal of Educational Administration</i>	<i>Educational Evaluation & Policy Analysis</i>
<i>Journal of School Leadership</i>	<i>Harvard Educational Review</i>
<i>Educational Researcher</i>	<i>Teachers College Record</i>
<i>American Educational Research Journal</i>	<i>Educational Management & Administration</i>
<i>Review of Educational Research</i>	<i>Journal of Educational Research</i>
<i>Education Leadership Review</i>	<i>Journal of Experimental Education</i>

Third, help the mentee determine the most prestigious journal that is suitable for the manuscript. Many journals are available in any given discipline, but not all journals are of the same quality or scientific rigor. Academics classify journals into a rough hierarchy as to quality as follows: excellent (Tier 1), above average to average (Tier 2), and below average to marginal (Tier 3). This rough classification system is based primarily on three factors: refereeing systems, acceptance rates, and citation scores. For example, some journals may not be juried; i.e., they do not (a) require peer reviews of manuscripts, (b) conceal the identity of the author(s), and (c) provide a rating scale to guide reviewers. Additionally the journal may have very high acceptance rates. Other journals have a peer-review system, and they may have a very low acceptance rate. Some journals have high citation scores, while other journals are cited less often. All of those considerations should be reviewed between the mentor and the mentee.

Generally, the higher the rejection rate, the higher the quality of the journal. However, there are exceptions to this general pattern. In many behavioral and social science disciplines, some of the best and most prestigious journals are not refereed. (Examples include *Educational Leadership*, *Harvard Educational Review*, and *Phi Delta Kappan*). In addition, some universities place importance on *citation scores*. This is a calculation of how often other researchers cite an article from a specific journal. The more often a specific journal is cited, the higher the quality the journal is judged to be. Although the aforementioned three journals are not refereed, each has high citation scores and high rejection rates. Citation scores for most journals can be found in the *Social Science Citation Index* and the *Humanities Citation Index*. Nevertheless, again, it is critical that the mentor know and share what the specific university and departmental policy is in terms of emphasis in publishing in refereed journals.

Lunenburg and Irby (2008) recommended *Cabell's Directory of Publishing Opportunities in Educational Psychology and Administration* (2010) as a good source of information on journal listings and specific information about the journal. It lists more than 5,000 specialized and professional journals by discipline. For each journal it supplies (a) submission addresses; (b) publication guidelines, including manuscript length, copies required, computer submission requirements, format, and manuscript style; (c) review information, including number of external reviewers, acceptance rate, time required to review, reviewer's comments, and invited articles; (d) circulation data, including primary audience, frequency of issue, copies per issue, publisher; (e) manuscript topics; and (f) manuscript guidelines.

In helping the new faculty members to select a journal, it is important as well to help them to evaluate the level of scientific rigor of their manuscript. If the research is a two-variable study using correlation, it is not likely to be published in a Tier 1, empirical journal, unless it is some seminal piece of work—something very unique. Mentors should also guide mentees toward quality Tier 1 journals when their research is qualitative with solid and trustworthy results. In some cases, the mentor may need to recommend a journal more suitable for the publication at a Tier 2 or Tier 3 level.

Mentors Can Assist in Preparing the Manuscript

Mentors can help with the next step – preparing the manuscript for publication. Most APA-style journal articles include the following sections: abstract, introduction, method, results, and discussion. Mentors will want to suggest that mentees cut down their dissertation so that the sections of the manuscript are shorter and more focused, or they could suggest to enhance conference proposals submitted to the American Educational Research Association (AERA) or the University Council for Educational Administration (UCEA), or other national or international annual meetings.

Observe the following maxim when preparing the manuscript: Write, print, edit, revise, polish, get feedback, and revise again. Repeat such a cycle as many times as it takes to get a publication-ready manuscript (Vasquez-Armijo et al., 2011). Write a first draft. Do not worry about how the ideas are organized at first. Print and edit the paper on the hard copy. Avoid on-screen editing, which is usually confined to simple corrections. At the revision stage, focus on organizing ideas into a clear argument sequence and linking closely related points. Then polish the text using topic sentences, transitions, and closure sentences (consult Chapters 3 and 4 of the Sixth Edition of the *Publication Manual of the American Psychological Association* for further discussion of

these matters). Mentors should provide feedback on an almost polished manuscript so that revisions can be made once more, repeated until the mentor and mentee are completely satisfied with the manuscript.

Mentors Can Assist with Submitting the Manuscript

Mentors can insure that new faculty members have submitted according to the journal guidelines by reviewing the submission just prior to it being sent. Check the required number of copies to the address provided in the most recent issue of the journal selected or on the online posting. Most journals now require electronic submissions. If the journal requires a hard copy, send the manuscript *Return Receipt Requested*. This postal method requires a signature from a receiver where the journal is housed. This practice ensures that the manuscript arrived safely. Most editors will acknowledge receipt of the manuscript by e-mail or letter. They will usually indicate who is handling the manuscript which is typically an associate editor. If there is not such an acknowledgement e-mail or letter within a few weeks of submission, contact the editor (by e-mail, telephone, or letter) to inquire about the status of the manuscript. The turnaround time for electronic submissions is usually a few days.

Mentors can encourage new faculty members to have patience on the decision on their manuscripts. The average turnaround time required for a publishing decision is approximately two months (Lunenburg & Irby, 2008). Journal editors typically use four categories of response: (a) acceptance with no changes; (b) conditional acceptance pending changes; (c) rejection, accompanied by two or more anonymous reviews; and (d) revise and resubmit. In the latter case, the editor encourages the author to revise the manuscript and resubmit it for additional consideration. The *conditional acceptance pending changes* and the *revise-resubmit* decisions are very common practices in publishing. In the former case, there is an acceptance. It does not get much better than that, because an *acceptance with no changes* is very rare. Thus, mentors should encourage mentees to revise the manuscript as soon as possible, following the suggestions provided by the reviewers. Mentors will want to share with mentees that they do not have to make all suggestions recommended if they do not agree with them, but they must respond to each suggestion in a respectful letter. The *revise-resubmit* decision is, in essence, no decision. It is basically considered a reject, until accepted. Mentors can help new faculty in making a decision to revise and resubmit, or to submit the manuscript to another journal, using the suggestions from reviewers to improve the manuscript.

When a manuscript has been accepted for publication, the turnaround time these journals require to publish it varies from 1 month to 2 years. Therefore, examining a journal's turnaround time for publication is important when selecting a target journal. Thus, turnaround time is as important as acceptance rate. Prolific scholars do not get to be prolific by waiting extended periods for each manuscript to be accepted and published. Instead, they submit their manuscripts and begin immediately writing other manuscripts.

Mentors Should Assist New Faculty in Planning the Writing Process

One of the major problems beginning assistant professors face in getting ready for tenure is the shortage of time. Amassing a suitable number of important articles in top-tier, refereed journals is difficult for some, especially with the competing demands of teaching, service, and family. Once teaching is begun, it will seem as though it is very difficult to find the time to write. The

keys to writing success and publishing success are planning and discipline. Following are some tips that mentors could share with new faculty members for organizing their writing process (Day, 2011; Henson, 2005; Jalongo, 2002; Osborn, 2002).

Establish Regular, Predetermined Writing Times

Some authors find it helpful to set aside 2 or 3 half-days or 1 full day (8 or 9 hours) each week for writing. Others write for 2 hours every day. Still others may prefer to reserve writing blocks of 6 to 8 hours one or two times a week. Mentors can suggest that new faculty members establish regular, predetermined writing times, and make them inviolable. Writing regularly greatly increases the level of writing productivity, as well as the quality of the writing.

If the new faculty members find it difficult to write during the regular, predetermined writing times, mentors should encourage them not to stop writing – encourage them to just write a first draft and do not worry about how the first draft is organized; rather, concentrate instead on expressing the ideas. Then, later they can rearrange the ideas into a single, clear sequence of arguments.

The Order of the Writing Task Need Not Be Linear

We have suggested that an APA-style journal article contains the following sections: abstract, introduction, method, results, and discussion. However, mentors must relay to mentees that manuscripts do not have to be written from beginning to end, (i.e., write the abstract page and continue linearly through the manuscript). Start with the easiest task and progress to the more difficult tasks. Perhaps the method section is the easiest to write. Begin there. When this task is accomplished, it will feel like progress is being made and movement toward the next step can take place.

Mentors should also share writing conventions with mentees. They should explain that some sections may take longer to write than others. For example, introductions usually take the longest to write, so they may recommend that a large block of time be reserved to write that section.

The Best Writing Does Not Happen Under Pressure

Successful professional writing takes time: time to reflect, time to read, time to write, time to get feedback, time to evaluate the writing, and time to repeatedly revise the manuscript. That is a central theme that mentors should share with new faculty members. Lunenburg and Irby (2008) stated “A manuscript should be written and revised at least five times, and more for inexperienced writers” (p. 271). Usually the first, second, and third draft of the manuscript is not ready to submit.

The lead author of this article had a conversation a few years ago with a new faculty member. She told him that she was going to submit her manuscript the following day to me to get my reaction. I said to the student: “Are you completely satisfied that your manuscript is the very best work you can do. If not, consider revising it until you are absolutely certain your paper cannot be improved any further by yourself; then, I, as your mentor, will go through the paper.” This is

sound advice to any writer, experienced or inexperienced, whether writing a dissertation, journal article, book chapter, or book. We find, as mentors and as editors of journals, that many new faculty members submit their first draft to get the mentor's or the editor's reaction. Ninety-nine times out of a hundred, it is sent back for further revision. Certainly, the revision should be with the mentor, as that is part of the job of mentoring—providing feedback—but not of an editor. Encourage new faculty members to get everything in top shape prior to sending it to the editor, and never send anything for the editor to *just* review. In addition, as book and journal editors, we find that many authors submit rough drafts to us for publication. If the content is worthy, some are returned to the author for revision; however, some may end up in the *circular file*. Mentors want to caution new faculty members about sending out rough drafts.

Conclusion

University presidents often proclaim that their organizations are *teaching institutions*. However, faculty members in 4-year colleges and universities on tenure tracks know that the gatekeepers of the tenure review process—however broadly their institutions may define scholarship—want to see a long list of quality publications at the time of the tenure decision. Thus, most faculty members in higher education institutions are required to write for publication and often times, the new faculty members get little support with jump-starting their writing/research careers. Through mentoring new faculty in such a process, those faculty members can have the opportunity to better succeed in their scholarship. Marcellino (2011) found that mentees were able to refine their research agendas with their mentors' assistance. We hope that as early-career faculty members move ahead on their roads to tenure, mentors can use this article in promoting and demystifying the publication process for their mentees.

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