

Superintendents' Perceptions of Public School Foodservice Programs in Kansas

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Please note that this study was published before the implementation of Healthy, Hunger-Free Kids Act of 2010, which went into effect during the 2012-13 school year, and its provision for Smart Snacks Nutrition Standards for Competitive Food in Schools, implemented during the 2014-15 school year. As such, certain research may not be relevant today.

ABSTRACT

To evaluate the effect of administrative policy on school foodservice program financial self-sufficiency, a survey was mailed to the superintendents of 150 Kansas school districts that were part of an overall evaluation of the financial self-sufficiency of their programs. Respondents provided the following information: district and personal demographics; perceived program outcomes; mealtime spans; level of difficulty in hiring management and line employees; and responsibilities for development and use of school foodservice program budgets and financial reports. Superintendents' perceived levels of stress, complexity, and workload related due to school foodservice programs, and methods for district support, also were recorded. The total response rate following two mailings was 82%.

On average, respondents served as school administrators for almost 20 years (19.6 ± 9), with most of that time in Kansas (18.0 ± 9 years). Average tenure as a superintendent was 8 ± 8 years. Current district tenure was 6 ± 5 years.

On a scale from 1=strongly agree to 5=strongly disagree, superintendents agreed that the school foodservice program affected their stress levels (2.5 ± 1) and workloads (2.8 ± 1). Increased stress was reported when superintendents were unable to fill personnel openings. Less stress was reported when positions were filled with less-than-qualified personnel rather than with qualified personnel ($p < 0.001$). Perceived stress and workload were inversely related to percent profit of the school foodservice program ($p < 0.001$). The percent profit also was related inversely to the total number of years serving as an administrator.

There was no difference in food cost percentage if line employee positions remained unfilled, were filled with less than qualified persons, or filled with qualified persons. However, food costs increased when management positions were filled with unqualified personnel ($p < 0.0026$). Labor cost percentage ($p < 0.001$) and percent profit were higher ($p < 0.016$) when management positions were filled with qualified individuals.

The highest areas of support provided by the districts included student supervision during meals (92%) and general support of the program (90%). The areas receiving the least support by superintendents included permission to cater outside functions (46%) and grant writing assistance (38%). Mean scores for marketing support ($p < 0.006$) and ability to cater ($p < 0.001$) were higher in larger districts than in smaller districts.

The fact that the majority of superintendents articulated support for school foodservice programs is great news for school foodservice directors. Directors need to continue to work with

superintendents to provide the best foodservice programs for school children and remain a part of the total educational environment.

INTRODUCTION

Public school district superintendents face challenges daily in administering multi-goal, multi-location educational centers. Considering that superintendents ultimately are responsible for the stewardship of multi-million-dollar budgets to provide a suitable educational environment for each pupil, these challenges become more complex. The increasing expectation to educate students with cutting-edge knowledge and technologies is contrasted with the reality of school district budget limitations when state and local taxpayers supply funds. "Since the mid-1960s, elementary and secondary school spending has grown substantially in almost every state. Much of this growth has been for special education, school lunch programs, and purposes other than regular education, but growth in regular education spending has been substantial, about 35% in real terms from 1967-96" (Rothstein, 1998).

School superintendents perform a wide range of roles in the course of their jobs, with an awareness of financial constraints inherent to operating a public school district. Superintendents and school boards concurred that school finance, curriculum development, and board/superintendent relationships were the top three professional competencies superintendents must possess to assure district success (Haughland, 1987). In the same study, superintendents of smaller districts ranked school finance as the most important competency. Sharp and Walter (1997) found similar results in a three-state sampling of districts in a survey concerning education issues. School finance was ranked as very important, with technology implementation issues gaining increased attention.

High expectations of the administrative multi-role performance sometimes can block optimal job execution. A school superintendent profile development project revealed that many superintendents perceived several factors as detracting from their mission to ensure quality instruction. These included inadequate financing, excessive paperwork, and the collective bargaining process (*Characteristics of Public School Superintendents*, 1986). Decreasing financial resources appeared to be a source of conflict or frustration in the school board/superintendent relationship for about one-third of the respondents in a three-state survey (Merz, 1986). In a national study, rural administrators faced additional challenges in smaller districts with limited resources (Kennedy & Barker, 1987).

Other research illustrated possible actions to help balance the expectations for the superintendents. Glass, Everett, and Johnson (1998) assessed the skill and knowledge requirements of school business administrators. Respondents prioritized daily tasks, frequency, level of training, and preparation they received in each area. The highest priority rankings were given to financial issues. Medium rankings were given for program management issues of salary administration, facility management, auxiliary services, federal programs, collective bargaining, special education, and strategic planning. Prior education in auxiliary services was perceived as acceptable in contrast to perceived good for preparation in finance and accounting.

Ancillary programs, such as school bus service and foodservice operations (Bogden, 2000), support the educational environment. Pankake and Bailey (1986) found that positive management of budget declines affected ancillary services and building maintenance more than student instruction levels. These auxiliary programs increasingly are called upon to function with limited resources and to maintain a financially solvent operation without district subsidies. Bogden (2000) reported that one-fourth of the school foodservice directors in the study was expected to earn a profit. Griffith, Sackin, and Bierbauer (2001) noted there is pressure on the majority of school foodservice programs to meet the financial obligations of the district. Both the superintendent and the school foodservice director share this pressure.

While research on superintendent job parameters has been limited in recent years, accomplishing a successful tenure generally revolves around providing a quality education while maintaining tight control of revenue and expenditures. School foodservice programs offer superintendents opportunities for additional revenue streams that can be managed to the financial advantage at the district level. The purpose of this study was to evaluate the impact of administrative policies on school foodservice program financial self-sufficiency. This research was part of a larger study evaluating the financial self-sufficiency of school foodservice programs.

METHODOLOGY

For the initial project, researchers analyzed annual financial data gathered from audited monthly reimbursement claim forms. A sample of 150 out of 304 Kansas school districts was collected from the Kansas State Department of Education's Division of Fiscal Services and Quality Control for school year (SY) 1997-98. Performance ratios of expenditure composition, costs/revenue, participation rates, meal pricing, and profitability were calculated with an Excel™ spreadsheet and analyzed using the SAS™ software package. A stepwise linear regression model including headcount, financial performance ratios, and participation levels predicted the dependent variable of percent profit or loss, which was defined as: $(\Sigma \text{ revenue} - \Sigma \text{ expenses} - \Sigma \text{ general funds transfers}) > 0$. Therefore, self-sufficiency was a profit ≥ 0 . A complete description of the methodology is found in March and Gould (2001).

The Institutional Review Board of Kansas State University and the Division of Fiscal Services and Quality Control, Kansas State Board of Education, approved the studies. A two-page survey was mailed to superintendents of the 150 previously sampled districts who supplied school foodservice program financial data. Respondents were asked to supply the following information:

district and personal demographics;

- perceived outcomes of breakfast and lunch programs;
- mealtime spans;
- difficulty in hiring management and line positions; and
- responsibilities for development and use of school foodservice program budgets and financial reports.

Superintendents' perceived levels of stress, complexity, and workloads from foodservice programs were documented. Superintendents also responded to statements pertaining to

foodservice program support provided by the district. These statements elicited yes/no responses and ranged from meal supervision to offsite catering.

The survey was developed and revisions were made based on 10 graduate students' suggestions. Questions were improved for clarity and the format was enhanced for readability. To evaluate ease of completion and clarity, a pilot survey and cover letter were mailed to 10 randomly selected superintendents not included in the study sample. The response rate achieved was 70%. Superintendents did not suggest further revision and reported a range of 2 to 10 minutes to complete the pilot survey.

Following the pilot, a cover letter and survey were mailed during the spring semester to the 150 districts previously supplying school meal program financial data. Response to the first mailing was 52%. A second mailing was sent to non-responding districts three weeks after the first mailing. (Districts located in areas with recent tornado damage did not receive a second mailing.) The total response rate was 82%.

Survey response data were entered into SPSS 8.0 for Windows (1998). Data were summarized using descriptive statistics. Analyses of variance, correlation, and chi square techniques were used to answer research questions.

RESULTS AND DISCUSSION

Demographic Profile

Districts. Most respondents were from districts with enrollments > 5,000 (46%), with 5% from the smallest districts with enrollments of 400 or fewer students (**Table 1**). More than half of the schools (52%) were located in rural areas (<1,800 students) and almost an equal response came from school districts in suburban (1,800-5,000 students) and urban areas (> 5,000 students). Response was higher from the eastern half of the state (75%), corresponding to areas of highest population concentration. Top items on the educational agenda identified by superintendents included technology (98.4%), basic skills acquisition (95.1%), and sports (95.9%).

Table 1. Profile of school districts and superintendents (N=123)

Demographic	Frequency	Percentage*
District Headcount		
201-400	6	5.0
401-1800	33	27.3
1801-5000	25	20.7
>5000	57	46.3
Geographic Area		
Rural	52	44.1
Urban	45	38.1
Suburban	21	17.1
State Quadrant		
Northeast	49	40.5
Southeast	42	34.7
Northwest	12	9.8
Southwest	18	14.6
Total years in administration including as a principal and other administrative posts (mean=19.6 ± 8.9)		
1-10	14	12.7
11-20	45	40.9
21-30	43	39.1
>30	8	7.3
Total years as a superintendent (mean=8.5 ± 7.5)		
1-10	69	70.4
11-20	23	23.5
>20	6	6.1
Total years as a superintendent in current district (mean=5.5 ± 5.3)		
1-5	64	64.0
6-10	24	24.0
>10	12	12.0
Total years as a Kansas administrator (mean=18.0 ± 9.0)		
1-10	20	19.2
11-20	46	44.3
21-30	30	28.8
>30	8	7.7

**N will vary; percentages are based on the total response to each item.*

Superintendents. Eighty percent of superintendents held administrative positions for 11 to 30 years, with an average of 20±9 years. The average respondent had been a superintendent for 9±8 years. Tenure in the current district was 6±5 years. The number of years as a superintendent in Kansas closely matched total years in administration.

Meal programs. Breakfast had been offered within the district most often between four and seven years (**Table 2**). Both elementary (74%) and secondary (71%) students most often had between 11 to 20 minutes to eat breakfast. The majority of elementary (95%) lunch periods were 30 minutes or less, while the majority of secondary school lunch periods (83%) were from 21 to 40 minutes. Overall, meal programs were perceived to benefit students, as 81% of superintendents indicated that there was a positive impact on elementary students and 67% indicated that secondary students were affected positively.

Table 2. Demographic profile of school foodservice programs		
	Frequency	Percentage *
Number Years Breakfast Served		
Not Offered	1	0.8
1-3 Years	4	3.3
4-7 Years	7	62.3
> 8 years	41	33.3
Impact of Foodservice Program on Students		
Elementary		
No impact	4	3.3
Somewhat positive	19	15.4
Positive	100	81.3
Secondary		
No impact	11	8.9
Somewhat positive	30	24.4
Positive	82	66.7
Meal Period Length		
Breakfast		
Elementary		
11-20 minutes	89	74.2
21-30 minutes	29	24.2
31-40 minutes	2	1.7
Secondary		
<10 minutes	5	4.3
11-20 minutes	82	71.3
21-30 minutes	27	23.5
31-40 minutes	1	0.9
Lunch		
Elementary		
11-20 minutes	31	25.2
21-30 minutes	87	70.7
31-40 minutes	5	4.1
Secondary		
11-20 minutes	21	17.1
21-30 minutes	67	54.5
31-40 minutes	35	28.5

Superintendents' perceptions of meal program operation. On a scale of 1=strongly agree to 5=strongly disagree, superintendents agreed that their stress level (2.5 ± 1) and workload (2.8 ± 1) increased with oversight of school meal programs. They were neutral in their response to the statement "the program increases my job complexity" (3.3 ± 1).

Program operation. The main revenue stream for supporting school foodservice operations comes from reimbursable breakfast and lunches. If more students purchase these meals, revenue increases. Participation in the breakfast program was higher the longer the program had been in place ($p < 0.001$). Programs operating for more than eight years had better participation than those existing for shorter time periods ($p < 0.001$). Elementary students in schools with short breakfast periods participated more often ($p < 0.001$) than students in schools with longer breakfast periods. Secondary students participated more when breakfast periods lasted between 11 and 20 minutes ($p < 0.001$) and ate less often when the meal period was either shorter or longer.

There was no relationship between time allowed for elementary students to eat lunch and participation in the lunch program. Secondary students were more likely to participate when meal periods were shorter ($p < 0.001$). Time is an important factor for secondary students to be able to leave the eating area to seek vending machines or commercial foodservice options.

Programmatic profitability. Profitability was related to several internal and external factors of the school foodservice program. These factors included geographic location, superintendent program perception, program operation, and personnel within the program. Districts in the eastern half of the state fared better ($p = 0.009$) in profitability for both southern and northern quadrants. Rural districts statewide were less profitable than suburban districts, with urban districts being the most profitable ($p < 0.001$).

Superintendent perception also was related to program profitability. Stress and workload perceptions were related inversely to percent profit of the foodservice program ($p < 0.001$). Percent profit also was related inversely to the number of years the superintendent had been a superintendent but did not appear to be related to the perceived additional complexity of the program.

The inability to achieve program self-sufficiency was due largely to inattention to food and labor costs. Percentage of food cost to revenue was higher ($p = 0.026$) when management positions were unfilled or filled with unqualified individuals. Food cost was not different if districts were filling line positions with under-qualified people. Hiring qualified management staff to control costs is important for program consistency and control; however, labor cost as a percent of revenue was higher ($p = 0.001$) when qualified management was hired. While qualified management staff may be expensive, the expectations of revenue increases or the sharing of their expertise between two or more smaller districts may mitigate costs.

Fiscal programmatic operation. Foodservice directors most often (68%) wrote budgets for their programs along with superintendents (29%) and business managers (21%). Superintendents did not identify the school board and principals as participants in the foodservice budget process. The budgetary process appeared to be delegated to foodservice directors when qualified staff was in place.

Geographic location affected budgeting abilities of school foodservice directors and superintendents' ability to operate profitable programs. While rural programs were different from suburban and urban programs, superintendents in rural districts were better able to manage profitability while budgeting. School foodservice directors in these districts were less able to manage profitability. Superintendents may indeed be able to better handle fiscal aspects if directors aren't qualified, which intensifies the challenge of operating a financially self-sufficient school foodservice program.

Superintendents indicated that foodservice directors received limited financial communication, which ultimately impacted program self-sufficiency. Directors did not receive financial reports in 70% of districts. Seventeen percent of directors did not see invoices, but 45% did see unit reports. Only 20% saw revenue/expenditure reports. There was a difference in program profitability when unit reports and financial reports were shared ($p < 0.001$). Superintendents may believe that management staff in school foodservice programs do not need these reports; however, sharing this information in a timely manner is critical for controlling costs (Cater, Cross, & Conklin, 2001).

Superintendents were asked to indicate their ability to hire line and management personnel. Almost half (42.3%) of superintendents indicated that line positions were not filled completely. An almost equal number (41.5%) filled positions with persons lacking in experience and skill. Only 16.3% of the superintendents reported the ability to hire for all line positions with ideal qualifications. Rural districts experienced more difficulty ($p < 0.001$) in hiring enough personnel than did in suburban or urban districts.

Superintendents indicated that they could not fill 7% of their school foodservice program management positions, and almost half filled these openings with persons not having adequate qualifications. However, 43% felt they were able to fill the positions with qualified persons. Further analysis revealed a difference in the ability to hire based on the district's geographic location. Urban and suburban districts were able to hire management staff more easily than rural districts ($p < 0.001$).

The filling of management positions seemed to create a challenge to program profitability. The ratio of labor cost percent to revenue increased when positions were deemed filled with qualified persons ($p < 0.001$). The percent profit was significantly higher ($p = 0.01$) when management positions were filled with qualified staff.

Programmatic support by the superintendent. Eighty-eight percent of superintendents supported mealtime supervision, defended the program in principle, and maintained physical facilities (**Table 3**). Forty-six percent or fewer of the superintendents supported the following issues: "permission to cater to external customers" and "provide grant writing assistance." These are less common activities within a school foodservice program, but they do provide revenue. School board approval and competitive clauses must be considered before pursuing these activities.

Table 3. Superintendents* (N=123) response to areas of support for school foodservice program

Area of Support	Frequency	Percentage*
Mealtime supervision of children by teachers/paraprofessionals	113	91.9
Support in principle for the program in board, faculty, and external meetings	111	90.2
Repair/upkeep in dining rooms	108	87.8
Offering a la carte	102	82.9
Promotion of lunch/breakfast menus	101	82.1
Scheduling for adequate time for breakfast/lunch periods	101	82.1
Training for managers and staff	101	82.1
Assistance with bookkeeping	100	81.3
Adoption of closed campus policies	91	74.0
Scheduling of bus arrival to allow students to eat breakfast	90	73.2
Restriction of mealtime sales of vending machine products	90	73.2
Promotion of special days/meals	88	71.5
Gaining student input	84	68.3
Long-range planning to improve preparation/serving areas	77	62.6
Assistance in marketing to increase student participation	69	56.1
Gaining teacher input	66	53.7
Gaining parent input	61	49.6
Permission to cater events to external customers	56	45.5
Assistance in writing grants for special programs	47	38.2

The likelihood of marketing the program was higher in districts enrolling more than 5,000 students ($\chi^2=12.492$, $p=0.006$) than those with less than 1,800 students. This also was true for offering a la carte items in addition to reimbursable lunches ($\chi^2=28.785$, $p<0.001$) and catering to external customers ($\chi^2=25.207$, $p<0.001$). Also more prevalent in larger districts was the practice of long-range planning for programs ($\chi^2=11.699$, $p=0.008$). Superintendents of districts with enrollments of 401-1,800 were the least likely to support their meal programs ($\chi^2=8.028$, $p=0.045$). The likelihood of restricting students from leaving campus at mealtime was not related to district size.

CONCLUSIONS AND APPLICATIONS

A minimum of 50% of the superintendents supported all but two of the issues under investigation listed in **Table 3**, which ranged from mealtime supervision of students to gaining parent input. The benefit of the school foodservice program merits continued study to improve and refine outcomes in order to meet district superintendents' expectations. Superintendents with a long tenure within a state system develop knowledge of the processes and programs within the state, which should facilitate the operation of common federal programs, including school foodservice.

The brevity of breakfast periods supports the idea of non-traditional foodservice options such as hallway kiosks and portable breakfasts. Technological advancements in record-keeping and smart kitchen equipment would allow workers to provide quality food and maintain proper documentation for reimbursement. Students not traditionally eating breakfast at school may be more likely to participate in contemporary environments, which could merit the capital equipment expenditure to initiate the breakfast service option.

Inability to hire line employees affects training needs and job performance. The more difficult it is to hire line employees the more intense the need for excellent training and monitoring to assure quality outcomes. Staff shortages also are an opportunity to realign responsibilities to reduce staffing needs and, thus, labor costs.

All school foodservice program directors must understand and be privy to financial data concerning their programs, such as costs of food purchased, labor costs, and revenue generated (Sanchez, Gould, & Sanchez, 2000). While qualified managers demand higher salaries, they can have an effect on procedures and changes beyond their salary, and these could result in improved cost control and additional ideas for revenue stream generation. On the other hand, hiring less-than-qualified managers could result in higher labor and food costs with disastrous management outcomes. Smaller districts may investigate the use of convenience foods to reduce labor hours. At the same time, districts must be sensitive to the community employment base. Another option is to share qualified management staff between two or more neighboring districts. This would allow districts to share labor costs associated with the expected higher salary level and enjoy the expertise, which would likely improve program financial outcomes. This is a realistic option for districts that have a strong desire to maintain local control of the school foodservice program, as well as those districts that are unlikely to be operated by a contract management company due to small size and geographic dispersion.

The limitations of this study include the geographic boundaries of Kansas and the cross-sectional nature of the study. Programs can change as superintendents or foodservice personnel change. Programs within other states may experience different challenges affecting their ability to succeed financially. The need to keep the survey brief may have caused the omission of important factors to consider when looking at financial self-sufficiency and provision of meal programs.

Future studies should include a greater geographic representation for generalizing the conclusions beyond Kansas. Variations in concentration of rural and urban areas and other cultural factors could yield different results. Comparison of results from different types of districts may indicate that districts should be surveyed using categories such as rural and urban or geographic location. A survey of other states would provide comparative data.

While the overall goal of school foodservice programs is to provide nutritious meals, the needs of the customers and the financial climate of districts are changing constantly. As evidenced by this study, superintendents are supportive of school meal programs. Foodservice directors need to find ways to capture this support by working with the superintendent to achieve the vision and mission of the district and to remain a key player in the total educational environment.

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