OHIO VALLEY EDUCATIONAL COOPERATIVE

Best Practices for Kentucky School Facilities

The 1990 Kentucky Education Reform Act spawned many improvements to education programs including a historical renewal of the K-12 school facility infrastructure. Proponents of the legislation not only wished for needed replacement and renovation of poor-conditioned schools but also a sustainable system of common schools through appropriate and continuous revenue and proper local district maintenance and operations.

As part of education reform in 1990, the General Assembly enacted Chapter Seven of the Kentucky Revised Statutes which among other things established the Office of Educational Accountability (OEA) to serve as an independent body of the Legislative Research Commission to protect Constitutional requirements. KRS 158.785 (Collection and review of management data-Management AuditConditions for designation as state-assisted or state-managed districtActions required) was repealed and re-enacted defining benchmark criteria for state assistance and management. The Kentucky Department of Education's (KDE) associated reorganization in 1990 included funding and formation of the Office of Management Assistance which had the direct responsibility for state assistance and management of local school districts. Initially, the work of OEA and Management Assistance was punitive in dealing with malfeasance, but the long-range focus was to develop local district leadership capacity. Out of these efforts grew many best practices for local school district operations including facilities.

As local district capacity improved, OEA and the Office of Management Assistance moved to a platform of more positive and proactive intervention. Most of the new clients were adopted voluntarily. The district support intervention strategies were also used to create a foundation for improved student performance and are still required today for persistently low-performing districts. Currently, only in worst-case scenarios (financially deficit or persistently low-performing districts) are actions mandated by the statutory criteria.

Exemplary District Program:

In 1998 the State Board of Education enacted an Exemplary District program. The program was created to identify districts of excellence in support operations including finance, transportation, food service, and facilities, and to partner them voluntarily with districts seeking improvement.

The Office of Management Assistance worked closely with its companion offices in the Office of District Support Services to establish and grow criteria for exemplary programs. The Program Director and their staff received annual applications from candidate districts seeking exemplary status as well as improvement. A cadre of expert teams was formed by KDE which received

applications, made comprehensive district site visits, and performed detailed evaluations of each application. The exemplary review teams consisted of program experts from KDE and selected volunteers from local school districts chosen for their accomplished programs. The concept was that awards were to be given by pier experts. If a district was awarded exemplary status, its chief officer was invited to serve on the committee for the following year. Each year the committee membership grew in number and skill. Exemplary districts were recognized in an annual ceremony by the Kentucky Board of Education, given a token $2,500 cash award, and agreed to partner with a volunteer district that needed help or had applied as a candidate for improvement.

The following Kentucky districts (and their respective officers) received exemplary status in facilities:
1. Daviess County care of Mr. Ed Higdon (Facility Director)
2. Warren County care of Mr. Charles Rector (Facility Director)
3. Laurel County care of Mr. Jim Kennedy (Finance and Facility Director and current president of Kentucky School Plant Management Association, KSPMA)
4. Todd County care of Mr. Charles Ed Wilson (Superintendent)

Each of the above served on the Exemplary Facility District Committee (at one point) along with Mr. John Brill, (Grant County Finance and Facility Director), Mr. Pete Miller (Boyd County (Transportation and Facility Director and past president of KSPMA, and Mr. Mark Ryles (Director of Facilities Management for KDE, and permanent Board member of KSPMA).

The following facility best practices were identified for exemplary districts:

- Exemplary districts must demonstrate in their actions, beliefs, and policies, that their facility program is fully supported by district leadership (including the superintendent and the local board of education). District leaders make an intentional connection between facilities and student performance, and are committed to excellence and innovation.
- Exemplary districts must demonstrate a capacity for quality long-range capital planning and have in place current appropriate capital construction priorities that match the facility needs of the district. Plans and facilities support a modern educational program including exemplary and ubiquitous technology, and consider the cost of delivery of services, transportation, demographics, and condition of facilities for an adequate and equitable education. School centers and classrooms are sized and utilized appropriately for the quality of education and cost of delivery of services.
- Exemplary districts have 90% of facilities in good to new condition (1, 2, or 3 on the 1 new, to 5 poor, regulatory scale), and are staggered and financially sustainable on 30-year life cycles. Appropriate capital construction revenue streams are in place to support short and long-term capital needs. All facilities are 100% handicapped accessible, have exemplary technology access for all students, and have no portable classrooms in service.
- Exemplary districts have an effective preventative maintenance plan in place. Maintenance staffing is appropriate (about 1 fte per major building) with all trades represented, or adequate resources are provided to outsource an effective program. If

maintenance is not outsourced, exemplary districts provide a local budget of 3 to 7% of the general fund (not including dedicated personnel or utilities) for operations and maintenance. There is an effective, established electronic work order system, and appropriate local control of maintenance equipment and inventory that support an effective program.

- Exemplary districts have effective Safe School Plans and maintain a safe and healthy environment for students and staff. Plans include appropriate leadership training, student and staff drills, and emergency facility and transportation planning for storms, fires, possible flooding, and other major disasters.
- Exemplary districts have clean and healthy buildings with appropriate custodial staffing of 1 fte per 20,000 square feet of facility.
- Exemplary districts have an effective energy management program.
- Exemplary districts demonstrate an ongoing commitment to facility leadership development at all levels, with effective and adequate professional development for staff inside and outside the facility area.

The KDE Office of Management Assistance is no longer available for voluntary or required district facility audits because the General Assembly ceased funding in 2005. However, the eight abovementioned best practices remain embedded in KDE's current facility audit template and are still very relevant measures of good facility programs.

Best Practice School Facility Benchmarks and Resources:

Of the eight exemplary district criteria, the core success is built around items one (leadership), two (planning), and three (inventory condition). The manifestation of good leadership and planning is item three (carrying the greatest weight), which is a facility inventory of whose condition is sustainable. If item three (which grows from quality leadership and planning) is not achievable, it results in other benchmarks becoming problematic. In essence, item four (preventative maintenance) item seven (energy management), and perhaps item five (safe and healthy schools) and even six (building cleanliness) are not sustainable if building conditions are generally poor.

Leadership:

In the facility audits conducted by the exemplary district committee, often quality leadership was found, but sometimes it was not consistent. Institutional control was desired with a clear chain of command that started with the superintendent and board and continued through the program area to the school level. There was evidence of quality and supportive communication, policies, training, expectations, and accountability. Adequate resources and support were provided at all levels with result-oriented procedures.

Current Leadership resources:

1. Kentucky School Board's Association (KSBA) superintendent and board training.
2. KDE Facilities Management branch
3. Ohio Valley Educational Cooperative (OVEC) and Kentucky Educational Development Corporation (KEDC) Facility Consulting services
4. KSPMA Facility Certification program

5. Superintendents mentoring through educational cooperatives
6. National Center for Educational Statistics (NCEF) facilities website

Planning:
The building of a sustainable school inventory starts with leadership and good planning. Fortunately for Kentucky school districts, long-range four-year capital plans are required per 702 KAR 4:180 and a detailed and quality result-oriented process is in place. The process defined in administrative regulation is holistic and includes the educational program, cost of delivery of services, relative condition of facilities, and their capacity to support a modern educational program including technology, and transportation. Architectural models for equity and adequacy are provided, as required by the Kentucky Constitution. Issues of appropriate classroom and school size are addressed for all age groups and curriculum types.

Current Resources:
1. KSBA's planning consulting service.
2. KDE Planning unit
3. The Kentucky School Facilities Planning Manual (702 KAR 4:180)
4. OVEC and KEDC facility consulting service
5. KSPMA planning curriculum for facility directors
6. Picus research documents available through KDE

Condition and Education Suitability of the Building Inventory:
The condition of schools and their education suitability is the ultimate measure of a sustainable facilities program. Current regulation provides a one (new) to five (poorest) scale for school conditions and education suitability. In Kentucky, the life cycle of a school is generally considered to be about 30 years. That means most building systems will need to be replaced when a facility's actual or functional age exceeds 30 years. Functional age is a building's actual age, or the age from which it has had a complete major renovation. In general, schools rated one, two, or three are considered adequate within a functional age of 30 years, whereas buildings rated four or five that have a functional age of 30 years (or more) are considered inadequate, in need of major renovation or replacement. The four-year long-range capital plan provides information on each facility including a detailed architectural and engineering assessment. If renovation or replacement is required for any facility, appropriate and standard construction budgets (needs) are provided for each facility.

The life cycle times for each facility should be plotted on a chart calendar identifying the respective 30-year benchmark. Proposed projects are already prioritized in the facility plan. A comparable calendar covering the same time frame should also be developed that identifies capital revenue streams, and 20-year bond retirement(s), and includes future revenue projections based on projected enrollment and possible bond refinancings. Demographic information can be projected from local attendance data and/ or developed by the KDE Planning unit, and supported through statewide demographic data published by the University of Louisville. Best practice and sustainable programs shall match facility needs (at appropriate benchmarks) with like revenues. In general, it is a best practice for school districts to have at

least 10 cents of local revenue pledged to capital construction for each $100 of assessed property value, in addition to general fund revenues for maintenance.

Current resources:
1. District facility plan and architectural assessments
2. KDE facility data system
3. Fiscal Agent
4. University of Louisville demographic information
5. Local attendance data
6. School Finance Manager's Institute
7. KDE Planning unit
8. OVEC and KEDC facility consulting service

Preventative maintenance:
Preventative maintenance is generally only attainable after leadership, planning, and the suitability and condition of the inventory are obtained. Maintenance schedules are developed for critical building components like roofs, HVAC, electrical, plumbing, lighting, paving, painting, hardware, etc. Processes including appropriate resources, labor, work order system, and follow-up are in place to achieve appropriate results and maintain long-term serviceability.

Architectural building manuals that are turned over to the owner upon the completion of any capital project (including as-built plans and specifications) are the foundation for this work where contacts, warranties, maintenance schedules, and general processes for each building component are found.

Current resources:
1. Architectural and Engineering building manuals and as-built plans and specifications
2. KSPMA facility maintenance curriculum and certification
3. School facility software systems
4. NCEF maintenance publications
5. Project Architects and Engineers
6. KDE facilities branch
7. OVEC and KEDC facility consulting services

Safe Schools:
Student safety is the most important element of any school process. It must be embedded in the daily practice of the school. It is everything from plans, policies, and administration, to school staff and students knowing what is occurring in (and sometimes out of) school. It requires students and staff to build and maintain a system of trust and quality communication.

In KRS 158.440, the General Assembly found that "Every student should have access to a safe and secure, and orderly school that is conducive to learning", and requires "that all schools and school districts must have" (appropriate) "plans, policies and procedures" to ensure student safety. KRS 158.442 established the Center for School Safety to provide an agency resource for local schools and districts. School safety encompasses many topics including but not limited to

student behavior, natural and man-made disasters, and basic building safety (health, fire, equipment, stairs, emergency access, egress, accessibility, and security).

Current resources:
1. Center for School Safety
2. KSBA
3. KDE
4. Department of Housing Buildings and Construction
5. State Fire Marshal's office
6. NCEF website
7. Local and State Health Department
8. Disaster and Emergency Services
9. Local law enforcement

School Cleanliness:
Probably the most direct impact on creating a healthy and safe school environment is to have and maintain a clean school building. In almost every case, no matter the age and condition of the building, you will find that academically high-performing schools are associated with clean facilities. The reciprocal climate of caring for both students and staff is almost always shown in a clean facility. It starts with caring occupants and ends with quality resources, staff, training, and commitment. It is always a reflection of leadership in and out of the building, whether that comes from the principal or the custodians who do the work. Although it is possible to outsource, the best programs are in-house, where custodial staff are part of the family that does school.

Current resources:
1. NCEF School cleaning and maintenance
2. School Finance Managers Institute (custodial staffing)
3. KSPMA curriculum for facility managers and staff
4. United States Green Building Council (USGBC) cleaning protocol

Energy management:
Long before legislation was enacted to raise a level of awareness and proficiency, for efficiency, and effectiveness, and at some point for educational purposes, best practice facility programs fostered a strong energy management program. KRS 160.325 requires that all Kentucky school districts participate in the Kentucky Energy Efficiency Program (KEEPS). Legislation also created the School Energy Management Program (SEMP) which established a network of energy managers through KSBA. Benchmark programs include measurable Energy Star building performance of a level of 40 to 50 KBTU's per sf per year for all buildings (or lower). Remotely operated and programmable digital lighting and HVAC systems, support software for measurement and verification, quality district and school policies that are fully implemented, coordination of finance operations and billings, quality design and construction and student programs through the National Energy Education Development program and guided by KRS 157.455 are benchmarks of exemplary programs.

Current resources:
1. SEMP program
2. KEEPS program
3. Green and Healthy Schools Program
4. NEED program
5. Department of Energy Development and Independence (DEDI)
6. USGBC
7. Advanced Energy Design Guide for K-12 School Buildings, Achieving 50% Energy Savings Toward a Net Zero Energy Building. (published by ASHRAE)
8. District Architects and Engineers
9. KSPMA

Professional Development:
Ongoing job-embedded Professional development is a part of every effective educational program including facilities. Current Resources:
1. KSPMA facility manager certification and curriculum
2. NCEF
3. OVEC and KEDC facility consulting services

Future:
As we look ahead to future best practices, certainly the ones from the Exemplary District program still seem very relevant. At some point, however, schools and districts need to be sustainable. When we think of sustainability, we generally mean environmentally friendly, or perhaps at least not compromising future opportunities with current practices. The keys to sustainability lie in finding a balance. Balance between declining infrastructure, and revenue for renewal: Balance between long-term serviceability and initial cost: Balance between service and maintenance: Balance between energy consumption and energy production: Balance between student needs and curriculum: Balance between using resources and renewing resources. At some point, we must put a system of governance and decision-making in place that has parameters for success and flexibility to meet the needs of today and the needs of tomorrow.