Report on the General Status of Wyoming Public Schools

A Report to the Wyoming People and to the State Legislature **Submitted October 15, 2013**

OFFICE OF THE WYOMING SUPERINTENDENT OF PUBLIC INSTRUCTION **CINDY HILL, SUPERINTENTENT**

2013

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Introduction 1.

Before addressing the general status of the public schools, one must consider the legal framework establishing our system of public education. Wyoming's educational system as designed by the delegates to the Wyoming Constitution places primary control of the public

schools in the hands of those who immediately impact student learning—those at the local level (educators, parents, and community members). The delegates to the Wyoming Constitutional Convention knew what teachers know, what has been proven time and time again, and what the educational research explored in this report illuminates: students learn and grow as a result of quality instructional time with their teacher and with parental support. Any policy that promotes these ends is beneficial; any policy that distracts from this fundamental purpose of education is non-productive. This must be the test

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for every policy and every action. The goal of my administration has been clear and unwavering. At the center of every discussion and decision during my abbreviated tenure as the leader of the Wyoming Department of Education (WDE) was increasing student achievement through improved instruction in literacy and numeracy, and ultimately (though prevented from reaching this topic by SF104), critical thinking.¹

Consider the Constitutional framework for education in Wyoming. Article 7, Section 1 of the Wyoming Constitution sets forth the role of the Wyoming Legislature when it comes to public education. The Legislature is the funding arm of public education tasked to "provide for" the establishment and maintenance of the public schools:

The legislature shall provide for the establishment and maintenance of a complete and uniform system of public instruction, embracing free elementary schools of every needed kind and grade, a university with such technical and professional departments as the public good may require and the means of the state allow, and such other institutions as may be necessary.

As the Constitutional text reflects, the requirement to ensure funding for the public schools comes through this provision. Neither Article 7, Section 1, nor any other provision in the

¹ Not surprisingly, local control through fiscal responsibility and accountability was the first in my four part plan for education achieved through best practices funding, real-time assessment tools, stakeholder feedback, and teacher, parent, and administrator collaboration. The only way to improve struggling schools is to get into the schools and to encourage change to develop from within the school.

Wyoming Constitution, defines for the legislature a role for the management of schools. For example, Article 7, Section 2 is entitled "School revenues." Article 7, Section 3 is entitled "Other sources of school revenues." Article 7, Section 4 is entitled "Restriction in use of revenues." Article 7, Section 5 is entitled "Fines and penalties to belong to public school fund." Article 7, Section 6 is entitled "State to keep school funds; investment."

This report is mandated by a law that I believe to be unconstitutional. Within minutes of signing SF104 into law, two Wyoming citizens and I served Governor Mead with a lawsuit challenging the constitutionality of SF104. That challenge has been briefed and argued and is, at this moment, awaiting a decision from the Wyoming Supreme Court. Although this report is a requirement of what I believe to be an unconstitutional law, by way of cooperation, and not as a requirement, the OSPI staff and I offer the citizens of Wyoming and the Wyoming Legislature a summary and overview of the state of education in Wyoming along with recommendations for regaining our focus.

Federalizing Education in Wyoming

We must return to our mission - student learning. Teachers across Wyoming argue over and

over that politics is getting in the way of our primary purpose. The more bureaucratic requirements we heap upon teachers, the less focused their work becomes. Teaching time decreases in direct proportion to bureaucratic requirements. Talk to any teacher in Wyoming. Their chief complaints are that they are being asked to leave the classroom or abandon planning time to attend an endless succession of meetings, most having little to do with

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instruction, and their instructional time is too frequently interrupted by endless batteries of tests.

These are the products of top-down thinking. From a common sense perspective, we know that Congress does not teach a child to read, to write, to perform mathematical functions, or to critically think. Nor can the Wyoming legislature perform or manage these functions. Only professionalism by teachers and instructional leadership achieve these ends. Yet, over the past several decades, the federal government has sought to assume greater control of education in the states, reaching into the classrooms, and Wyoming has been lured in this direction through reliance on federal money, as the following reflects:

- In 1965, the Elementary and Secondary Education Act (ESEA) was enacted, to be reauthorized every five years. With every reauthorization more compliance on the part of the states was added.
- In 2001, the reauthorization of ESEA was called No Child Left Behind, (NCLB) advancing and codifying the testing movement. Although scheduled for reauthorization and amendment in 2007, this remains the law of the land. Many states have opted for greater federal controls as the condition for seeking a waiver from NCLB.
- In 2009, President Obama's American Recovery and Reinvestment Act (ARRA) established Race to the Top funding and led to the adoption of Common Core State Standards and other requirements to receive these federal funds. As most states faced severe education funding shortfalls, many took this path, accepting the carrot and with it further federal control over education.
- In the fall of 2011, Arne Duncan, U.S. Secretary of Education and head of the U.S. Department of Education, offered states the opportunity to sign on to greater federal control in exchange for waivers from NCLB requirements. Those federal controls included:
 - A requirement to institute college and career ready standards, i.e., Common Core State Standards,
 - ii. Adoption of accountability systems in state law, and
 - iii. The linking of teacher evaluation to student performance data.
- In January of 2010, then Superintendent Jim McBride, on behalf of the WDE, applied for \$159 million in Race to the Top funding. The U.S. Department of Education's review of Wyoming's Race to the Top application revealed that Wyoming received a low ranting and would not be considered for Race to the Top monies because Wyoming had not adopted the Common Core State Standards, did not have federally approved accountability systems in place, was not linking teacher evaluations to student performance, and was not meeting other federal requirements.
- In response, in June of 2010, without following rulemaking requirements, the Wyoming State Board of Education approved the Common Core State Standards. Immediately, the WDE set out to advise school districts that the Common Core State Standards had been adopted and began compliance-based efforts for standards that had not yet been adopted through rulemaking.

- During this period, the Legislature began work on a state system of accountability. Legislators spoke of the need to adopt the national assessment, which of course is tied to the Common Core State Standards.
- In November of 2010, I was elected as Superintendent of Public Instruction. I had the audacity to ask why Wyoming was taking federal money, questioning the merits of federal controls.
- During the two years in which I held general supervision of the public schools (prior to the passage of SF104), I questioned the need for increased federal control over
 - education in Wyoming (e.g., seeking to place emphasis at the local level and on teacher training; giving parents the right to opt-out of data collections by requiring informed consent of parents prior to data collection rather than parents not knowing that data was being collected on their children; pointing out that no measure

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- presently exists for accurately assessing teacher performance through student test scores; not signing Wyoming up for greater federal controls through the NCLB waiver; and a myriad of other views not in conformity with the effort to federalize Wyoming education).
- With the adoption of SF104 in 2013, the Superintendent of Public Instruction was stripped of the general supervision of public schools, and was assigned a handful of ministerial duties, this report among the duties assigned by the Legislature.
- A week after signing SF104, Governor Mead flew to Washington, D.C. to apply for more federal controls over education through the NCLB waiver. Responding to public pressure, Governor Mead placed Wyoming's waiver application on hold until after the 2014 primary election.
- The Governor appointed a director of education who had no degree, no training, and no experience in education, and was not from Wyoming. He was a state senator from Arizona whose nutrition-related business relied upon contracts with state education agencies.

Above all else, we must ensure high quality instruction and increase the amount of time teachers have with their students. Throughout this report the reader will see that quality instruction and instructional time are the keys to improved student performance. More than in any other place, Wyoming tax dollars are most effectively spent on developing best practices and increasing the time that teachers have with their students.

A repeated theme of this report is that we must listen to Wyoming people about what they

want from public education, and how they define success. I submit this report with the sincere hope that the issues identified here will spur continued discussion and the development, where appropriate, of effective policies. I continue to assert that we, the people of Wyoming, possess all the experience and

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problem-solving skills required to arrive at solutions appropriate to our schools and fitted to the specific needs of our students. Outside "experts" and top-down leadership have proven to be of little value. We must look within to find solutions, honoring those who do the hard work on a daily basis. Only then will we become a national leader in education.

Cindy Hill

Wyoming Superintendent of Public Instruction

Eindy Hill

Methodology II.

Statutory Task:

In 2013, Senate Enrolled Act 1 (SF 00104) charged the Superintendent of Public Instruction with annually preparing a report on the general status of schools.² It indicates six areas to be discussed:

- 1) Shortfalls in education
- 2) Proposed improvement
- 3) Relevance of education
- 4) Measurement of achievement of educational goals
- 5) Improvement of learning
- 6) Innovations in education

OSPI Staff:

The Office of the Superintendent of Public Instruction (OSPI) is comprised of six people: the Superintendent of Public Instruction, the deputy superintendent, an instructional leader, a senior policy analyst, a research and reporting specialist, and an operations director. The staff skills include: school teaching, school administration, business and professional experience, lecturing, post secondary education, and many others. The budget creating the office allowed for two additional positions--public information officer and administrative assistant--but did not provide sufficient funding to fill these positions.

To facilitate public input in the work of the office, OSPI established a website which is available for comment, and continues to invite public access via electronic mail. The website and email addresses are located at: http://ospi.wyo.gov/staff

School and District Snapshots:

The report includes snapshot information for every Wyoming school and district. These snapshots are part of fulfilling the OSPI's statutory charge to report on the general status of all

^{21-2-201.} General supervision of public schools entrusted to state superintendent.

⁽b) Not later than October 15 each year, the state superintendent shall prepare a report on the general status of all public schools for the legislature. The report shall include the quality of education including any proposed improvement to address any shortfalls, the relevance of education, the measurement of achievement of educational goals, the improvement of learning and any suggested innovations in education. The state superintendent may obtain information or data necessary for completion of the report through the liaison appointed by the director under W.S. 21-2-202(b). This shall include, as necessary, copies of the fiscal reports submitted by clerks of school districts under W.S. 21-3-117.

Wyoming schools. The information provided in the snapshots includes data on student enrollment, school location, configuration, and other facility information, academic and achievement data, and other demographic information.

To make these snapshots a useful and accurate reflection of the individual schools, access to current and reliable data was essential. Unfortunately, accessing data proved to be a significant challenge as the OSPI was required to request most of the needed data from the WDE through its liaison. Many data requests were significantly delayed, ignored, or simply unfulfilled. It is the hope that going forward data will be made more readily available to the OSPI so that these snapshots can be more fully developed.

In the future, once data is made available, the OSPI will provide enhanced school, district and statewide snapshots focusing on funding metrics, statewide achievement data, and economic and census data and trends.

School visits:

To fully and thoroughly report on the status of all public schools, as required by SF104, the initial objective of the office was to visit all of Wyoming's approximately 350 schools to make

individual comments concerning each. It was quickly recognized that while all schools could be visited, many would not be in session. Similarly, visits might not be convenient to the local schools. Lastly, OSPI budgetary funding was inadequate to accomplish

OSPI staff visited 29 districts, 12 district offices, and 68 schools since February 1, 2013.

these visits. Nevertheless, members of the OSPI staff visited 29 districts, 12 district offices, and 68 schools since February 1, 2013. Many of the observations within this report are premised upon these individual school visits, but the observations are not intended to be associated with any single school.

During the spring of 2013 the Superintendent and members of her staff visited schools in the state where the students had tested at 100% proficiency in both math and reading on the previous administration of the Proficiency Assessments for Wyoming Students (PAWS). Additionally, OSPI visited most of the schools where students had 100% proficiency in either math or reading. All such schools received a certificate of recognition. The staff also visited many of the classrooms of district teachers of the year. During many of those visits, the OSPI staff observed teaching methods and interviewed parents and teaching staff. From these visits and earlier school visits, common traits were gathered that assisted in the development of this report.

Surveys:

As a method of reaching out to parents, the education community, and the broader community, the OSPI staff with the assistance of the Regional Education Laboratory located in Denver, Colorado (REL Central), developed surveys that were posted on the OSPI website. REL Central assisted in developing survey items and analyzing survey responses. Many of the REL Central observations are included within this report for reader convenience. The comments have been distilled to the most common categories.

Although all district central offices were contacted for support in administering the survey, the bulk of responses came from about 12 of Wyoming's 48 school districts. Nevertheless, a good sampling of districts was obtained by size and geographic location.

The surveys were targeted at three specific groups: educators (including administrators and support staff), parents, and community members. It is not possible to discern whether individuals took more than one survey, but the survey did not permit more than one set of surveys to be answered by a discrete device (computer or other internet connected device). Over 5300 responses were received. Each response was read by one or more OSPI staff member, and REL Central assisted in analyzing the survey responses that included both openended and quantitative questions.

Because of the large number of responses, the REL team sampled open-ended responses and developed a coding of the most common ideas. For simple quantitative questions, responsive data was assembled and reported. For quantitative questions requiring ordering or ranking of responses, REL analyzed the frequency and standard deviation associated with each possible response.

Data review:

SF104 provides that, "The state superintendent may obtain information or data necessary for completion of the report through the liaison appointed by the director under W.S. 21-2-

202(b)." A content specialist at the WDE, was appointed by the director to serve as liaison. While any member of the public may communicate directly with WDE staff, WDE instructed OSPI staff that all communications to the WDE were to pass only through the liaison. The WDE unilaterally determined whether or not to honor information requests. At times, this process presented insurmountable

"The state superintendent may obtain information or data necessary for completion of the report through the liaison appointed by the director under W.S. 21-2-202(b)."

challenges to the OSPI staff as it endeavored to meet its statutory duty to report on the general status of all schools.

For example, OSPI was able to review publicly available assessment data. However, the 2012 pilot accountability model was not available to OSPI nor did WDE make available the most recent version of the accountability model. Although requested, neither 2013 AYP calculations and status nor 2013 growth calculations were provided in time for inclusion within this report. Additional forms of data were obtained from the WDE public website and from the financial information available within WDE's data warehouse. Financial data was obtained from districts' June 30, 2012 audited financial statements and from WDE series reports. Several of the financial reports were received by OSPI in incomplete form, but most of the critical information was distilled and is appended to this report.

Challenges:

The staff continues to review research materials and to gather and analyze data related to the identified issues. Much of this work has been negatively impacted by the considerable distractions resulting from political activities following the 2013 Legislative session, including the MacPherson investigation and report, and the subsequent select committee investigations. However, the report has a "Summary" section that anticipates some of the subjects for interim consideration and future reports.

III. Wyoming's Unique Advantages and Challenges

Early in this process the question was posed: What are Wyoming's unique educational advantages and are these advantages being deployed effectively? One common means of thinking about such issues is through a SWOT analysis.

SWOT Analysis (Strength, Weakness, Opportunity, Threat)

Developed at the Stanford Research Institute in the 1960s by Albert S. Humphrey,³ SWOT helps focus managerial/policy decisions on the entity's Strengths, Weaknesses, Opportunities and Threats. In the policy-making endeavor of a state public education system, we can make a similar analysis. What are the identifiable strengths and weaknesses? Where are opportunities, such as to meet goals, to embrace our values, or to further societal objectives? And where are the threats to the entity's eventual success, such as the loss of local involvement and support and the diminishment of student creativity and flexibility?

In this section we raise for future discussion possible areas of strengths and weaknesses, leaving to policy makers the further discussion of how to capitalize on opportunities and how to avoid or minimize threats. This section, therefore, is based largely upon observation. As such, it should become a starting point for discussion and is not intended to be complete nor devoid of controversy.

Strengths and Weaknesses

As any successful coach, business leader or political leader knows, each entity has strengths. In basketball, a good shooting team wants as many possessions as possible in the hopes of outscoring opponents, while strong defensive teams wants to make every opponent possession difficult in the hopes of keeping a low scoring game within reach of victory. Understanding weakness is often more difficult than what are perceived as strengths.

For example, many consider abundant funding to be a strong point of the Wyoming public

education system. However, surplus funds are often used to purchase and implement new programs and hire additional non-teaching staff. Between 1992 and 2009, student enrollment fell 15% but administrator and non-teaching staff levels rose 35%.⁴ Doug Reeves

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³ See, http://rapidbi.com/history-of-the-swot-analysis/ attributing SWOT as an outgrowth of other work done in analyzing management of change within Fortune 500 companies

⁴ Scafidi, B. (2013), The school staffing surge, Decades of employment growth in America's public schools – Part II, The Friedman Foundation for Educational Choice, pg 4.

refers to the sometimes unintended results of a multitude of new programs as "initiative fatigue." Reeves states initiative fatigue hampers improvement through a "litany of prescriptions that piles one idea on top of another, crushing school leaders, teachers and ultimately students under the weight of too many attractive ideas." ⁵

The following, in no particular order, are often mentioned as strengths of Wyoming schools:

- High per capita funding.
- An enviable mixture of high performing small and medium size schools.
- Relatively high compensation of staff.
- Relatively stable economic base in communities resulting in relatively stable populations.
- Typically lower unemployment levels when compared to the national rate.
- High access to post-secondary educational opportunities through Hathaway support and well located community colleges and a strong land-grant based university.
- Low class room size (student-teacher ratio).
- Few access barriers between citizens and elected representatives.
- Large numbers of modern facilities.
- Political climate supportive of education.
- Relatively strong sense of personal responsibility within general population.
- Citizens viewing themselves as self-reliant.
- Citizens willing to support education.
- Communities that identify with local schools.

Likewise, often mentioned weaknesses of public schools in Wyoming include:

- Too much funding making it easy to hire solutions rather than to problem-solve from within, resulting in a lower level of support for acquired solutions.
- Isolation of many schools resulting in higher costs and creating barriers to sharing innovative techniques and methods.
- Low real property tax thus failing to provide incentives for the general population to engage in school management and budgets.
- Over reliance on consultants and contractors to solve problems but who are often absent when the results of their suggestions are analyzed.
- High compensation levels and rich benefit plans leading to retention of potentially mediocre staff whose commitment is only to pay level.
- Greater number of non-academic distractions.

⁵ Reeves, D. B. (2003). *High performance in high poverty schools: 90/90/90 and beyond.* Center for Performance Assessment.

- Ever growing bureaucracy impeding individual involvement of parents and members of the community.
- Excessive reliance on standardized testing rather than on teacher-made assessments, the latter affording teachers and students immediate feedback.
- Diminishment of classroom creativity so that uniformity might be achieved.
- Unfocused policies that detract from the essential mission of education instruction.

Complexity often causes distraction from the purpose of education – to teach students. We often resort to committees and liaisons for important work. Figure 1 below was prepared in January of 2013 to demonstrate the multitude of actors – at the state level – in the education accountability process. Sadly, the graphic has grown in complexity since that time.



Figure 1 – Diagram of separate entities working on Accountability in January 2013

This report is intended to comment on these topics and to invite a broader discussion within the public venue for determining the future of Wyoming's public educational system. Public comments have been solicited by surveys, but these are only a starting point.

A common theme within this report is the call for greater involvement of the local communities. This is accomplished by:

- (1) identifying values important to the citizens of the state,
- (2) formulating goals and objectives consistent with those values, and
- (3) establishing benchmarks and measuring tools to confirm progress toward the furtherance of those values.

Too often we hear comments like: For as much money as we spend we ought to have the best

results! While such comments may seem intuitively appealing, they tend to reduce a complicated subject to a simplistic statement. That money does not equal success is readily understandable. Rather, Wyoming

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people must define success consistent with our values and then utilize our strengths and solve our weaknesses while striving toward greater success.

The purpose of noting the advantages and challenges is to simply keep in focus the uniqueness of Wyoming, especially as we experience a process of moving from local or state leadership to national leadership.

Quality of Education Analysis IV.

The OSPI's statutory charge reads as follows: "Not later than October 15 each year, the state superintendent shall prepare a report on the general status of all public schools for the legislature. The report shall include the quality of education including any proposed improvement to address any shortfalls, the relevance of education, the measurement of achievement of educational goals, the improvement of learning and any suggested innovations in education." W.S. 22-2-201(b)

This statute touches on six areas:

- Shortfalls in education 7)
- 8) Proposed improvement
- 9) Relevance of education
- 10) Measurement of achievement of educational goals
- 11) Improvement of learning
- 12) Innovations in education

This section will primarily examine item number 4, Measurement of Achievement of Educational Goals. The Wyoming Legislature outlined Wyoming's educational goals in the Wyoming Accountability in Education Act, W.S. 21-2-204. Those goals are:

- (i) and (ii) Repealed by Laws 2012, ch. 101, § 2.
- (iii) Become a national education leader among states;
- (iv) Ensure all students leave Wyoming schools career or college ready;
- (v) Recognize student growth and increase the rate of that growth for all students;
- (vi) Recognize student achievement and minimize achievement gaps;
- (vii) Improve teacher, school and district leader quality. School and district leaders shall include superintendents, principals and other district or school leaders serving in a similar capacity;
- (viii) Maximize efficiency of Wyoming education;
- Increase credibility and support for Wyoming public schools. (ix)

The following sections will examine each of these goals in detail. We will look at how the goal has been defined, what current tools are being used to measure progress or successful completion of each goal, and how these goals impact Wyoming's educational community and the general status of schools.

Goal 1: Become a national education leader among states

Defining the Goal:

As of the writing of this report, no definition of "national education leader among states" has been adopted. Wyoming has not established a target or series of targets that will assure the people of the state that Wyoming's educational system is a national leader. Implicit within the definition should be a reflection of the *values* of the people of the state.

Current Measuring Tool:

Without definition, no measuring tool can be identified nor can progress be evaluated or success achieved.

Discussion:

"National education leader" can be thought of in many ways. High academic test scores of

students, the economic vitality of communities, and a population developing new and unique goods, services, techniques, and ideas in response to the marketplace are just a few. To fully appreciate the task of defining this goal, it is important to establish the values or societal objective to be furthered. For

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example, in an industrial area, the production of skilled-workers might be valued. In an agrarian community, the continuity of farms and ranches might be cherished. In an information-based economy, the development of creative problem solving and innovation might be prized. Are there statewide values that can be embodied within a goal statement?

As an example, Wyoming long has had a reputation of exporting many of its best and brightest youth. It is conceivable that a valid measure might be how many of Wyoming's youth remain or return to the state. To facilitate measurement of this goal, one might measure the creation and success of new businesses employing Wyoming youth. It was recently reported that Wyoming leads the nation in the creation of mid-wage jobs. Moreover, it is not enough to take a single snapshot at the conclusion of public schooling and use this as a basis for determining whether the educational system is succeeding. Should we wait upon a 12th grade examination to

that-are-fostering-them/

⁶ Mid-wage jobs are defined as those earning between \$13.84 and \$21.13 per hour (roughly \$28,800 to \$44,000 per year). Economic Modeling Specialists (ESMI) reports: "No state has stood out more than Wyoming, where 45% of new jobs since 2010 have been mid-wage — well ahead of lowa (37%), North Dakota (36%), and Michigan (35%)." http://www.economicmodeling.com/2013/10/03/middle-skill-jobs-that-have-survived-and-the-states-

determine whether the first grade teacher succeeded with a child? Can we allow creativity to be extinguished in the elementary school only to later see our technological advantages in problem solving disappear over time? Clearly, measurement needs to be regular, reliable, and reflective of the goal.

The 2013 OSPI public and parental surveys are instructive on this point. The surveys indicate high value is placed neither on academic scores nor achievement tests, but rather on

encouraging the inquiring mind (to be a life-long learner), and personalizing instruction to meet the uniqueness of each student. Creativity also remains a valued attribute. Clearly, most parents and community members desire that each student's unique talents are developed. Parents and community are interested in respecting individual learners and enhancing individual skills. Not

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surprisingly, many of the mission statements of districts and of schools (see snapshots) also embed these important concepts.

This is not to say assessment is unimportant. However, the role of assessment must be understood both as to the strengths and weaknesses of assessment and the behavior that assessment induces. If, for example, student assessment becomes the primary mechanism for evaluating teachers and leaders, unintended consequences may result. For example, expert teachers may avoid teaching content areas with rigorous, albeit, arbitrary assessments.

Another unintended negative consequence might be that curricula is standardized, removing creativity from the classroom; consequently, teachers may find their interest in teaching diminished to the point where quality teachers prematurely leave the profession. Likewise, creating additional bureaucracy may distract teachers and leaders alike from the important tasks of teaching and improving instruction in favor of compliance with state and federal requirements. Benjamin Scafidi of the Friedman Foundation for Educational Choice estimates that if non-teaching staff had grown at same rate as student enrollment from 1992 to 2009, Wyoming could have increased average teacher salaries by \$18,462 with no overall impact on the cost of public education.⁸

⁸ Scafidi, B. (2013), *The school staffing surge*, infra, pg 8. Stated another way, had the administration/non-teaching staff moved at the same rate as student enrollment, Wyoming would save \$129,235,051 per year, pg 6.

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⁷ Borsuk, A. (2012) *Journal Interactive*, Education data needs to be used carefully

Thus, the lofty ideal that Wyoming should become a national leader in education is only the start of the discussion. It presupposes the educational system knows what is meant to be a

national leader, and that we have the proper tools for measuring progress. It also suggests that other states use sufficiently similar tools so that a valid comparison can be made. However, bowing to pressure to use a common or uniform assessment may minimize the values we intended to promote, as such values may not be included within broader assessments or may have only a minor role. For example, if the goal was to produce the best

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communicators within the nation, then using an assessment that ignores writing or does not value development of each student's lexicon could cause a disregard for the stated goal in favor of conforming to the adopted assessment.

We should consider the values around which Wyoming education must focus. One possible measure of educational success might be that Wyoming's students enter college or careers upon completion of high school. However, with students moving in and out of state, that metric is difficult to measure for students who have departed the public school system. Another view might be to measure a more universally accepted data point such as the labor unemployment rate for a specific subgroup of young adults within a community.

To form an opinion whether Wyoming is a national education leader, it may be necessary to adopt a widely applied and comparative assessment so that Wyoming's rank order can be compared with her sister states. Such an assessment should produce reliable information of how Wyoming compares relative to other states but only as to the factors being measured by that assessment. Will such an assessment embody the state's understanding of national leadership? In other words, will it measure what we, the people of Wyoming, hold to be important?

Yet another approach might be to defer to a nationally recognized general knowledge assessment such as the National Assessment of Educational Progress (NAEP) sample survey, but only for establishing that Wyoming is on pace or in front of its sister states, perhaps leaving to us the development of our own measurement tools to establish that our educational system remains aligned with Wyoming's values as reflected in our content and performance standards and our statewide goals.

The simple answer (and current track) seems to be to rely on a nationally developed assessment based upon the Common Core State Standards (CCSS). Inherent within this process is the expectation that Wyoming will then use a national assessment tool. The national tool will measure some academic values, but it is unclear whether it will reflect Wyoming's values. Likewise the standards will drive the curricula introduced into Wyoming classrooms and will drive the production of classroom textbooks to conform to the Common Core. While the CCSS were sponsored by a national affiliation of school officers, it will ultimately result in great uniformity among the states as to what is taught, when it is taught, how it is assessed, and the textbooks underlying all of this work. It is left to citizens and policy-makers to determine whether this *common* path is the appropriate path for Wyoming students.

Conclusion:

There is no perfect solution. Comparison with other states infers we will establish objectives

and goals that are identical or at least largely similar with all other states. That requirement alone risks directing Wyoming's system toward mediocrity. A valuable question might, then, be to ask why do we care about our national status? Is it a matter of pride? Perhaps the initial and better consideration is

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this: how do we best prepare our students, and only as an ancillary matter whether our solution to that question lends itself to measurement on a national scale.

We suggest that the state convene widely diverse groups of educational leaders, parents, and community leaders in various parts of the state to identify the values to be served by education and how those values can be articulated in a measurable goal. Policy makers can then decide on clear objectives that all agree facilitate the goal. Only then can the state begin tracking our progress toward accomplishing the goals and objectives that resonate with Wyoming's values.

⁹ Wyoming recently joined as a voting member the Smarter Balanced Assessment Consortium (SBAC) which seeks to develop a standardized assessment for wide use by many states. A similar effort is underway by PARCC (Partnership for Assessment of Readiness for College and Careers).

Goal 2: Ensure all students leave Wyoming schools career or college ready

Defining the Goal:

The Wyoming legislature has indicated that readiness should be evaluated based on the following criteria: (1) standardized college readiness and achievement tests, (2) Hathaway eligibility, (3) graduation or high school completion, and (4) ninth grade credit accumulation. W.S. 21-2-204(c)(iii) through (vi).

Current Measuring Tool:

Although the statute identifies four indicators of "readiness," it does not describe how these indicators should be used to determine whether the goal of college and career readiness has been met. Presumably an individual student's performance relative to each of these indicators would result in some determination that the student is career and college ready. Although not explicit, it would seem then that college and career ready simply becomes a function of these indicators (i.e. if a student does well on standardized tests, qualifies for a Hathaway scholarship, and graduates from high school then that student is "career or college ready.")

Discussion:

This section will look at each of these criteria and determine whether, when considered in isolation or jointly, they adequately demonstrate that the goal of student college and career readiness has been achieved.

College and career readiness when expressed by lay persons includes the broader concepts of becoming a functioning and contributing member of society. Parents and the broader communities expressed within the surveys a concern that our students mature into contributing and productive adults.

Traditionally it was thought that a child had attained such status when she or he completed

high school. If that were our standard, we have succeeded. According to the Economic Analysis division, Wyoming ranks first in the nation of 25 year old adults possessing a high school diploma or the equivalent. 10

However, what is now often observed is the high school graduate who, for reasons beyond the scope of this report, is not integrated into adulthood. The

The phrase "career and college ready" seems to have become the placeholder for acknowledging that high school graduation no longer signals that a child has transitioned into adulthood.

¹⁰ Wyoming Economic Analysis Division, Wyoming 2013, Just the Facts, http://eadiv.state.wy.us/Wy_facts/facts2013.pdf

phrase "career and college ready" seems to have become the placeholder for acknowledging that high school graduation no longer signals that a child has transitioned into adulthood. Again, we must first define a measurable goal in terms of the value to be served and then agree on the appropriate measurement if such measurement is to extend beyond those set forth in the Wyoming Accountability in Education Act.

One can surmise that when enrolling his or her child in school, each parent expects that the child will eventually graduate high school, find a job, and take his or her place as an adult in our society.

Most parents agree that each child possesses unique skills and abilities. Yet parents also want

the child to have challenging and appropriate content. They expect each student to master essential skills and receive basic educational knowledge. Yet they do not want, nor do they believe, students can be mass-produced like widgets on a production line. Moreover, most parents also recognize that while on the path to adulthood, students must also acquire character traits such as integrity, responsibility, honesty,

Most parents recognize that while on the path to adulthood, students must also acquire character traits such as integrity, responsibility, honesty, respect for proper authority, and charity.

respect for proper authority, and charity. ¹¹ So it should come as no surprise that measurement of this goal proves challenging.

The Path Toward Graduation and Enrollment Trend Predicament

In Figure 2 the progress of student populations from kindergarten through high school is tracked. For example, after accounting for the effects of migration, a kindergarten group in year one is expected to become the first grade group in year two. Of interest is the drop off between kindergarten and first grade, the growth in ninth grade, and the subsequent drop in enrollment through grades ten through twelve.

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¹¹ Four Essential Principles for Educational Success, Thomas A. Hinton (2004)

	Enrollment													
Date	KG	1	2	3	4	5	6	7	8	9	10	11	12	Total
2004	6,224	6,039	5,977	5,836	6,165	6,424	6,689	6,960	7,100	7,217	7,051	6,604	6,451	84,737
2005	6,263	6,206	5,981	6,040	5,851	6,218	6,489	6,787	6,905	7,219	7,063	6,475	6,272	83,769
2006	6,381	6,255	6,184	6,053	6,104	5,955	6,329	6,634	6,799	7,443	7,078	6,444	6,042	83,701
2007	6,576	6,422	6,346	6,373	6,188	6,271	6,132	6,535	6,676	7,168	7,396	6,395	6,147	84,625
2008	6,891	6,565	6,512	6,485	6,488	6,394	6,415	6,321	6,665	7,069	7,160	6,398	6,212	85,575
2009	7,215	6,770	6,678	6,659	6,604	6,694	6,547	6,522	6,433	6,978	6,993	6,333	6,093	86,519
2010	7,422	7,068	6,774	6,691	6,685	6,696	6,761	6,591	6,586	6,724	6,979	6,302	6,141	87,420
2011	7,611	7,124	7,061	6,799	6,689	6,708	6,759	6,766	6,632	6,777	6,645	6,386	6,208	88,165
2012	7,873	7,441	7,104	7,115	6,787	6,746	6,825	6,831	6,784	6,934	6,633	6,231	6,172	89,476
2013	8,131	7,628	7,394	7,116	7,127	6,790	6,811	6,879	6,874	7,122	6,738	6,337	6,046	90,993

Figure 2: Ten Year data, Wyoming public school enrollment by grade. Source: WDE Stat Series 2

These trends might be explained by parental movement of students into other educational environments including parochial schools, private schools, or home schools. Later we see a remarkable increase in students after eighth grade suggesting those students might be returning to public schools to attend high schools. Finally, it is noteworthy to watch class sizes decline through high school paying particular attention to tenth grade when, perhaps, driver's license privileges are obtained, work becomes a possible alternative to completing school, or a student simply loses interest in high school. It is also possible that some of these declines are attributed to students leaving school early for higher education. A more complete understanding of these data might help in funding, policy making, and facility planning. (See Appendix F for a more detailed look at enrollment).

A child can enter the adult world in any number of ways but perhaps the most common are: college graduation, full-time employment, enlistment into military service, or engagement in some form of public service. Again the fruit reveals itself usually after the completion of K-12 schooling so an effective interim measurement, perhaps coupled with appropriate policy—based incentives, should be developed.

A child can enter the adult world in any number of ways but perhaps the most common are: college graduation, full-time employment, enlistment into military service, or engagement in some form of public service.

If the goal of career and college readiness is indeed shorthand for "mature and responsible adulthood" and if the elementary and secondary schools must be measured, then it seems intuitively correct that the measurement must expand beyond reading, math and science.

In 2013, Dr. Robert Sternberg, University of Wyoming President, noted in a recent article his desire that the value of education at the University of Wyoming must add "to the whole person:"

Ethical leaders come from all kinds of backgrounds. Through work or chores as well as through school and extracurricular activities, students learn the importance of integrity, hard-work, self-reliance, responsibility, entrepreneurship, common sense and how to work with others for a common good.

ACTs and SATs measure important academic skills, but the scores do not measure these crucial characteristics of ethical leaders.

I would like to see us focus on the broad characteristics of active citizenship and ethical leadership. 12

Similarly, if primary and secondary schools of Wyoming should develop within students these broad characteristics, then that development can and should be measured. Only then will Wyoming be able to assure itself that its students are well along the path to "career and college readiness" or, as may be more appropriate, along the path to "active citizenship and ethical leadership."

Conclusion:

Thomas Hinton, parent and international speaker on educational issues, explains that the

educational system must address intrinsic human values of "freedom, self-determination, choice and respect." ¹³ As students become adults and if possessed of these values, then society should likewise respect choices made by the student. However, if not equipped with these values, students may well make less-than-optimal choices. Information should be gathered as students enter and exit the educational system to understand how and

Thomas Hinton, parent and international speaker on educational issues, explains that the educational system must address intrinsic human values of "freedom, self-determination, choice and respect."

why choices were made and whether the educational system has succeeded in preparing that child for career or college. Academic standards are part of the process, but other values must be inculcated within the system to properly equip students for adulthood. Focus groups from around the state should be consulted to examine how schools can and should function in growing students into "active citizenship and ethical leadership."

Sternberg, R. Wyoming Tribune Eagle, September 24, 2013, College Rankings Hold Little Merit

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¹³ Hinton, T. A. (2004) *The Heritage Foundation* Heritage Lectures No. 822, Four essential principles for educational Success

Goal 3: Recognize student growth and increase the rate of that growth for all students Defining the Goal:

The 2012 report entitled, *Wyoming Comprehensive Accountability Framework: Phase I*, outlined four approaches to measure academic growth: categorical, gain score, value-added, and normative.¹⁴ This report, now state law, then indicated "there is no single correct approach to growth or method that stands-out as the 'gold standard.' The decisions regarding which analytic approach should be adopted should first be considered in context to the purpose for measuring growth and the desired growth model characteristics." ¹⁵

Current Measuring Tool:

The state has not formally adopted any single one of the four analytic approaches outlined by report. The concepts of the normative approach were incorporated into Wyoming's version of the Colorado Growth Model. This model was used in the 2012 pilot of the Wyoming Accountability Model. This measured growth on only two vectors — reading and math — and only for students in grades four through eight. Effort is being made to extend growth calculations into secondary schools using college readiness tools (the ACT® suite).

Although requested, the 2013 calculations of growth have yet to be provided by WDE to OSPI and, therefore, have not been studied by OSPI or included within this report. Ideally, such information will be included within future school snapshots.

Discussion:

There are many ways to measure growth including social and psychological measures. Students need to progress along different axes of growth so that there are more components to growth than just scores in certain academic areas.

Measurement of a student's academic growth depends upon applying periodic assessment

tools in a consistent and valid manner. They must measure a fixed and known standard. They must reliably track progress over time. For the reasons stated above in the discussion of becoming a national leader, the measured goals should be held static over time to produce the most valuable information. Even then aberrations at the individual level should be

For the reasons stated above in the discussion of becoming a national leader, the measured goals should be held static over time to produce the most valuable information.

expected and accepted. Moreover, we must accept that not all student attributes can or

¹⁴ The Wyoming Comprehensive Accountability Framework: Phase I, Scott Marion, Chris Domaleski (January 31, 2012) which is incorporated into law by reference (*c.f.*, W.S. 21-2-204((e)).

¹⁵ Marion, supra at 33-34.

should be measured and that in focusing on the measured attributes we must not diminish the value of other desired outcomes.

When fully functioning and available, the accountability model should produce reliable estimates of student academic growth as a whole, and individual level, and the aggregate and individualized increasing rate of growth. Even then, data limitations will restrict the value of this information to the measured subjects and grades.

Conclusion:

If Wyoming is to value the student as a whole person, then effort must be made either to develop additional growth measurements or to not over-emphasize the existing growth measures to the exclusion of other valuable instruction and developmental assistance.

Goal 4: Recognize student achievement and minimize achievement gaps

Defining the Goal:

This goal statement encompasses two separate concepts: (1) recognizing student achievement, and (2) minimizing achievement gaps. The Wyoming Accountability in Education Act discusses student achievement in terms of performance in reading, mathematics, science, and writing and language. Minimizing achievement gaps is defined by the same statute in terms of equity "as defined by a measure of academic student growth for nonproficient students in reading and mathematics, subject to a standard for academic progress that is linked to attainment of proficiency within a reasonable period of time." ¹⁶

Current Measuring Tool:

Both achievement and equity are measured by performance on the statewide assessment for grades three through eight and grade eleven for math, reading, science, and writing. Only where measurements are available in consecutive years are growth calculations made; this includes grades four through eight for math and reading only.

Discussion:

After the people of Wyoming identify the values that matter to them, the schools must focus on creating goals and measures consistent with the values. These values may extend beyond

those measured by a standardized test. To guarantee personalized instruction with rigor and relevance, teachers need to build relationships and foster a sense of responsibility for the success of the whole child. While some measures should be standardized, most measures will need to be respectful of the uniqueness of each child. Currently, achievement is a status measure of academic skills; however, the

Currently, achievement is a status measure of academic skills; however, the status we desire for each child is to successfully live as a productive, contributing, and valued member of our society.

status we desire for each child is to successfully live as a productive, contributing, and valued member of our society.

Mentioned herein are the infirmities of standardized assessments with respect to scope (content and grades measured) and the risk of drawing firm conclusions about individuals. Nevertheless, assessments such as PAWS and NAEP do produce signposts pointing toward progress in academic achievement.

¹⁶ W.S. 21-2-204(c)(vii)

Conclusion:

The achievement measures should be aligned with the goals of becoming a national leader in education which, in turn, must be consistent with Wyoming values. State content and performance standards should be similarly aligned. As definition is added to what it means to become a national leader, then Wyoming will more confidently measure both achievement, growth and growth rates, and inequitable gaps among served populations. Care should be given that any intervention does not diminish the opportunities for continued advancement of the high achieving students. We submit the goal should be to move all students toward excellence, no matter how that target might ultimately be established. Equally important, however, is to instill within our students intrinsic Wyoming values. A high-achieving Wyoming student who becomes a notorious international criminal would only demonstrate the failure of measuring purely academic skills while ignoring Wyoming values.

Goal 5: Improve teacher, school and district leader quality

Defining the Goal:

A Wyoming statute requires that a system defining what is a quality teacher/leader is in place by July 1, 2015 for leaders and July 1, 2016 for teachers. W.S. 21-2-305(b)(xv)-(xvi)

Current Measuring Tool:

The above cited statute states both teacher and leader quality will be measured "based in part upon defined student academic performance measures as prescribed by law, upon longitudinal data systems and upon measures of professional practice according to standards prescribed by board rule and regulation."

Discussion:

Research confirms expert teaching has enduring and positive effects on student learning. Not so easily demonstrated is the relationship of poorly performing students to the quality of instruction offered by a teacher.

Research confirms expert teaching has enduring and positive effects on student learning.

In his study "Teachers Make a Difference, What is the Research Evidence?" (2003), Professor John Hattie, University of Auckland, examines characteristics of expert, experienced, and novice teachers. Not surprisingly he concludes that expert teachers have positive influences on student achievement, but he adds caution about how to determine expertise based upon student achievement. At page nine he states:

The impact of teachers on students' achievement is often considered the gold standard of expertise. While we consider that other dimensions of outcomes (self-efficacy, self-regulation, willingness to be challenged) are critical outcomes, the effects on achievement and learning are important. The problem is that we have not yet discovered dependable and credible ways to capture these achievement effects and attribute them to teacher effects.

The power of prior learning is one problem, and an obvious method would be to measure the gain between the end and beginning of the school year and attribute this gain to the teacher. This gain is often termed "valued added," and while a seductive claim we have yet to find a defensible way to assess value added of teachers — as the differences can be related to prior achievement of students, other influences such as the home, the resources available differentially to students even in the one class (e.g., out-of-class experiences), and the effects of other teachers (especially in intermediate and secondary

schools). The use of tests also elevates them to the level of curriculum goals, obscuring the distinction between learning and performing on tests.

While not questioning that tests can be important indicators of student learning, their use has too many problems to dependably, credibly, and fairly assess teacher effectiveness (at this time). An alternative is to evaluate the quality of learning, such as surface and deep learning.¹⁷

A study by Linda Darling-Hammond, *Teacher Quality and Student Achievement: A Review of State Policy Evidence* (1999), examines the ways in which teacher quality affects student achievement. The Darling-Hammond study first reviewed prior research and developed some noteworthy observations:

- 1. Teacher effectiveness is a strong determinant of differences in student learning.
- 2. Students who are assigned to several ineffective teachers in a row have significantly lower achievement.
- 3. There is little relationship between teachers' measured intelligence and student achievement.
- 4. Verbal ability of the teacher seems to improve student achievement.
- 5. Studies of teachers' scores on subject matter tests show no consistent relationship between scores and student achievement.
- 6. Knowledge of subject matter is significant but acquiring a master's degree has little effect on student achievement.
- 7. Teachers' knowledge in science has a greater effect on student achievement in higher level science courses.
- 8. Degrees in major areas (content specialists) versus education degrees show no appreciable gain in student achievement.
- 9. Teacher learning opportunities in reading accounts for improved student achievement. "The relationships between specific teaching practices and student achievement were often quite pronounced, and these practices were in turn related to teacher learning opportunities. NAEP analyses found that teachers who had more professional training were more likely to use teaching practices that are associated with higher reading achievement on the NAEP--use of trade books and literature, integration of reading and writing, frequent visits to the library--and were less likely to engage in extensive use of reading kits, basal readers, workbooks and multiple choice tests for assessing reading, practices that the NAEP analyses found to be associated with lower levels of student achievement."

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¹⁷ Hattie, J. (2003). *Teachers make a difference, what is research evidence.*

- 10. There is a relationship between teachers' effectiveness and their years of experience but it is curvilinear. Inexperienced teachers (those with fewer than 3 years of experience) are less effective than those with more years' experience--up to a point.
- 11. The average undergraduate program requires 30 hours of education credits, a major or minor in the field, and 12-15 weeks of student teaching.
- 12. Higher student achievement correlates to formal teacher preparation.

However, she noted with caution:

- 1. State reform strategies that do not include substantial efforts to improve the nature and quality of classroom work have shown little success in raising student achievement,
 - especially if the reforms rely primarily on student testing rather than improved teaching.
- 2. Higher standards for teacher preparation makes more difference than student demographic conditions such urban versus rural or poverty versus affluence.
- 3. Ambitious professional development also accounts for improved student performance more than other conditions. Teacher quality confirms a strong significant relationship even after controlling for student poverty and student language. The most consistent predictor of student achievement is well-qualified teachers.
- 4. "Since most of the states which ranked among the highest-scoring on the NAEP examinations are strong local control states that have traditionally not exerted much control over school decision-making, there are relatively few policy areas in which they have been active. Perhaps the relative lack of policy intervention is itself a support for
 - student learning, leaving educators free of regulations that might force greater attention to procedures than to learning."
- 5. There is an "almost inverse relationship between statewide testing policies and both teaching standards and student performance.... Tests alone do not transform learning."

Perhaps the relative lack of policy intervention is itself a support for student learning leaving educators free of regulations that might force greater attention to procedures than to learning

State reform strategies that do not

include substantial efforts to

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achievement

Darling-Hammond then concluded:

- 1. While student demographic characteristics are strongly related to student outcomes at the state level, they are less influential in predicting achievement levels than variables assessing the quality of the teaching force.
- 2. Teacher quality variables appear to be more strongly related to student achievement than class sizes, overall spending levels, teacher salaries
- 3. The percentage of teachers with full certification and a major in the field is a more powerful predictor of student achievement than teachers' education levels.
- 4. Substantial evidence from prior reform efforts indicates that changes in course taking, curriculum content, testing or textbooks make little difference if teachers do not know how to use these tools well and how to diagnose their students' learning needs.¹⁸

For the past several years, Wyoming and states around the country have been working on accountability bills that measure quality of teachers by student performance on standardized tests.

On the surface, student performance on standardized tests seems an objective method of

measuring educator effectiveness, but executing the state and federal mandate is fraught with complications, not the least of which is that no test has yet been designed to measure how well teachers teach. In addition, how can a score be assigned to the expert teacher whose content knowledge, classroom methodology and compassion produce a "whole person" rather than merely a proficient test taker?

Executing the state and federal mandate is fraught with complications, not the least of which is that no test has yet been designed to measure how well teachers teach.

Evaluating teachers according to researchers

Dr. W.J. Popham addressed a balanced method of measuring teacher effectiveness, and involving human judgment during classroom observations.¹⁹

The spotlight on public school was reflected in President Obama's 2009 Race to the Top program, a component of the American Recovery and Reinvestment Act, which provided over \$4 billion in educational grants. To receive ARRA funds, one requirement was to create a rigorous teacher evaluation system with evidence of student growth. In 2011, U.S. Secretary of Education Arne Duncan announced the concept of a waiver providing a way out for schools

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¹⁸ Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence.*

¹⁹ Popham, W.J. (2013). Evaluating america's teachers: mission impossible?

struggling to attain 100% proficiency by 2014 as specified by "No Child Left Behind." This waiver called for teacher evaluation systems. "Clearly," said Popham, "Uncle Sam was deftly employing both a carrot and a stick to get what he wanted" (p. 4).

But Popham waved a red flag. Getting teacher evaluations wrong can have the unintended negative consequence of worsening education. He warned that "determining a teacher's

quality is a fundamentally different game than determining a student's achievement level." Popham says that to evaluate teachers, neither an aptitude test nor an off-the-shelf achievement test will work because these assessments measure students'

Determining a teacher's quality is a fundamentally different game than determining a student's achievement level.

background knowledge, native intelligence, and socio-economic status—conditions a teacher cannot control, hence, for which a teacher cannot be responsible.

Instead, Popham urges that what is needed is an instructionally sensitive assessment aligned to standards. "Instructional sensitivity," he said, "is the degree to which students' performances on a test accurately reflects the quality of instruction." Wyoming's state test, PAWS, was instructionally supportive. Getting it right is very important, said Popham. The following table (Figure 3) shows the components of his teacher evaluation system with weighted components:

Evidence source	Evaluative weight (times 100 points)	Teacher quality (5 = high 1 = low	Contribution to overall score			
Classroom observations	20%	4	20 x 4/5 =- 16			
Administrator ratings	20%	3	20 x 3/5 = 12			
Student ratings	10%	5	10 x 5/5 = 10			
Student growth						
*State test	40%	4	40 x 4/5 = 32			
*Teacher-made tests	10%	4	10 x 4/5 = 8			
Overall Score		78 out of 100				

Figure 3: Sample teacher evaluation method using multiple measures, James Popham.

In lieu of relying only on an instructionally insensitive state administered test, Popham advocated that classroom assessments, created by groups of teachers, should be part of the teacher evaluation system. He asserted that the evidence from classroom assessments can be

²⁰ Dr. Popham opined that PAWS could be made instructionally sensitive.

used to evaluate teachers if the assessment is administered, scored and interpreted in a standardized manner. To strengthen classroom assessments for teacher evaluation, Popham said that to measure growth at least two administrations are required—a pretest and a posttest.

Classroom observations can inform teacher evaluations.

In his book, Popham discusses two teacher evaluation systems at length: Charlotte Danielson and Robert Marzano each have authored widely-used observation frameworks which, when focused, could be used as an observation guide. Overall, Danielson's model has 72 elements within 22 general components, subsumed under four general domains. The number of elements is daunting. However, a teacher's teaching ability is captured in Domain #3, with only 22 components upon which the teacher is rated: distinguished, proficient, basic or unsatisfactory (Danielson, 1996).

The Marzano model features 60 elements to Danielson's 72. Domain #1, Classroom Strategies and Behaviors, has 41 components that can serve as an observation guide. The teacher is rated on five levels of performance: high to low (Marzano, 2011).

As stated earlier, Popham believed that classroom observations, whether these observations follow the Danielson or the Marzano models, are powerful and should be a mainstay in teacher evaluation systems.

A school-wide reading assessment can support teacher evaluation.

An observation model alone will not suffice when evaluating a teacher's effectiveness. According to Popham, a common classroom assessment that measures student growth also should be a component of a teacher evaluation system. One example might be a common literacy assessment administered in all content classes much like the constructed response work of Dr. Roger Farr and embedded in PAWS.

Popham concluded: Teacher evaluation systems put more emphasis on student growth data. Yet teachers and leaders need to fully understand assessments and move cautiously to do more good than harm. This push from the federal government to make teachers accountable for student learning as part of teacher evaluation systems raises two critical needs: reliable classroom observations need to be part of the system; and, all secondary teachers, now responsible for reading in their content areas, need a common classroom reading assessment that, for optimal value, can be standardized school wide. The constructed response with clear teaching targets and rubrics, such as the Roger Farr essentials, could be that common assessment. If implemented, reading scores on tests will improve, but more importantly, our students will learn to read, discern, analyze and apply their reading to the work of their lives. Reading this way is fundamental to life-long learning, the ultimate goal of all teachers. ²¹

Contrary to the work of Hattie, Darling-Hammond, and Popham, the current legislative focus seems directed toward creating teacher and leader accountability based upon student achievement with little regard for the individuality of students and factors beyond the control of teachers and leaders. Throughout the process of hearings before the legislative select committee on accountability, a series of cautionary themes reverberated:

- 1. The assessment tools for student achievement do not measure quality of instruction.
- 2. Factors beyond the classroom, thus beyond the control of the teacher, seem to heavily impact student success.
- 3. Many of the subjects and grades are either not measured or not measured with precision, thus calling into question whether such data can effectively be used to measure the quality of any single teacher.

As stated by Dr. Scott Marion, consultant to the Select Committee on Accountability in Education, "Teacher evaluation needs to be done very well, or not at all. It is a very difficult task."

A Summary of John Hattie's Research

Research says:

If a student, regardless of his socio-economic background, has exemplary teaching five years in

a row, he scores 50% higher on achievement tests than his counterpart with so-so teaching.

John Hattie is an international researcher known for a synthesis of 500,000 studies related to expert teaching and student achievement. Hattie says, "When we talk about student performance, no other aspect of educational life matters as much as the talented, expert teacher." The five major dimensions of excellent teachers are:

If a student, regardless of his socioeconomic background, has exemplary teaching five years in a row, he scores 50% higher on achievement tests than his counterpart with so-so teaching.

1. Expert teachers can identify essential representations of their subject.

²¹ Popham, W.J. (2013). Evaluating American's teachers: mission possible? Thousand Oaks: Corwin. Popham, W. J., Pellegrino, J., Berliner, D. Tests helping teachers. American School Board Journal. March 2012.

Experts do not know more about their content; they know more about how to deliver the content. They organize the content for learning, they combine old knowledge with new knowledge, they make lessons uniquely their own. They are spontaneous, adapting to what is happening in the classroom to learning. "One of my criticisms," says Hattie, "of secondary schools is the degree to which it is powered by curriculum, assessment, time bells and other bureaucratic controls and not by responsiveness to students." Expert teachers are very context bound, meaning they think in terms of the specifics of their classroom of students. Experts take on a problem-solving stance, seeking information about student's individual needs and are They improvise. They are good decision-makers, flexible in adapting to the needs. understanding the sequence of lesson components, adjusting time depending upon the classroom. They balance content with the students themselves.

2. Expert teachers can guide learning through classroom interactions.

Experts give fine-tuned and frequent feedback to learners and welcome questioning, errors and engagement so students have a sense of efficacy. They manage the multidimensionality of the classroom by effectively scanning the classroom. They are dependent upon the context of each unique classroom, seeking information on the ability, experience and background of the students and, of lesser importance, the facility in which they will teach.

3. Expert teachers can monitor learning and provide feedback.

Experts anticipate and prevent disturbances and are responsive to students who lack understanding or motivation. They are automatic, meaning they know in their bones how to react, freeing working memory to deal with more complex characteristics of the situation.

4. Expert teachers attend to affective attributes.

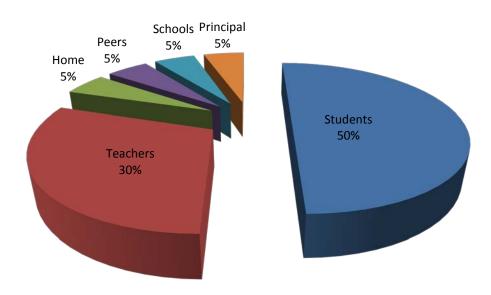
Experts have high respect for their students as people and demonstrate care and commitment to them. They are passionate about teaching and learning and show more emotion about their successes and failures.

5. Expert teachers influence student outcomes.

Experts want more than achievement; they want students to deeply understand and apply their knowledge. They expect students to do well with challenging tasks.

We must understand expert teaching: advance professional development, improve pre-service training at universities, and to defend teacher professionalism so faith is restored in the public school system. This faith is necessary to counteract the push to create "idiot-proof solutions where the proofing has been to restrain the idiots to tight scripts, tighter curricula specification, prescribed textbooks, bounded structures of classrooms, scripts of the teaching act and all this underpinned by a structure of accountability," says John Hattie. According to Hattie research, the major influences on student learning are:

Influence on Student Learning



"I suggest," Hattie says, "that we should focus on the greatest source of variance that can make

the difference--the teacher." Hattie claims that few teachers do damage, some maintain the status quo and many are excellent. "We need to identify, esteem and grow those experts," he says. To grow from experienced to expert, teachers need to see expertise modeled by other expert teachers.

Hattie explains why achievement tests cannot be the sole indicator of teacher excellence. "We have not yet discovered dependable and credible ways to capture these achievement effects and attribute

Hattie claims that few teachers do damage, some maintain the status quo and many are excellent. "We need to identify, esteem and grow those experts," he says. To grow from experienced to expert, teachers need to see expertise modeled by other expert teachers.

them to teacher effects.... The use of tests also elevates them to the level of curriculum goals, obscuring the distinction between learning and performing on tests."

To paraphrase Hattie, the great, unforgettable teachers make magic in their classrooms, year after year. How? They bring together content knowledge, effective methodologies, affection and attention to each student, and the unflappable belief in the

The great, unforgettable teachers make magic in their classrooms, year after year.

potential of every learner.

Conclusion:

As noted above by Darling-Hammond, success as measured by statewide NAEP scores seems almost inversely related to the involvement of the state policy makers in the educational process. Local control seems a more successful way to address teacher and leader quality concerns. Thus, as an alternative to tying student performance to evaluation of teacher quality, energy might be better spent twofold: (1) provide encouragement for local leaders to identify and either improve or remove inadequate teachers and (2) improve teacher preparation at the state's primary source of replacement teachers. Education accountability systems focused at school level should provide both district and school leadership with guidance as to the progress being made within each school, allowing those leaders to act as necessary. Pre-service preparation and overall improvement of the pool of teaching candidates present a greater challenge which is beyond the scope of this report but which is widely documented by researchers such as Darling-Hammond. The conundrum remains: while all seem to agree that teacher quality is critical to student achievement, few agree that student achievement, based upon the result of standardized test, is the best method of measuring teacher quality.

Goal 6: Maximize efficiency of Wyoming education

Defining the Goal:

As will be discussed below there is no clear definition of what is meant by "efficiency" in education.

Current Measuring Tool:

Without a clear definition, no measuring tool can be identified.

Discussion:

Efficiency can be described in many contexts. Economic efficiency would incorporate financial and time considerations. Educational efficiency might be thought of in the sense of how student/teacher contact is put to best use and whether students are progressing at an optimal rate of educational development. Management efficiency might consider whether the leadership/administration/instructor ratios are appropriate. Perhaps each of these topics was intended when the language of the statute was adopted. However, an oft-heard comment in legislative discussions concerns the level of student achievement when related to school funding.

In that context it might be of value to examine whether or not funding directly affects student learning and whether or not there comes a point of diminishing returns to increased funding. For example, with the injection of more funds into the educational model, have we experienced a shift from local problem-solving to "purchased" solutions and do such solutions (1) reflect the community's need and (2) have the local support required for successful implementation.

As another example, Wyoming has participated in the national shift in expenditures in growing school bureaucracies²² without corresponding improvement in student achievement. Such expenditures should be questioned as to whether the necessary resources are effectively filtering to the classroom and whether the increased bureaucracy otherwise impedes student learning.

Conclusion:

These are policy questions which should be further defined. Again, the broadly based examination of Wyoming attitudes and beliefs, (rather than consultants, special interest groups, and small committees holding special interests) seems the most effective manner to tackle such issues.

²² See, Scafidi, B. (2013) The School Staffing Surge, infra

As reflected by the district snapshots, high levels of funding, and high levels of unrestricted

reserves often inversely correlate with student achievement. Perhaps there are reasons to accumulate large reserves or to refrain from expending resources or perhaps the local electorate prefer large bank balances to student growth, but this anomalous condition should be further investigated.

High levels of funding, and high levels of unrestricted reserves often inversely correlate with student achievement.

Goal 7: Increase credibility and support for Wyoming public schools

Defining the Goal:

As will be discussed below there is no accepted definition of the terms "credibility" or "support" for Wyoming public schools.

Current Measuring Tool:

Without a clear definition, no measuring tool can be identified.

Discussion:

Perhaps the most important, but most difficult metric, is credibility and support of schools. OSPI, in conjunction with REL Central, developed a parent and community survey designed to measure support of Wyoming schools. The surveys invited select groups (parents, educators, and members of the community) to respond at will. Many of the responses were, however, remarkable if only to confirm widely-held beliefs. For example, most parents (88.5%) desire their children to attain an equal or higher level of education than that of the parent. Thus, parents rely on elementary and secondary schools to launch their children to higher levels.

When asked what defines a quality education, in open-ended responses, the top identifiable categories of parental responses were: (1) that students be prepared for higher education or a vocational career, (2) that education should be the foundation for the child's future success, and (3) that students should develop problem solving, critical thinking, and technological proficiency.

When asked what indicates a child has in fact received a quality education, by an overwhelming

margin, the top three responses were: that the student becomes a life-long learner, that the student receives interesting and challenging content, and that the student's unique talents are developed. Eighth on the list of eight options was that students earn high scores on standardized tests. Thus, lack of credibility in the educational system may center more on perceptions of student tests than on the substantive development of the student as a future member of society.

In an open-ended question of indicators of quality education, the most frequent responses were: (1)

When asked what indicates a child has in fact received a quality education, by an overwhelming margin, the top three responses were: that the student becomes a life-long learner, that the student receives interesting and challenging content, and that the student's unique talents are developed.

that the school is staffed with competent and qualified persons, (2) that students are prepared for higher education or vocational careers, and (3) that the school is a safe and respectful

environment. These were followed closely by several aspirational goals, such as development of social-emotional intelligence, self-motivation, eagerness to participate in school, and student focus on future success.

Parents seem to feel that parental involvement in schools was too little although most respondents felt their own involvement was appropriate.

Lastly, when asked what is not working in schools, the leading answer was "too much time spent on testing or focused on testing" with nearly twice as many responses as the next response category, "methods of instruction may not suit all students."

Much as in other polls of attitudes, most parents felt their child was obtaining a good education and that they were adequately involved in the education but that these conclusions were not applicable to other schools and students. Thus, the issue may be one of perception premised upon public statements made in the press and by public leaders that schools are failing or inadequate, except when it comes to the parent's first-hand knowledge of his or her child's educational experience.

Conclusion:

We suggest that the attitudes of parents should be more widely surveyed in the future to determine whether or not progress in the area of credibility and support for public education is increasing. It seems intuitive that parental and community support will follow if it is widely perceived that students are learning at an adequate rate and in a manner consistent with the values endorsed by the community.

V. Summary

Based upon observations, surveys, research and experience, the OSPI suggests some basic but essential work should be accomplished to identify, articulate, and implement our values.

Values:

When it comes to the education of our youth, what is it that the people of Wyoming value?

While it seems intuitive that we in Wyoming value academic achievement and growth, it is not so clear from existing law that the people of Wyoming also value character development. They may also value how the individual is incorporated into society and

When it comes to the education of our youth, what is it that the people of Wyoming value?

what this means to them. There is danger of removing critical thinking and creativity by overly emphasizing pure academic measures. Such discussions should occur and then should become the lodestar for development of policy. The OSPI observes from surveys, personal visits within communities, and from research, that many critical societal values seem to have been lost in the rush to reduce every student to a set of achievement scores.

Once values are clearly articulated, then our goals should be framed in a manner consistent with the values. At that point it will be possible to select the proper measurements of achievement of our goals.

Educational System:

The State should re-examine the role of each level of policy formation. Over the last half century we have seen an increasing effort to standardize and mechanize education. Our

Constitution provides "The Legislature shall provide for the establishment and maintenance of a complete and uniform system of public education, embracing free elementary schools of every needed kind and grade . . . "23 Where once this was thought of as

The State should re-examine the role of each level of policy formation.

primarily a funding provision, this language has become the touch point for increasing state involvement in what were once local issues producing local solutions. Funding has been equalized in a manner consistent with the Constitution and this task seems now to be the justification for additional management at the state level of local schools. management needs to be re-examined. Bureaucratic bloat, compliance with requirements that

²³ Wyoming Constitution Article 7, Section 1

are no longer meaningful, and solutions not supported by those required to implement the solutions, are examples of a remote manager attempting to create structural reform in piecemeal fashion. It would be wise for the structure to be reevaluated from top to bottom and back to top to learn what works, and what is truly consistent with the values cherished by the people of Wyoming.

Alignment:

The role of each level of education – from the classroom teacher to the legislature – should be

aligned toward common goals. As the state recognizes and articulates the values of the people which should be furthered in public education, a clear delineation of the roles of each component of the educational structure should be defined. This should enable decisions to be made effectively, efficiently

The role of each level of education from the classroom teacher to the legislature – should be aligned toward common goals.

and consistent with local understanding of goals and values. Too often the best solution for one school or district is entirely inappropriate for all other schools or districts. Provided that each level of policy is premised upon the stated values, the overall goals should remain achievable notwithstanding that the various schools and districts pursue differing paths toward the goals. We should trust local leadership to do that which is best for the local schools.

Funding:

Review the finance model and the distorted conduct it may have produced. School funding has been a controversial topic and with a stable funding system now in place we have observed that funding does not resolve every challenge. Indeed there is reason to suggest funding may

heretofore unknown create challenges. Reimbursement of transportation expenses may encourage more out-of-school activities. High administrative salaries provided by funding may encourage expert teachers to become administrators.

Review the finance model and the distorted conduct it may have produced.

Total reimbursement of Special Education programs may result in over-identification of students as needing special services. Programs inappropriate or ineffective are introduced because funding is available. Each tempting use of money brings with it some unintended consequence. The State of Wyoming now has captured data that should be analyzed to determine whether funding levels are proper, whether undesired conduct is being encouraged, and whether student learning has been adversely affected. High levels of resources have created high levels of expectations. Are these expectations properly related to funding? Such

matters need to be re-examined in light of clear values and goals, and policy makers need to grapple with these sensitive, yet important issues.

VI. **Conclusion**

In October of 2011, expert educators and school leaders from across the state gathered at the invitation of the Superintendent. From that meeting it was observed that these successful schools and districts shared many common traits. They remain valuable guidance and were summarized as follows:

Seven Commitments of High-Performing Schools

A number of educators, representing high-performing schools from across Wyoming, held conversations about how high-performing schools and districts achieve success. The group produced a document titled "Seven Commitments of High-Performing Schools" to contribute to the conversation about how to improve educational success in Wyoming. The participants represent decades of teaching and administrative experience within the education profession and recommend the following keys to effectiveness:

1. Effective Leaders

Build a balanced culture of learning for students with no excuses by setting time priorities and utilizing and protecting the learning day. Principals hold themselves accountable for student results.

A good leader builds a culture of learning with no excuses whereby leadership and ownership are balanced. He or she sets time priorities in the school day, utilizing the whole day for learning and protecting instructional time.

2. Collaboration

Foster a collaborative culture focused on student learning and teacher improvement. Schedule regular and systematic teacher team meetings that focus on student performance resulting directly in plans for intervention and enrichment. Arrange for these collaborative teams to study professional literature.

Teachers use the professional learning team model for professional reading, common assessments, mentoring new teachers and providing students remediation and enrichment.

3. Instruction

Direct the school to maintain a laser-like focus on teaching and learning. Hire great teachers and support them in their work with students. Stress in-depth knowledge of the theory, models and practices of reading, writing, and mathematics as well as deep understanding of content. Insist upon research-proven best practices that meet the individual needs of all learners. Principals evaluate teachers to include student results.

Everyone from the principal to the custodian focuses on teaching and learning. The principal hires great teachers, supports them and then stays out of their way. These leaders discourage rote teaching of commercial programs and provide professional development that encompasses in-depth knowledge development. Literacy, numeracy and critical thinking are encouraged across the content areas. Teacher evaluations take into account student results.

4. Culture of Expectation

Set high community and school expectations and grow a culture of relationships. All stakeholders are accountable for student excellence.

The school and community must acquire high expectation and grow a culture of relationship with one another. Local school boards should require reports on measures including state test results and formative assessments.

5. Data

Share the data with the whole staff. The data is personal and readily available to teachers, parents and students. All school staff knows each student and his or her data.

The whole staff shares student data which is made readily available. The school has a data notebook or some other means of collecting and referencing data on each student.

6. Assessment

Aim for 100% proficiency on state assessments. Authentic learning should be measured (e.g., running records, constructed responses, rubrics, and writing). Educate the public on assessments. Leave formative and interim assessments to local control.

The school holds all students accountable for whatever measures are used, such as the state test. The state should leave all other assessments up to local control.

7. Accountability

Focus on achievement. Hold all students and stakeholders accountable for student learning and achievement. Minimize duplicative reporting and paperwork. Grow statewide capacity by sharing exemplary practices with other leaders and teachers.

State-level mandates take performing schools off their focus. Accreditation should be tiered with minimal interference from accreditation or accountability mandates for those high performing schools and districts.

To summarize, as referenced throughout, this report should be viewed as a start to the discussion. A discussion that should incorporate voices from throughout Wyoming and, one hopes, a study that will coalesce around a common set of values leading us to a focused approach to improvement of Wyoming's educational system.

VII. Appendices

School and District Snapshots Appendix A: **OSPI Surveys and Analyses** Appendix B:

Observations: What Research Tells Us . . . Appendix C: Appendix D: Observations: What Experience Tells Us . . .

Appendix E: Shortfalls and Innovations

Enrollment Analysis Appendix F:

Financial Reports of the Districts Appendix G: