

2014

Challenges Faced by Maine School Districts in Providing High Quality Public Education

David L. Silvernail PhD

University of Southern Maine, Center for Education Policy, Applied Research and Evaluation

Sarah R. Linet

University of Southern Maine

Follow this and additional works at: https://digitalcommons.usm.maine.edu/cepare_state



Part of the [Educational Assessment, Evaluation, and Research Commons](#)

Recommended Citation

Silvernail, David L. PhD and Linet, Sarah R., "Challenges Faced by Maine School Districts in Providing High Quality Public Education" (2014). *State of Education*. 1.

https://digitalcommons.usm.maine.edu/cepare_state/1

This Study is brought to you for free and open access by the Center for Education Policy, Applied Research and Evaluation (CEPARE) at USM Digital Commons. It has been accepted for inclusion in State of Education by an authorized administrator of USM Digital Commons. For more information, please contact jessica.c.hovey@maine.edu.

RESEARCH BRIEF

Challenges Faced by Maine School Districts in Providing High Quality Public Education

David L. Silvernail

davids@usm.maine.edu

Sarah R. Linet

slinet@usm.maine.edu

The Maine Education Policy Research Institute

Center for Education Policy, Applied Research and Evaluation

University of Southern Maine

March 2014

Table of Contents

Executive Summary	i
Introduction	1
Methodology	2
Review of Literature.....	2
Development of the Challenges Survey.....	5
School District Challenges Survey Distribution.....	7
Results	7
Analysis of School District Challenges by Type of Community.....	8
Analysis of School District Challenges by District Size.....	12
Progress in Addressing Challenges Analysis by Type of Community.....	14
Progress in Addressing Challenges Analysis by District Size.....	16
Summary	17
References	19
Appendices	20
Appendix A: Copy of School Districts Challenges Survey.....	21
Appendix B: Copy of Survey Results.....	26

Executive Summary

Challenges Faced by Maine School Districts in Providing High Quality Public Education

The goal of this study was to: (1) identify challenges faced by Maine school districts in providing high quality public education; (2) describe the magnitude of the challenges; and (3) identify areas where school districts were experiencing some success in meeting these challenges. The School Districts Challenge Survey was distributed online to all Maine's public school district superintendents. Survey responses were collected from 68 superintendents representing leadership of both rural and non-rural school districts and districts of varying size.

The top three challenges identified by superintendents for both rural and non-rural school districts were: (1) The level of state funding of the local school district; (2) The high level of poverty among the students in the local school district; and (3) The ability of the local school district to compete for external grants and funds. Other high ranking challenges dealt with personnel topics such as the availability of special education personnel, being able to offer competitive salaries and benefits, and recruiting and retaining high quality building administrators.

When asked about progress superintendents were making in addressing challenges, many superintendents indicated they were in the process of developing plans to address selected challenges, but few reported they were making some, if any, progress in addressing the challenges they face. It was concluded that many of the challenges are related to fiscal issues and require state policy makers and local school districts to work together, both in addressing resource levels as well as using these resources in the most efficient and effective ways.

Challenges Faced by Maine School Districts in Providing High Quality Public Education

David L. Silvernail

Sarah R. Linet

Introduction

This **Research Brief** reports the findings from the study of the major challenges facing Maine school districts. More specifically, the study was designed to: (1) identify challenges; (2) describe the magnitude of the challenges; and (3) identify areas where school districts were experiencing some success in meeting the challenges.

Today as never before, American PK-12 public education faces many critical issues as it strives to prepare its graduates for college, careers, and citizenship in a global society. Keen global competition underscores the need for exceptional performance in our primary and secondary schools. Yet, state and federal governments face unprecedented budget deficits and limited resources for the foreseeable future.

Additionally, our schools are being called upon to do an even better job of preparing students for the 21st century. There is growing evidence that success in the 21st Century requires more than what has traditionally been the content of schooling. It requires more and different types of knowledge, skills, and learning.

In light of these critical issues, it is important for Maine policy makers to have an opportunity to learn more about the specific challenges Maine school districts face as they attempt to address these issues and provide all Maine's children with a high quality education. Accordingly, at the request of the Joint Standing Committee on Education and Cultural Affairs of the Maine Legislature, the Maine Education Policy Research Institute (MEPRI) has conducted a study of the major challenges Maine school districts face in meeting 21st Century education needs. MEPRI is a non-partisan policy research institute jointly funded by the Legislature and the University of Maine System (UMS), charged by law to conduct targeted research studies for Maine policy makers.

The original request from the Joint Standing Committee on Education and Cultural Affairs was to identify challenges faced by rural school districts in Maine. However, the

original request was expanded to examining challenges facing **all** Maine school districts. It was concluded that it was important to understand the challenges rural school districts may be facing in the context of challenges faced by other types of school districts in Maine and to be able to assess if the types of challenges and/or the magnitude of the challenges are different for school districts in both rural and non-rural communities.

Methodology

The methodology used in this study consisted of the administration and analysis of an online survey distributed to **all** Maine's public school district superintendents. Several steps were undertaken in designing and administering the online survey. The first step entailed a review of the national literature on rural school challenges.

Review of Literature

A review of contemporary literature on rural education revealed several areas that rural schools and districts find challenging. The research literature highlights many real benefits of rural education, in addition to detailing some obstacles. The original focus of this study was to identify challenges that rural districts and superintendents in Maine are experiencing and the degree to which they are addressing those issues. With that in mind, the specific focus of the literature review was to identify the challenges of rural education that appeared to be most frequent, most pressing, and most impactful in Maine. Many of these challenges are interrelated and compound the effects of one another; finding ways to address them is the charge of rural schools and districts. Some of these challenges are simply part and parcel of running schools and school districts in rural areas.

One such problem identified repeatedly in the literature is recruiting and retaining highly qualified teachers. Recruiting and retaining teachers can be difficult for rural schools and districts because of the location of the schools themselves – some rural areas can be limiting, with fewer cultural opportunities and social amenities (Mathis, 2003, p. 5), and that can make them less desirable areas for highly qualified teachers to live and work. Other research points to compensation as a reason that rural schools can be difficult to staff, as Monk (2007) points out: “compensation tends to be low in both rural and small school settings,” (p. 161) in part because rural areas tend to have a lower tax capacity (Mathis,

2003, p. 5). Teachers do not exist in isolation, and recruiting and retaining highly qualified teachers is not one dimensional; “[s]everal organizational features of rural schools directly affect teacher recruitment and retention. Among the most important are demographic characteristics of the teachers, teachers’ workloads and teachers’ salaries” (Monk, 2007, p. 158). Teachers’ workloads can be so significant in small and rural schools because teachers in those environments often need to wear many hats.

This is true of administrators as well, and much of the literature on rural education points out that recruiting administrators may also be difficult. “Rural administrators have to assume more responsibilities in small districts because there are fewer administrators in the district. They also receive less compensation and have greater visibility in their communities” (Arnold, 2005, p.18). Arnold (2005) describes rural administrators who need to be instructional leaders, athletic directors, bus drivers and more in schools that simply do not have the capacity to hire different people to fill all of those roles (p. 18). The increased visibility of administrators in rural schools means, in many ways, increased accountability for many aspects of schools that administrators simply do not have control over.

Providing students with comprehensive course offerings can also be a challenge for rural schools and districts. Once again highlighting the interconnected nature of the issues facing rural schools, content-area coursework deficits in teachers bleeds over into the rigor and diversity of course offerings for students (Monk, 2007, p. 159). School size also impacts the ability of teachers and schools to offer varied course options, and “smaller numbers of students limit the ability of teachers to specialize and may require them to deal with wider ranges of pupil needs” (Monk, 2007, p. 160). Research has also found that “rural schools typically offer fewer advanced and college preparatory courses, and lower proportions of rural students take advanced classes such as physics and calculus” (Arnold, 2005, p. 17). This may be in part due to the challenge of finding highly qualified teachers, particularly in “high-need areas such as mathematics, science, and special education” (Irvin, 2011, p. 1227). Providing special education services (and, more generally, services for students with special needs) was also seen as challenge for rural schools and districts.

School finance, transportation costs, and facility upkeep were seen as areas of real

concern for rural districts. Once again, these fiscal demands have the potential to impact the quality of academic programs and the salaries of teachers. As Monk (2007) states, “such rural attributes as sparse settlement or geographic isolation can also raise transportation costs and draw resources away from the core instructional program in general, and teacher salaries in particular” (p. 163). High transportation costs are virtually inherent in rural education, but can present a real challenge for districts, and their effects are felt in classrooms. The research reviewed indicates that transportation cost and facility maintenance are particularly burdensome for small rural schools (Monk, 2007; Mathis, 2003), which typically have limited local tax bases, sparse settlement, and frequently deteriorating facilities.

One overarching theme throughout the literature was rural poverty and its role in all of the other problems that researchers identified. Poverty plays into almost every rural education challenge described in the literature, from attracting and retaining teachers and administrators to transportation costs and maintaining facilities. Another factor was the link between poverty and student aspirations. “When communities are more geographically isolated, rural youth tend to have lower educational aspirations because postsecondary schooling is not needed for local job opportunities in most rural industries” (Irvin, 2011, p. 1227). Irvin (2011) also states that “poverty is more prevalent in rural areas, and it is long lasting, intergenerational, and disproportionately focused on non-white ethnic minorities and more remote areas” (p. 1225). That reality feeds into community norms and family expectations. “For many rural youth, pursuing postsecondary educational opportunities also involves moving away from their home communities. Prior research suggests that rural youth may lower their aspirations to maintain their connections to family and community” (Irvin, 2011, p. 1227). Examining community, student, and parent aspirations appeared critical to gaining a complete picture of the landscape where rural schools and districts exist, and in order to gain a complete perspective on the challenges they face.

Particularly in rural areas, community may have a substantial influence on student aspirations, as well as on school and district performance. As Mathis (2003) put it, “for rural areas, community is a core value” (p. 3), which is both an asset and also a potential

difficulty for schools and districts. Arnold (2005) pointed out that “rural community aspirations and expectations can influence the success of school improvement efforts, perhaps even negatively, if communities continue to adhere to the economic development model of bringing in low-skill, low-wage jobs” (p. 20). Community support is crucial, particularly in rural areas, in order for school improvements to truly take hold.

In summary, the literature review identified many challenges faced by rural schools and districts. However, it appears that many of these challenges are not unique to rural settings. Some may be more pressing than others for some types of school districts, but the literature suggests all types of school districts are facing many of these challenges.

Which of these challenges are most pressing for Maine school districts? Do the challenges differ significantly by the type or size of the school districts? Are school districts experiencing success in addressing these challenges? The goal of this study was to answer these questions by compiling evidence from all Maine school districts.

Development of the Challenges Survey

Based on the evidence from the review of relevant literature, the second methodological step taken in this study entailed constructing an online survey to collect evidence from Maine school superintendents about the challenges they are facing in leading their school districts. One strategy used in this construction phase was to enlist the assistance and advice of a group of experienced Maine school and district leaders. The group selected to assist in drafting the challenges survey was a cohort of doctoral students presently enrolled in a PhD program in educational leadership and public policy at the University of Southern Maine. A majority of the doctoral students currently hold leadership position in Maine’s school districts and they represent rural and non-rural school districts of varying sizes. In light of the existing literature, these leaders were asked to draft sets of survey questions that might be used on the school districts challenges survey.

The initial set of draft survey items was reviewed, refined, condensed and placed into a survey format. A second set of questions was also added to the draft survey at this time. Both the literature on rural challenges and conversation with the leaders group suggested that school districts may be experiencing the challenges differently and having

differing degrees of success in addressing them. Thus, a second set of questions was added to the draft survey that were designed to provide an assessment of the progress school districts were making in addressing the different challenges.

Next, the draft survey was distributed to a small sample of practicing Maine school superintendents. The superintendents were asked to review the list of survey items and to suggest any changes. Several additional challenges were identified through this phase of the survey construction and these were added to the survey. The revised survey was once again distributed to the small sample superintendents for their final review and suggestions.

The final version of School Districts Challenge Survey (SDCS) consisted of a list of 25 possible challenges. The survey asked respondents to assess the challenges along two continuums. First, superintendents were asked to indicate the degree to which their school districts were experiencing each challenges using the following response continuum:

1. *Not a challenge; does not impact the operation of your school district.*
2. *Minor challenge; periodically may have some impact on the operation of your school district.*
3. *Moderate challenge; consistently has some impact on the operation of your school district.*
4. *Major challenge; consistently has a substantial impact on the operation of your school district.*

Second, superintendents were asked to indicate the extent to which they are addressing each challenge according to the following continuum:

Assess the status of addressing those challenges according to this scale:

1. *Our district is not presently addressing this challenge.*
2. *Our district is in the process of developing a plan to address this challenge.*
3. *Our district has a plan in place to address this challenge and we are making some progress.*
4. *Our district has a plan in place and is making significant progress in addressing this challenge.*

In addition to these closed-end survey items, superintendents were given

opportunities to identify additional challenges they may be facing through responding to open-ended survey items. Final sections of the survey asked a series of demographic questions about the types and sizes of school districts. A copy of the final survey used in this study appears in Appendix A.

School Districts Challenges Survey Distribution

The School Districts Challenges Survey (SDCS) was distributed electronically to all Maine public school district superintendents. An e-mail describing the purpose of the survey study was sent to 129 superintendents, representing 131 school districts (2 superintendents lead more than one school district). Approximately two weeks after the initial mailing, a second email was sent to all superintendents asking again for their participation in the survey study. In addition, the leadership of the state superintendents’ association, the Maine School Management Association (MSMA), asked its members to complete the challenges survey.

Results

By the end of the survey administration period, 68 superintendents had completed the online survey. This number represents a return rate of 53%, a percentage representing a considerably higher return rate than secured in other surveys distributed by MEPRI to superintendents in recent years. This fact alone suggests that the issue of the challenges facing school districts in Maine is a major concern to school superintendents and that it was important for the superintendents to have an opportunity to identify these challenges for policy makers.

The completed surveys represent a wide spectrum of Maine’s public school districts. Table 1 reports the distribution of completed surveys by type of school district community.

Table 1: Distribution By Type of School

Type of School District	Number of Respondents
Urban	4
Suburban	6
Town	15
Rural	40
Total	65

Superintendents were asked to self-identify the type of community where their school

districts were located, and approximately 62% indicated they were located in rural settings. An additional 23% were located in towns with the remaining percent representing urban or suburban communities (15%). A small number of superintendents did not indicate the community type. For purposes of the subsequent data analysis, survey responses were clustered into two school district groupings: (1) rural; and (2) non-rural (combining town, urban and suburban communities).

The completed responses also represented a wide range of school district sizes in terms of resident pupil populations. Table 2 reports the ranges and number of survey

Table 2: Returns By District Size

District Size	Number of Respondents
0-599 Students	19
600-1199 Students	12
1200-2499 Students	24
2500+ Students	10
Total	65

returns for different district sizes. The data indicates that approximately 37% of the districts had pupil populations between 1200-2500, with an additional 20% having 200-600 pupils. Approximately 15% of the respondents were from school districts larger than 2500 pupils. Again, a small number of the superintendents did not report their district size. For purposes of the data analysis, survey responses were grouped into district sizes of: (1) less than 600 pupils; (2) 600-1199 pupils; (3) 1200-2499 pupils; and (4) 2500 or more pupils.

Analysis of School District Challenges by Type of Community

Turning to the analysis of responses, a copy of all the aggregated survey response appears in Appendix B. Table 3 on the next page lists the top 10 challenges reported by all the respondents, and the lists broken down by rural and non-rural school districts. It also displays the reported magnitude of these challenges for each grouping. The scores for the magnitude of challenge could range from 1-4, with higher scores indicating greater

Table 3: Top Ten Challenges Identified by School Superintendents

Challenges	All Superintendents n=67	Rural District Superintendents n=39	Non-rural District Superintendents n=25
1. Level of state funding of school district.	1 (3.68)	1 (3.74)	1 (3.60)
2. High level of poverty among the students in your district.	2 (3.17)	2 (3.31)	2 (2.96)
3. Ability to compete for external grants and funding.	3 (3.15)	3 (3.26)	3 (2.92)
4. Technology costs.	4 (2.92)	4 (3.05)	9 (2.72)
5. Capacity to provide comprehensive education program for all students.	5 (2.90)	6 (2.97)	7 (2.76)
6. Capacity to provide sufficient professional development.	6 (2.85)	7 (2.90)	4 (2.84)
7. Availability of sufficient special education personnel.	7 (2.79)	10 (2.82)	8 (2.75)
8. Student aspirations.	8 (2.77)	9 (2.85)	10 (2.68)
9. Competitive salaries and benefits.	9 (2.77)	5 (3.03)	-
10. Recruiting and retaining high quality building administrators.	10 (2.75)	-	5 (2.80)
➤ Transportation costs.	-	8 (2.90)	-
➤ Staff capacity to understand and use data.	-	-	6 (2.76)

Key: 1= Not a challenge; 2=Minor challenge; 3=Moderate Challenge; 4=Major challenge

challenges. Table 3 also lists two additional challenges, challenges that were not in the top 10 when all response were aggregated but ones that surfaced in the top ten lists when the responses were broken down by rural and non-rural school districts.

Several observations may be gleaned from the data in Table 3. First, the top three challenges are the same for both rural and non-rural school districts. These are:

1. The level of state funding of the local school district.
2. The high level of poverty among the students in the local school district.
3. The ability of the local school district to compete for external grants and funds.

These three challenges are major ones for all the school districts as evidenced by the high magnitude scores (i.e., 3.74-2.92) they received from superintendents. Superintendents report these three consistently have a substantial impact on the operation of their school districts. Additionally, these three are of the greatest challenge for rural school districts; that is, they had the highest magnitude scores (3.74-3.26).

Three of the other top 10 challenges for both rural and non-rural school districts deal with personnel topics. These are:

1. The availability of special education personnel.
2. Being able to offer competitive salaries and benefits.
3. Recruiting and retaining high quality building administrators.

Relatively speaking, being able to provide competitive salaries and benefits is particularly challenging for rural school districts (i.e., ranks 5th highest), while recruiting and retaining high quality building personnel is reported to be particularly challenging for non-rural school districts (i.e., ranks 5th highest).

In addition to the top three challenges, two other challenges in the top 10 share similar rankings for both rural and non-rural school districts. These are:

1. The capacity to provide a comprehensive education program for all students.
2. Student aspirations.

By the rating scale these both would be considered Moderate challenges for both rural and non-rural school districts.

Two challenges that were identified by one of the sub-groups did not appear on the aggregate top 10 list. In the case of rural school districts, transportation costs ranked 8th, while in the case of non-rural school districts the capacity of staff to understand and use data ranked 6th. It might be expected that transportation costs is a greater challenge in rural less populated areas, but it is not clear from the survey data why understanding and using data ranked 6th among non-rural school districts and 13th among rural school districts. In reality there may be little difference in this area because although the rankings are quite different, the magnitude of the challenge is relatively equal for the two groups of

school districts. Understanding and using data may be considered a Moderate challenge for both types of school districts (e.g., rural=2.67 and non-rural=2.76).

Table 4 lists the bottom 5 challenges as reported by the superintendents. All five challenges are the same for both rural and non-rural school districts, although the rankings are somewhat different. All five of the challenges are reported to be Minor, meaning according to the response scale that they may periodically have some impact on the operation of school districts. The governance structure of school districts and working cooperatively with school committees appear to be very minor for rural school districts, relatively speaking.

Table 4: Bottom Five Challenges Identified by School Superintendents

Challenges	All Superintendents	Rural district Superintendents	Non-rural District Superintendents
21. Collaboration across school districts.	21 (2.03)	21 (2.10)	24 (1.92)
22. Adequate central office support.	22 (2.03)	22 (2.05)	23 (1.96)
23. Staff absenteeism.	23 (2.03)	23 (1.95)	21 (2.20)
24. Governance structure of school district.	24 (1.91)	24 (1.74)	22 (2.08)
25. Working effectively with school board/committee.	25 (1.61)	25 (1.54)	25 (1.72)

Superintendents were asked at the end of the survey to identify any additional challenges their districts face that were not listed in the survey. They were then asked to share any other comments they might have. Forty superintendents described additional challenges and nineteen superintendents added comments. The three challenge topics that appeared most frequently over the two open-response questions were: (1) proficiency-based diploma implementation; (2) teacher and administrator evaluation; and (3) comments around funding and budgets. Of all the total fifty-nine responses, eleven superintendents mentioned the implementation of proficiency-based graduation requirements and the new educator effectiveness evaluation. Ten superintendents who mentioned the proficiency-based graduation requirements described it as a real challenge and one praised the initiative. Six superintendents expressed concern about both

implementing a proficiency-based diploma system and the new educator effectiveness measures, listing challenges like, “lack of technical support from the MDOE regarding proficiency based diplomas and educator effectiveness is preventing us from knowledgeably building capacity with either of these initiatives.” Multiple superintendents expressed limited support at the state level for implementing these new initiatives and expressed frustration with the number of new programs they must implement in their local school district.

Seventeen of the fifty-nine superintendents who provided responses to open-ended survey items raised an issue related to school funding at either (or both) the state and local level. One superintendent noted that a major challenge was the budget, “with an already bare-bones budget and a community that wants a 0% increase in taxes we have no where to go but to cut programs. That would negatively impact our students unless the state steps up and provides more funding.” Many of the superintendents who mentioned budget issues as a major challenge highlighted the perceived burden falling on the local tax base. Some of those superintendents mentioned those issues within the context of strained regional partnerships with uneven tax bases spread among multiple towns. Without going into much detail, many superintendents commented on what they feel are numerous unfunded mandates at the state level.

Analysis of School District Challenges by District Size

Turning to the analysis of the response by school district size, Table 5 on the next page reports challenge rankings and magnitude scores for the survey respondents broken down by four different school district sizes. The top 10 challenges for all school districts are repeated in this table followed by the rankings of these 10 challenges for the different school sizes. The blank (-) cells in the table indicate a particular challenge did not rank among the top 10 challenges for school districts of a particular size. These different challenges for different size school districts are reported in the next table. As may be seen in Table 5, many challenges are shared by all size school districts. However, the rankings of the challenges vary more than in the analysis of response in terms of the rural and non-rural groupings. In fact, if one focuses just on the top 5 challenges, the lists vary considerably by school district size. For example, while technology costs ranks in the top

Table 5: Top Ten Challenges By School District Size

Challenges	All Districts n=67	0-599 Students n=19	600-1199 Students n=12	1200-2499 Students n=24	2500+ Students n=9
1. Level of state funding of school district.	1 (3.68)	1 (3.56)	1 (3.83)	1 (3.71)	1 (3.67)
2. High level of poverty among the students in your district.	2 (3.17)	2 (3.47)	4 (3.00)	3 (3.00)	2 (3.22)
3. Ability to compete for external grants and funding.	3 (3.15)	4 (3.05)	3 (3.08)	2 (3.29)	8 (2.89)
4. Technology costs.	4 (2.92)	3 (3.16)	-	5 (2.83)	4 (3.11)
5. Capacity to provide comprehensive education program for all students.	5 (2.90)	5 (3.05)	10 (2.67)	6 (2.79)	6 (3.11)
6. Capacity to provide sufficient professional development.	6 (2.85)	7 (3.00)	9 (2.67)	7 (2.79)	5 (3.11)
7. Availability of sufficient special education personnel.	7 (2.79)	8 (2.79)	-	4 (2.91)	-
8. Student aspiration.	8 (2.77)	9 (2.79)	5 (2.92)	-	7 (3.00)
9. Competitive salaries and benefits.	9 (2.77)	10 (2.79)	2 (3.25)	-	9 (2.89)
10. Recruiting and retaining high quality building administrators.	10 (2.75)	-	7 (2.75)	9 (2.75)	-

Key: 1=Not a challenge; 2=Minor challenge; 3=Moderate challenge; 4=Major challenge

five for most districts regardless of size, it ranks 11th and as a Moderate challenge for school districts of 600-1199 pupils. On-the-other-hand, being able to provide competitive salaries and benefits ranks 2nd for the 600-1199 size districts, but considerably lower, relatively speaking, for other school district sizes.

Another way of uncovering the differences in challenges facing some school districts of different sizes is to look at the challenges that made the top 10 list of one or more of the different size school districts, but did not rank in the top 10 for all the districts in the aggregate. These challenges are reported in Table 6 on the next page. As may be seen from the table each size school district has at least one unique challenge in the top 10 that other districts do not have in their list of top 10. These are as follows:

1. 0-599 pupils=Access to cultural enrichment opportunities.
2. 600-1199 pupils=Transportation costs and Student mobility.
3. 1200-2499 pupils=Transportation costs.
4. 2500+ pupils=Access to high quality early childhood programs.

Table 6: Additional Top Ten Challenges for Different Size School Districts

Challenges	All Districts n=67	0-599 Students n=19	600-1199 Students n=12	1200-2499 Students n=24	2500+ Students n=9
11. Access to cultural enrichment opportunities.	-	6 (3.05)	-	-	-
12. Transportation costs.	-	-	6 (2.75)	8 (2.75)	10 (2.78)
13. Student mobility.	-	-	8 (2.65)	-	-
14. Staff capacity to understand and use data.	-	-	-	10 (2.71)	-
15. Access to high quality early childhood programs for future students.	-	-	-	-	3 (3.22)

Transportation costs and student mobility are reported to be Minor challenges (i.e., 2.65-2.75 scores), but access to cultural enrichment opportunities is considered a Moderate challenge for smaller size school districts. Cultural enrichment may be understandable in the case of smaller school districts that would typically be in more remote rural areas, but the reason why access to high quality early childhood programs is reported as a moderate challenge for the largest size school districts is not discernable from the survey data. If it is a Moderate challenge for larger school districts one might expect this also to be a moderate challenge for smaller school districts.

In summary, many of the challenges school districts face as they strive to provide all pupils a high quality education are shared by both rural and non-rural school districts. State funding of local school districts and poverty levels in the school districts are constant challenges faced by all school districts. Personnel issues are also shared by most school districts.

Progress in Addressing Challenges Analysis by Type of Community

Turning to the second major focus of the survey, superintendents were asked to indicate the degree to which they are currently able to address challenges they are encountering in their leadership of school districts. Superintendents were given the same list of potential challenges and asked to indicate to what extent they had a plan in place to address each challenge and what, if any progress they were having in addressing the

challenge. Table 7 reports the same list of top challenges as listed in Table 3, and provides the scores representing the degree to which they were addressing the challenges. The table also provides a breakdown by rural and non-rural school districts. As described above, scores could range from 1-4 with 1= not being addressed by the school district to 4=the district has a plan in place and is making significant progress in addressing the challenge.

Table 7: Progress in Addressing Challenges by Type of School District

Challenges	All Superintendents n=63	Rural District Superintendents (n=39)	Non-rural District Superintendents (n=24)
1. Level of state funding of school district.	1.52	1.49	1.58
2. High level of poverty among the students in your district.	1.94	1.9	2.00
3. Ability to compete for external grants and funding.	1.54	1.41	1.75
4. Technology costs.	2.32	2.23	2.46
5. Capacity to provide comprehensive education program for all students.	2.59	2.59	2.58
6. Capacity to provide sufficient professional development.	2.68	2.64	2.75
7. Availability of sufficient special education personnel.	1.71	1.74	1.67
8. Student aspirations.	2.55	2.63	2.42
9. Competitive salaries and benefits.	2.08	2.16	1.96
10. Recruiting and retaining high quality building administrators.	1.89	1.79	2.04
11. Transportation costs.	2.15	2.16	2.13
12. Staff capacity to understand and use data.	2.65	2.74	2.5

Key: 1=Not presently addressing; 2=In process of developing plan to address; 3=Have plan in place, making some progress in addressing; 4=Have plan, making significant progress in addressing.

A review of the data in Table 7 reveals that on average school districts are making little progress in addressing the challenges they face. No average score is above 3.00, a score that would indicate the school districts were making some progress in addressing the challenge. In many cases, school districts are reporting they are still in what might be considered the planning stages (e.g., averages scores from 2.50-2.75). And in many other cases, school districts are indicating that they do not at present plan to be able to address

the challenge. For the top 2 challenges this may be somewhat understandable. It could be argued that school districts can have very little direct impact on the poverty levels in their school districts, and at best a somewhat diffused impact on state funding to local communities. Other challenges are closely related to these two top challenges which may help explain why more school districts do not have plans in place to begin to address these challenges.

Progress in Addressing Challenges Analysis by District Size

School districts success in addressing challenges was also analyzed by different school district sizes. This data appears in Table 8. Similar to what was found in the analysis

Table 8: Progress in Addressing Challenges by School District Size

Challenges	All Districts	0-599 Students	600-1199 Students	1200-2499 Students	2500+ Students
1. Level of state funding of school district.	2.68	1.26	1.83	1.52	1.67
2. High level of poverty among the students in your district.	1.94	1.84	2.08	1.77	2.33
3. Ability to compete for external grants and funding.	1.54	1.42	1.92	1.30	1.89
4. Technology costs.	2.32	1.74	2.5	2.61	2.56
5. Capacity to provide comprehensive education program for all students.	2.59	2.42	2.75	2.57	2.78
6. Capacity to provide sufficient professional development.	2.68	2.37	2.50	2.91	3.00
7. Availability of sufficient special education personnel	1.71	1.47	2.17	1.70	1.67
8. Student aspirations.	2.55	2.37	2.83	2.59	2.44
9. Competitive salaries and benefits.	2.08	1.79	2.45	2.09	2.22
10. Recruiting and retaining high quality building administrators.	1.89	1.42	2.00	2.09	2.22
➤ Access to cultural enrichment opportunities.	2.09	2.16	2.25	2.04	1.89
➤ Transportation costs.	2.15	1.74	2.25	2.39	2.25
➤ Student mobility.	1.62	1.37	1.92	1.65	1.67
➤ Staff capacity to understand and use data.	2.65	2.63	2.50	2.74	2.67
➤ Access to high quality early childhood programs for future students.	2.35	1.89	2.75	2.45	2.56

Key: 1=Not presently addressing; 2=In process of developing plan to address; 3=Have plan in place, making some progress in addressing; 4=Have plan, making significant progress in addressing.

of success in addressing challenges by rural and non-rural school districts, school districts of differing sizes are also experiencing little success in addressing the challenges they face. With only one exception, progress scores are under 3.00, indicating that many school districts of different sizes are still in the planning stages of addressing challenges. This is particularly true in the case of the smallest school districts. Ten of the 15 scores are under 2.00 indicating they are not presenting addressing these challenges or are only experiencing small degrees of success. For other districts of different size, school districts with between 600-1199 students appear to be making some progress in addressing several challenges, relatively speaking. However, it is unclear why these districts are making more progress than others.

Summary

The goal of this study was to identify the type of challenges school districts in Maine face as they strive to provide a high quality education program for all their students. As might be expected, school district funding levels are at the heart of many challenges. Recruiting and retaining specialized personnel, be it special education personnel or high quality building administrators, or being able to offer competitive salaries and benefits, all are related to the resource bases of school districts. The capacity to provide comprehensive education programs and sufficient professional development are also related to resources bases. But more resources alone will not adequately address the challenges. How these additional resources might be used is also important and necessary to successfully addressing challenges.

The evidence from this survey study also points out that school districts on their own are not experiencing a great deal of progress in addressing the challenges they face. Some school districts are experiencing some success in addressing some challenges, but many more challenges and many more school districts are not succeeding in these endeavors.

Taken in its totality, the survey evidence suggests that policy makers and local school districts will need to work even more in concert to address the challenges. Policy makers will need to address the resources issues and local school districts will need to use these resources in the most efficient and effective ways.

It is important to note that some significant progress may be made in the near future to more adequately address the resources and best practices issues. During the current session of the Maine Legislature the Joint Standing Committee on Education and Cultural Affairs has invested considerable time and discussion to reforming selected section of the Maine school funding formula. As a result, legislative changes may be on the horizon, and the Joint Standing Committee has directed the Maine Department of Education and the Maine Education Policy Research Institute to identify supplemental funding streams to address early childhood programming, programs for disadvantaged student, and professional development, and to develop guideline for the most effective use of these resources.

In addition, the Steering Committee of the Maine Education Policy Research Institute has recommend that MEPRI researchers examine topics related to these and other challenges listed by school superintendents. These include examining how professional development time is used effectively, cost and impacts of different early childhood programs, and a labor market analysis for school and district leadership. These types of studies along with the proposed changes in the school funding formula may help school districts implement effective strategies and programs to address their most significant challenges in the coming year.

References

- (2011). Forgotten? Challenges facing rural schools. *The Wisconsin Taxpayer*, 79(6/7), 1-7.
- Arnold, M.L., Newman, J.H., Gaddy, B.B., Dean, C.B. (2005). A look at the condition of rural education research: Setting the direction for future research. *Journal of Research in Rural Education*, 20(6), 1-25.
- Irvin, M.J., Meece, J.L., Byun, S., Farmer, T.W., Hutchins, B.C. (2011). Relationship of school context to rural youth's educational achievement and aspirations. *Journal of Youth and Adolescence*, 40, 1225-1242.
- Mathis, W.J. (2003). Proceedings from Annual Meeting of the American Education Finance Association: *Equity and Adequacy Challenges in Rural Schools and Communities*. Orlando, FL.
- Monk, D.H. (2007). Recruiting and retaining high-quality teachers in rural areas. *The Future of Children*, 17(1), 155-174.

Appendices

Maine School District Challenges Survey

Directions: This survey asks you to provide an assessment of challenges you are facing in running your school districts and to report progress you are making in addressing these challenges. All responses will be confidential and reported in aggregated form, and individual responses will not be released. Your voluntary participation will be helpful to the Education Committee as it proposes future policies and programs. In addition, the results will be shared with the Maine School Management Association (MSMA). In the event you have received a link to this survey more than one time or to multiple district email addresses (because you are the superintendent of multiple district), please complete separate surveys for each district. Please e-mail us at cepare@usm.maine.edu with any questions or comments about this survey.

In the questions that follow you will be asked to:

Assess a series of challenges according to this scale:

1. Not a challenge; does not impact the operation of your school district.
2. Minor challenge; periodically may have some impact on the operation of your school district.
3. Moderate challenge; consistently has some impact on the operation of your school district.
4. Major challenge; consistently has a substantial impact on the operation of your school district.

Assess the status of addressing those challenges according to this scale:

1. Our district is not presently addressing this challenge.
2. Our district is in the process of developing a plan to address this challenge.
3. Our district has a plan in place to address this challenge and we are making some progress.
4. Our district has a plan in place and is making significant progress in addressing this challenge.

Maine School District Challenges Survey

1. Please assess the degree of challenge according to this scale:

	Not a challenge; does not impact the operation of your school district.	Minor challenge; periodically may have some impact on the operation of your school district.	Moderate challenge; consistently has some impact on the operation of your school district.	Major challenge; consistently has a substantial impact on the operation of your school district.
1. Recruiting and retaining high quality teachers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Recruiting and retaining high quality building administrators.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Availability of sufficient special education personnel.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Competitive salaries and benefits.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Access to high quality early childhood programs for future students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Capacity to provide a comprehensive education program for all students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. High level of poverty among the students in your district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Access to cultural enrichment opportunities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Capacity to provide sufficient professional development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Staff capacity to understand and use data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Parental support of school district and district budget.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Community support of school district and budget.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Level of state funding of school district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Ability to compete for external grants and funding.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Student aspirations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Student mobility.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Student absenteeism.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Staff absenteeism.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Quality of school district facilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Collaboration across school districts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Maine School District Challenges Survey

21. Transportation costs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Technology costs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Governance structure of school district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Working effectively with school board/committee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Adequate central office support.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Please assess the status of addressing the challenges according to this scale:

	Our district is not presently addressing this challenge.	Our district is in the process of developing a plan to address this challenge.	Our district has a plan in place to address this challenge and we are making some progress.	Our district has a plan in place and is making significant progress in addressing this challenge.
1. Recruiting and retaining high quality teachers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Recruiting and retaining high quality building administrators.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Availability of sufficient special education personnel.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Competitive salaries and benefits.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Access to high quality early childhood programs for future students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Capacity to provide a comprehensive education program for all students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. High level of poverty among the students in your district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Access to cultural enrichment opportunities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Capacity to provide sufficient professional development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Staff capacity to understand and use data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Parental support of school district and district budget.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Community support of school district and budget.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Level of state funding of school district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Maine School District Challenges Survey

14. Ability to compete for external grants and funding.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Student aspirations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Student mobility.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Student absenteeism.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Staff absenteeism.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Quality of school district facilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Collaboration across school districts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Transportation costs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Technology costs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Governance structure of school district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Working effectively with school board/committee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Adequate central office support.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Please describe any other major challenges facing your district that we did not ask about:

4. Other comments?

All data will remain anonymous. We are asking you to answer the following questions in order that the survey results may be analyzed to determine if challenges differ by district size, geographic region, etc. Providing this information is not required.

5. Superintendent region:

Maine School District Challenges Survey

6. Number of students in your district:

- 0-199
- 200-599
- 600-799
- 800-1199
- 1200-2499
- 2500+

7. Type of school district:

- Urban
- Suburban
- Town
- Rural

Appendix B

Question 1: All School District Superintendents

Challenge	Rank	Mean
Level of state funding of school district.	1	3.68
High level of poverty among the students in your district.	2	3.17
Ability to compete for external grants and funding.	3	3.15
Technology costs.	4	2.92
Capacity to provide a comprehensive education program for all students.	5	2.91
Capacity to provide sufficient professional development.	6	2.85
Availability of sufficient special education personnel.	7	2.79
Student aspirations.	8	2.77
Competitive salaries and benefits.	9	2.77
Recruiting and retaining high quality building administrators.	10	2.75
Staff capacity to understand and use data.	11	2.74
Transportation costs.	12	2.72
Access to cultural enrichment opportunities.	13	2.64
Student mobility.	14	2.62
Access to high quality early childhood programs for future students.	15	2.57
Community support of school district and budget.	16	2.52
Student absenteeism.	17	2.48
Recruiting and retaining high quality teachers.	18	2.40
Parental support of school district and district budget.	19	2.35
Quality of school district facilities.	20	2.32
Collaboration across school districts.	21	2.03
Adequate central office support.	22	2.03
Staff absenteeism.	23	2.03
Governance structure of school district.	24	1.91
Working effectively with school board/committee.	25	1.61

Question 1: Non-rural School District Superintendents

Challenge	Rank	Mean
Level of state funding of school district.	1	3.60
High level of poverty among the students in your district.	2	2.96
Ability to compete for external grants and funding.	3	2.92
Capacity to provide sufficient professional development.	4	2.84
Recruiting and retaining high quality building administrators.	5	2.80
Staff capacity to understand and use data.	6	2.76
Capacity to provide a comprehensive education program for all students.	7	2.76
Availability of sufficient special education personnel.	8	2.75
Technology costs.	9	2.72
Student aspirations.	10	2.68
Student mobility.	11	2.60
Student absenteeism.	12	2.52
Access to high quality early childhood programs for future students.	13	2.48
Community support of school district and budget.	14	2.48
Competitive salaries and benefits.	15	2.46
Transportation costs.	16	2.44
Quality of school district facilities.	17	2.42
Access to cultural enrichment opportunities.	18	2.40
Parental support of school district and district budget.	19	2.38
Recruiting and retaining high quality teachers.	20	2.28
Staff absenteeism.	21	2.20
Governance structure of school district.	22	2.08
Adequate central office support.	23	1.96
Collaboration across school districts.	24	1.92
Working effectively with school board/committee.	25	1.72

Question 1: Rural School District Superintendents

Challenge	Rank	Mean
Level of state funding of school district.	1	3.74
High level of poverty among the students in your district.	2	3.31
Ability to compete for external grants and funding.	3	3.26
Technology costs.	4	3.05
Competitive salaries and benefits.	5	3.03
Capacity to provide a comprehensive education program for all students.	6	2.97
Capacity to provide sufficient professional development.	7	2.90
Transportation costs.	8	2.89
Student aspirations.	9	2.85
Availability of sufficient special education personnel.	10	2.82
Access to cultural enrichment opportunities.	11	2.79
Recruiting and retaining high quality building administrators.	12	2.69
Staff capacity to understand and use data.	13	2.67
Student mobility.	14	2.64
Access to high quality early childhood programs for future students.	15	2.64
Community support of school district and budget.	16	2.59
Recruiting and retaining high quality teachers.	17	2.49
Student absenteeism.	18	2.46
Parental support of school district and district budget.	19	2.36
Quality of school district facilities.	20	2.31
Collaboration across school districts.	21	2.10
Adequate central office support.	22	2.05
Staff absenteeism.	23	1.95
Governance structure of school district.	24	1.74
Working effectively with school board/committee.	25	1.54

Question 2: All GW cc`District Superintendents

Challenge	Rank	Degree Addressing
Capacity to provide sufficient professional development.	1	2.68
Quality of school district facilities.	2	2.67
Staff capacity to understand and use data.	3	2.65
Capacity to provide a comprehensive education program for all students.	4	2.59
Student aspirations.	5	2.55
Collaboration across school districts.	6	2.49
Working effectively with school board/committee.	7	2.44
Parental support of school district and district budget.	8	2.43
Community support of school district and budget.	9	2.39
Access to high quality early childhood programs for future students.	10	2.35
Technology costs.	11	2.32
Student absenteeism.	12	2.30
Transportation costs.	13	2.15
Access to cultural enrichment opportunities.	14	2.10
Competitive salaries and benefits.	15	2.08
Governance structure of school district.	16	1.95
High level of poverty among the students in your district.	17	1.94
Recruiting and retaining high quality teachers.	18	1.90
Recruiting and retaining high quality building administrators.	19	1.89
Adequate central office support.	20	1.81
Staff absenteeism.	21	1.80
Availability of sufficient special education personnel.	22	1.71
Student mobility.	23	1.62
Ability to compete for external grants and funding.	24	1.54
Level of state funding of school district.	25	1.52

Question 2: Non-rural School District Superintendents

Challenge	Rank	Degree Addressing
Capacity to provide sufficient professional development.	1	2.75
Quality of school district facilities.	2	2.71
Working effectively with school board/committee.	3	2.67
Capacity to provide a comprehensive education program for all students.	4	2.58
Staff capacity to understand and use data.	5	2.50
Parental support of school district and district budget.	6	2.46
Community support of school district and budget.	7	2.46
Technology costs.	8	2.46
Student aspirations.	9	2.42
Access to high quality early childhood programs for future students.	10	2.38
Access to cultural enrichment opportunities.	11	2.25
Student absenteeism.	12	2.21
Collaboration across school districts.	13	2.17
Transportation costs.	14	2.13
Recruiting and retaining high quality building administrators.	15	2.04
High level of poverty among the students in your district.	16	2.00
Competitive salaries and benefits.	17	1.96
Governance structure of school district.	18	1.96
Recruiting and retaining high quality teachers.	19	1.92
Adequate central office support.	20	1.88
Ability to compete for external grants and funding.	21	1.75
Student mobility.	22	1.71
Staff absenteeism.	23	1.70
Availability of sufficient special education personnel.	24	1.67
Level of state funding of school district.	25	1.58

Question 2: Rural School District Superintendents

Challenge	Rank	Degree Addressing
Staff capacity to understand and use data.	1	2.7436
Collaboration across school districts.	2	2.6923
Quality of school district facilities.	3	2.6410
Capacity to provide sufficient professional development.	4	2.6410
Student aspirations.	5	2.6316
Capacity to provide a comprehensive education program for all students.	6	2.5897
Parental support of school district and district budget.	7	2.4103
Student absenteeism.	8	2.3590
Access to high quality early childhood programs for future students.	9	2.3421
Community support of school district and budget.	10	2.3421
Working effectively with school board/committee.	11	2.3077
Technology costs.	12	2.2308
Transportation costs.	13	2.1579
Competitive salaries and benefits.	14	2.1579
Access to cultural enrichment opportunities.	15	2.0000
Governance structure of school district.	16	1.9487
High level of poverty among the students in your district.	17	1.8974
Recruiting and retaining high quality teachers.	18	1.8974
Staff absenteeism.	19	1.8684
Recruiting and retaining high quality building administrators.	20	1.7949
Adequate central office support.	21	1.7692
Availability of sufficient special education personnel.	22	1.7436
Student mobility.	23	1.5641
Level of state funding of school district.	24	1.4872
Ability to compete for external grants and funding.	25	1.4103