Effectiveness of In-Classroom Breakfast in Five Exemplary Districts

**Purpose**
A national trend to improve school breakfast participation is the integration of breakfast within the school day. In-classroom breakfast programs dramatically increase student access to school breakfast. Service models include “grab and go”, distribution of breakfasts to each classroom, and mobile breakfast carts in hallways. The purpose of this study was to determine the effectiveness of in-classroom breakfast using financial records, menus, and student outcomes.

**Methods**
- Using case study research methodology, the National Food Service Management Institute, Applied Research Division conducted a study to determine effectiveness of in-classroom breakfast. State agencies recommended exemplary districts offering in-classroom breakfast programs.
- After a pilot visit to a school district in the Midwest USDA region, four districts of varying sizes in the Mid-Atlantic, Northeast, Western, and Mountain Plains USDA Regions were visited.
- Preparation, distribution, and service of breakfast were observed in elementary, middle, and high schools. School nutrition directors, principals, teachers, and other school personnel were interviewed.

**Results**
- Schools that offer in-classroom breakfast have experienced dramatic increases in participation which leads to increased revenue. A high school that served 585 breakfasts per day increased participation to 950 breakfasts per day.
- A K-8 elementary school with in-classroom breakfast earned $70,412 annually in excess revenue compared to a similar school that did not offer it ($29,815).
- When ranking menu planning considerations, directors highly ranked nutritive value, student preferences, and food costs.
- A middle school that began in-classroom breakfast in 2011 experienced a drop in disciplinary referrals from 377 to 171 from 2010 to 2011.

**Applications**
- Increased breakfast participation leads to improved nutrition for children and can be financially rewarding for districts. In-classroom breakfast can improve school culture and have a positive effect on student behavior. The outcomes of this study should be shared with school nutrition personnel, school administrators, teachers, school staff, and parents.
- School nutrition directors can use quantitative and qualitative data on effectiveness of in-classroom breakfast for marketing and program expansion.

**Data Collection for Effectiveness of In-Classroom Breakfast**

**Quantitative Data and Sources**
- Breakfast Participation - records (month by month, YTD, school year to school year)
- Accountability for Reimbursement - rosters and software
- Excess Revenue - financial records (include income, labor cost, food cost, supplies cost)
- Service Time - number of meals served per minute
- Food Waste and Disposable Waste/Recycling - weight in pounds
- Student Diet Quality/Nutrient Intake - can be determined from menus/nutrient analysis and plate waste data
- Custodial Time - minutes and/or hours for clean up
- Disciplinary Referrals - school records
- Attendance/Tardies - school records
- School Nurse/Wellness Office Visits - school records
- Academic Performance/Test Scores - school records
- Excess Revenue - financial records (include income, labor cost, food cost, supplies cost)
- Accountability for Reimbursement - rosters and software

**Qualitative Data (Student and Stakeholder Satisfaction, School Culture and Climate, Perceptions, Opportunities, Barriers) and Sources**
- Students - interviews, surveys
- Nutrition Services Staff - interviews
- School Nurse/Wellness Staff - interviews
- Teachers - interviews, surveys
- Principals - interviews
- Custodians - interviews
- Parents - interviews, surveys

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**School Personnel Comments on Student Issues and School Culture Related to In-Classroom Breakfast**

**Principals**
- “It gives students a healthy environment to sit without being rushed or missing instruction. Family environment. We settle into our day quicker. Breakfast in a Bag assists with student responsibility and builds a culture of calm.”
- “We’ve seen such a difference in student engagement. Breakfast is helping. Breakfast gives kids time to talk. Students are on-task, not in health office. Now, there isn’t a stigma – helps environment. All kids are equal. We have a nice community feel. Breakfast is the only thing we’ve changed – it is having a huge positive impact.”

**Teachers**
- “I’m for the program. I think it’s great during announcements. The kids are more awake and aware. It makes them more social with me.”
- “Awesome! Proving beneficial to our students and our school culture! Students are able to focus when hunger is not a distraction for them. Students are used to eating, listening to announcements, and completing the warm-ups on their own.”

**School Nurses**
- “It’s great – every child can. Parents love it. I have 4. Children are not jittery. Concentration is better. Not as many tummy aches.”
- “Significantly fewer visits complaining of hunger. It is a fabulous idea – lots of kids don’t eat breakfast but more are now.”

**Custodians**
- “I enjoy it because I get to see the students. It takes the same amount of time as cafeteria breakfast.”
- “It’s a good program. It takes the same amount of time. Not too much waste.”

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