academic performance
  and school site, 7-2
Academy of Irving ISD, 2-15
acoustics, 5-6
administrative areas, 5-17
air quality, 9-14–9-16
analysis and decision-making phase
  of Facility Master Plan, 4-5–4-6
architecture
  example of, 6-11
  importance of, 4-9
assessment of facilities, 4-11–4-14
asthma, 9-14

Baldrige Educational Criteria, 1-9, 1-13
  sample tool from, 1-47
Barbers Hill High School, 11-17
Bearsapaw School, 6-11
Bishop O’Byrne High School, 8-18
block scheduling, 2-5
Bloomfield Family Learning Center, 7-19
Boones Ferry Primary School, 2-16
bridging and design process, 11-2
budgets, 10-13–10-14
building maintenance forms, 14-15–14-19
building shell design
  characteristics of, 9-8, 9-9
  example of, 6-10
campaigns for funding, 12-6–12-8
Canadian schools, 12-4–12-5
Canby Applied Technology Center, 1-19
capital improvement plan, 4-6
cash-flow analysis, 13-5
career academies, 2-4–2-5
Center for Leadership in School Reform, 1-2–1-3
Century High School, 5-40
Challenge K–8 School, 7-20
change models, 1-9–1-12
class size, xiv
classrooms, 2-17–2-18, 5-14–5-16
Collaborative for High Performance Schools, 9-2
color, effects of, 5-5–5-6
Combs Elementary School, 14-13
comparative selection
  of design team, 10-2
communication plan, 13-2
community involvement
  benefits of, 3-3–3-4
  in educational planning, 1-6–1-8, 3-13–3-32
  in schools, 15-5
  See also: community partnership
community partnership
  case study of, 3-36–3-38
  characteristics of, 3-4–3-5
  and communication plan, 3-34
  components of, 3-14–3-16
  definition of, 3-2
  and discovery phase, 3-27
  and educational planning, 3-20, 3-22–3-23, 3-24–3-25
  and engagement, 3-28
  examples of, 3-7, 3-9–3-38
  importance of, 3-2
  models for, 3-9–3-35
  planning initiative for, 3-26
  and systemic change, 3-3
  U.S. Department of Education model for, 3-29–3-35
construction commissioning
  and bidding process, 11-2–11-3
  definition of, 13-7
  process of, 13-7–13-8
construction costs, 13-4–13-6
construction management agency, 11-2
construction management-at-risk
  benefits of, 11-8–11-9
  characteristics of, 11-6–11-17
  participants in, 11-8
  process of, 11-7–11-8, 11-10
  See also: construction management agency
construction quality, 13-6
contracts
  for building process, 10-2
  for design process, 10-12–10-13
  and task order, 11-3
contractors, hiring of, 10-2
crime prevention, strategies for, 5-25–5-26
daylighting
  benefits of, 9-7
  implementation of, 9-8
design committee, 10-7–10-8
design guidelines
and construction documents, 10-10–10-12
content of, 6-3–6-5
detail in, 6-5–6-8
examples of, 6-6–6-9
purpose of, 6-2–6-3
design plan
development of, 10-9–10-10
example of, 7-20
design process
and equipment, 10-15–10-16
and furniture, 10-15–10-16
and fast tracking, 11-2
fees for, 10-6–10-7
with pre-qualification, 10-3–10-5
without pre-qualification, 10-5–10-6
steps in, 10-8–10-13
design team
participants in, 10-2
selection of, 10-2
design-bid-build
benefits of, 11-6
characteristics of, 11-3–11-4
definition of, 10-2
participants in, 11-4
process for, 11-5
design-build
benefits of, 11-11–11-12
characteristics of, 11-9
definition of, 10-2
participants in, 11-10–11-11
process of, 11-9
disadvantaged students
and facility planning, 2-15
and school size, 2-3–2-4
Education Environment Program, 5-2
educational facilities
and academic performance, 2-2, 2-6–2-7
adequacy of, 4-4–4-5
age of, 14-3–14-4
changing nature of, 1-3
and the educational program, 2-8–2-9
inventory and evaluation of, 4-3–4-4
educational plan
definition of, 1-2
evaluation of, 1-15–1-16
and horizon issues, 1-6
implementation of, 1-14–1-15
resources for development of, 1-8–1-9
educational planning process
and assessment of district, 1-43–1-46
and community, 1-6–1-8
evaluation of 1-15–1-16
role of district in, 1-6–1-7
and vision statement, 1-7
educational program
and education specifications, 5-4
and facility master plan, 4-2
Educational Research Service, 1-3
educational specifications
components of, 5-3–5-4
definition of, 5-2
and design, 5-10
throughout a district, 5-4–5-4
example of form for, 5-20
example of executive summary of, 5-23–5-24
example of room descriptions from, 5-31
purpose of, 5-2–5-3
and state requirements, 5-3
and site specifications, 5-5
steps for completion of, 5-9–5-10
steps for creation of, 5-6–5-9
educational technology: See technology
EnergySmart Schools, 9-3
equipment
expected life of, 14-11
scheduling delivery of, 10-15–10-16, 13-10
Evaluation forms
for school facilities, 14-18–14-19
for facility, 4-16–4-17
See also: post-occupancy evaluation
Expansion of facilities
case study of, 3-36–3-68
and construction considerations, 13-8–13-9
design process for, 10-14–10-15
example of, 3-7
facilitators
for design guidelines, 6-5
identification of, 3-29–3-30
facility assessment
and educational planning, 3-18–3-19
goals of, 4-3–4-4

facility master plan
and capital improvement plan, 4-6
characteristics of, 4-2–4-3
development of, 3-32–3-35, 4-3–4-6, 4-10
and educational needs, 3-33
evaluation of, 4-6

floor plans, examples of, 2-17–2-18

furniture
scheduling delivery of, 10-15–10-16, 13-9
and technology, 8-8

funding
bond issue example of, 3-38
and community involvement, 3-2
for Canadian schools, 12-4–12-5
for facility master plan, 3-29
federal mechanisms for, 12-12–12-13
general obligation bonds, 12-6–12-8
grants, 12-3
identifying sources of, 3-33–3-34
local options for, 12-6–12-10
for maintenance and operations, 14-4–14-6, 14-8–14-9
and process of securing, 12-6–12-8
state mechanisms for, 12-5–12-6, 12-10–12-12
for technology, 8-7

green building practices, 9-2
Green Chimneys School, 4-8
Greening Schoolground Program, 7-2–7-3
Greenwood Elementary School, 4-9
Goodwillie Environmental School, 14-14
Guide for School Facility Appraisal, 4-3–4-4

hard costs, 12-2
HVAC systems
and construction commissioning, 13-7
deterioration of, 14-2
and sustainable design, 9-12

information gathering phase
of facility master planning, 4-3–4-4
I-BEAM, 9-16

John S. Park Elementary School, 15-5

LEED certification, 9-14, 9-17
lighting
    and student achievement, 5-6
    and sustainable design, 9-10–9-11

maintenance and operations, 14-4
maintenance and operations plan
    considerations for, 14-6–14-9
    development of, 14-9–14-11
    elements of, 14-6–14-7
Margaret Brent Middle School, 9-22
master plan: See facility master plan
master planning committee, 4-2
Medina High School, 3-7, 3-36–3-38
Moreland Hills Elementary School, 5-39

Nellie Stone Johnson Community School, 10-20
needs assessment
    and data collection, 1-23–1-29
    and interpreting data, 1-30–1-34
    and professional development, 1-39–1-42
Noble High School, 1-18
North Pole Elementary School, 13-13

Ohio School Design Manual, 5-33–5-38
oversight committee, 13-2–13-3

participants
    in development of design guidelines, 6-5
    in development of maintenance plan, 14-9–14-10
    profile sheets for, 3-25
partnering in construction contracting, 13-3–13-4
planning and building process, xvi–xvii, xix
planning committee
    composition of, 5-7, 5-9
    organization of, 5-3
    planning meetings, 5-8–5-9
post-occupancy evaluation
    importance of, 15-2
    sample forms for, 15-6–15-9
professional development, 1-39–1-42
program managers, 11-2
project architect, 10-2
project budget, example of, 12-3
project close-out, 13-10
project costs, 12-2–12-4
project delivery methods, 11-2, 11-14
construction management-at-risk, 11-6–11-9
design-bid-build, 11-3–11-6
design-build, 11-9–11-12
selection of, 11-12–11-13
project manager, 10-2, 11-2
project planning, xv–xvi
proposals for construction contracts, 11-2–11-3
punch lists, 13-10

qualified zone academy bonds, 12-12–12-13

Rayzor Elementary School, 12-16
Rebuild America, 9-3
Reece High School, 12-17
renewable energy, 9-13
renovation: See expansion of facilities
Richardson Elementary School, 13-14
schedules
   and design process, 10-14
   of values, 13-5
schematic design, 10-8–10-9
schools as center of community, 3-2–3-3
school boards, 5-10
school size
   and academic achievement, 2-3–2-5
   case study regarding, 2-10–2-12
   considerations of, 2-6
   and student alienation, 2-5
school-within-a-school
   examples of, 1-18, 2-16, 10-19
   value of, 2-4–2-5
School Works Toolkit, 3-10–3-13
security for technology, 8-9
site selection, 7-2–7-6
   and calculating acreage, 7-11
   case study of, 7-14–7-18
   criteria of, 7-7–7-12
   and design plan, 4-8
   and parking and traffic, 7-5–7-6, 7-11–7-12
   and size requirements, 7-10
   and Smart Growth, 7-3
   and state regulations, 7-7
   and sustainable design, 9-10
Smart Growth, 7-3
social capital, 3-2–3-3
soft costs, 12-2
space requirements
  example of, 5-18–5-20
  example survey for determination of, 4-15
Standard Bearer School Process, 1-13–1-14
structural-cultural change, 1-2–1-3
  external factors of, 1-4–1-6
  internal factors of, 1-3–1-4
student achievement
  and environmental influences, 5-5–5-6
  example of goals, 1-35
  example of intervention strategies, 1-36–1-37
  and facility condition, 14-2
  factors affecting, 1-3
  and parental involvement, 2-2
  and professional development, 1-39–1-42
  research on, 2-6–2-9
student demographics
  and educational planning, 3-19–3-20
  and site selection, 7-4–7-5
student enrollment, 4-5
student participation
  in design planning, 15-4
  in educational planning, 3-12–3-13
student performance
  and data collection, 1-23–1-29
sustainable design, 9-2
  components of, 9-6–9-14
  example of, 9-22, 14-9–14-14
  implementation of, 9-14–9-17
  and LEED certification, 9-14–9-17
  and operating costs, 9-4–9-2, 9-12, 9-14
  as teaching tool, 9-5–9-6
systemic change: See structural-cultural change
systemic change frameworks, 1-9

teachers, roles of, 1-5

technology
  and administrators, 8-3–8-4, 8-6
  benefits of, 8-2–8-4
  considerations of, 8-6–8-9
  definition of, 8-2
  determining need for, 8-13–8-15
  and disabled students, 8-8
  drawbacks to, 8-4–8-6
  example of implementation of, 1-19, 2-15
  in libraries, 8-8
organizational structure for, 8-11–8-12
planning for, 8-9–8-10
and professional development, 1-41–1-42
requirements for, 8-7–8-8, 8-14–8-17
role of, 8-7
and student achievement, 2-2–2-3
and student use, 8-2–8-5
and support personnel, 8-12–8-13
and teachers, 8-3, 8-5–8-6
Terrace Park School, 9-20–9-21
Thompson Middle School, 11-18
Timberline Middle School, 10-19
21st Century School Fund, 12-11
Two Rivers Middle Magnet School, 6-10

vision statements, 1-7, 1-22
visioning sessions, 3-17, 4-3, 5-21–5-22
volunteers for oversight committees, 13-2–13-3
voters and funding, 12-6–12-8

water efficiency, 9-14
Web sites, 13-2
West Woods Upper Elementary School, 15-4

Zack Elementary School, 10-18
zoning, 7-12