Index

A	peer comparisons, 271, 272
Absenteeism, health and, 374	in reading (See Progress in Interna-
Access, educational	tional Reading Literacy Study)
aspects of, 307	student-teacher ratios and, 372
barriers, obstacles and, 11-14,	teacher's qualifications and, 40
260–268	Addis Ababa Plan, for African Educational Development, 183–184
enrollment and, 69–70	• .
equity in, 100	AEC (African Education Commission), 182–183
gender disparities, 7	Africa
global, 72–73	Christian mission schools,
health and, 374	161–163
inequalities, 25	colonial period, 171-172
measures of, 44	GNP, 257–258
primary, 455	history of primary education, 126
private schools, 38	indigenous traditions, educational
progress in, 1-2	policy and, 198–202
race, ethnicity and, 168	postcolonial national education systems, 147–148
universal, 123 (see also Educational expansion)	postcolonial period, 147–148, 172, 182–185, 206
Access, Quality, Efficiency, and Equity	primary enrollment, 75–76
framework (AQEE framework), 321–322, 325, 338, 341, 343	promotion of nationalism, 248
Access, to health care services and	school expenditures, primary, 7
information, 10, 542	universalization and, 280
Accountability, 268, 278-283	vocational education in postcolo-
ACER (Australian Council for Educational Research), 343	nial states, 182–185
Achievement	African Education Commission (AEC), 182–183
inequalities, 25	Age
in mathematics and science (See	e
Trends in International Mathematics and Science Study)	boundaries, in compulsory education, 138–141
measures of, 41	at marriage, 516-517
opportunities to learn and, 304	Agricultural sector, educational benefits for, 244–245, 505–506

Alternative schooling, 135 development of, 17-18, 329 dissemination of results, 328 AMASA (Assessment of Mathematics and Science in Africa), 326–327, effectiveness of, 311 343 focusing on, 340, 343-344 Anemia, 551 format for, 317-318 Appraisal systems, for teachers, formative, 313-314, 340 324-325 Apprenticeships, 176-177 "forward-looking," 65 functions of, 18 AQEE framework (Access, Quality, Efficiency, and Equity framework), funding and, 17-18 321-322, 325, 338, 341, 343 high-stakes, 304 Arab states improvement constraints, 330-331 compulsory school laws, 132 improvements, 339 educational expansion, 250-251 inequities in, 329-330 gender parity in education, 76 influence, consequences of, Islamic resurgence in, 204 304-305 ARB (Assessment Resource Bank), international (see International 324 assessments; specific international assessments) Asia. See also Central Asia; East Asia and Pacific region; South Asia international initiatives, 335–338 colonial education, 171 item response theory, 334 postcolonial education, 172, motivation for change, 17 198-199 national (See National assessments) Assessment of Mathematics and Sciongoing concerns, 328-330 ence in Africa (AMASA), 326–327, 343 operational characteristics, 311-312 Assessment Resource Bank (ARB), 324 policies and practices, 304–305, 323, 341 Assessments, 303–344. See also specific assessments (e.g. AMASA, PIRLS, of progress, 17-18 TIMSS) public examinations, 315, aligned with national goals, 305 316-317 conceptual framework, 306–312 regional, 18 conducting, technical difficulties reliability of, 319-320 in, 330 role of, 313 content, 317-318 school-based, 314 costs of developing, 329 secondary education, 320-328 data quality, 341 stakeholder support, 340 definition of, 312–313

standardized tests, 317 summative, 313–314	variation in, measuring quantity of education and, 390
systemically valid, 309–312, 341	Attitudes, educational goals and, 16–17
technical quality, 318–320	Attrition bias, 406
technology role in, 332–335 test equating, 319	Australian Council for Educational Research (ACER), 343
types of, 314-317	Austria, 171
validity of, 318-319	
Attainment	В
Barro-Lee dataset, 54–58, 71, 79–82, 87–91	Backwash effects, of national examinations, 310
Cohen-Soto dataset, 55–58, 71, 79–80, 87, 89	Balsakhis remedial education program, in India, 394–395
data, 79–82	Barro-Lee dataset, 46
definition of, 47	attainment data, 54–58, 71, 79–82, 87–91
in developing countries, 236	completion rates, 59–61, 71,
of fifth grade schooling, 34 gender disparity, 79, 82	83–86, 91
maternal, mortality rates and, 57	discrepancies, 54, 58–59, 98
primary level, 53–61, 80–81, 100	quality of data, 100–101
secondary level, 59–61, 81–83,	vs. Cohen-Soto dataset, 46, 53–61
100	Belgium, 158, 171
student-teacher ratios and, 372	Birth rates. See Fertility rates
trends, 87–91	Blood pressure, education and, 549
variations in, 285	Brazil, 255, 274, 275
Attendance	Brown v. Board of Education, 159
compulsory (See Compulsory edu-	Buddhist schools, 150
cation)	Business, educational role of, 23
in developing countries, 390	
enrollment and, 3-4, 39	C
health and, 541, 542, 545, 547	Canada, compulsory school ordi-
intestinal parasite infections and, 446	nances in Northwest Territories, 133–135
payment for, 396–397	Capacity building, 67, 103, 337, 321
school meal programs and, 548	Capital cost estimates, 436
subsidies, 445	Capitalism, 238, 239, 283

Caribbean nations	national assessments, 323
income classifications, 485	school voucher system, 374-375,
primary education costs, 421–425, 439–444	403 China
primary enrollment, 75	compulsory school laws, 132
school-age population, 485	educational expansion, 249
school expenditures, primary, 7	religious values in modern educa-
UPC progress, 416-421, 451	tional practices, 164
Cash incentives, for school completion, 376–377	"revolutionary" schooling, 520–521
Central America, compulsory educa-	work-study programs, 188
tion laws, 130	Christian mission schools, 150,
Central Asia	161–162, 164
income classifications, 485–486	Church-state relations, 250–251
primary education costs and, 421–425	Cigarette smoking, education and, 551
primary school expenditures, 7	Classroom-based assessments, 341
school-age population, 485–486	Classroom construction costs, 436
UPC progress, 416–421, 450–451	Class size, xiii, 360
Centralized education systems, 151–153, 156, 166. See also	Clientelism, 253–255
	Cognitive development
Decentralization	domains, for TIMSS tests, 63
CEPAL (Comisi Ûn Econ Ûmica para AmÈrica Latina de las Naci Ûnes	health and, 547-549
Unidas), 205	Cohen-Soto dataset, 46
Chartering role, of education, 518–519	attainment data, 55–58, 71, 79–80, 87, 89
Children	completion rates, 59-61, 71, 83,
elite, advantages of, 508	84, 85, 91
health outcome, maternal educa-	discrepancies, 54, 58-59, 98
tion and, 550-551, 552, 553	quality of data, 100–101
height of, 550	vs. Barro-Lee dataset, 46, 53–61
in labor force, 261	Colombia
mortality rates, xvi, 538	randomized educational evalua-
students (see Students)	tions, 362–362
unenrolled number of, xi,	voucher system, 375–376, 362 Colonial America, compulsory school
Chile	legislation, 127–128

Colonial governments, Christian mis-Compulsory school legislation sion schools and, 161-162 in Colonial America, 127-128 Common-school movement, 145 duration of schooling and, 140 Common Tasks of Assessment (CTA), health impact of, 549 327 particularities, 133-136 Communication technology, 19-20 timing and passage of, 128–133 Communist countries "Conditional cash transfers," 275 educational reforms, 188-190 Conflict resolution skills, 16 national education system, Convention on the Rights of the 145-147 Child, 11 Competition, educational expansion Corruption, educational expansion and, 247 and, 12-13, 253, 254 Completion rates. See also Universal Costa Rica, education achievements, primary completion 271, 272 Barro-Lee dataset, 59–61, 71, Cost-effective programs, 389–390 83–86, 91 remedial education programs, Cohen-Soto dataset, 59–61, 71, 394-395 83, 84, 85, 91 school-based health programs, data, 83-86 18–19, 389, 390–394 gender disparity, 83, 86 Costs. See also Expenditures poverty and, 233 of assessment development, 329 primary, 84-85, 265 as assessment improvement consecondary, 85-86, 86 straint, 331 trends, 91-92 for family, reducing, 274-275 Comprehensive high school, 178–179 non-teacher, 425 Compulsory education of primary education (see Primary age boundaries, 138-141 education costs) comparative historical survey, of randomized evaluations, 361, 126 - 127403-404 development, 125-126, 198-199 reducing, school participation and, 395-396 duration, 140 of secondary education (see Secemergence, 124-125 ondary education costs) family socialization and, 128-129 teacher-related, 425 in newly independent countries, for universal primary and second-136-138 ary education, 20-22 prolongation of, 138–141, 170 "Credential inflation," 506 time factors and, 39

Credentialing, public examinations for, 316–317	D
,	Dakar Framework, 303
Credentialism hypothesis, 503	Data
Criterion-referenced standardized tests, 317	on attainment, 79–82
Cross-country comparisons. See also specific cross-country comparison studies	barriers and obstacles to obtaining, 103
	capacity to produce, 52, 67, 103, 337, 321
of educational indicators, 68	collection, 36–38, 44
item response theory and, 334 literacy rates, 37, 44, 47	comparability, 53–61, 66–68, 70–72, 80–86
misleading information from, 48	databases for measuring quality
prospects for, 65-67	and quantity, 46 (see also Barro-
purpose of, 41	Lee dataset; Cohen-Soto dataset)
variations in, 283–284 CTA (Common Tasks of Assessment),	disincentives for accurate reporting, 103
327	dissemination, political resistance
Cuba	to, 277
educational expansion, 249	on educational expansion, 523
educational reform, 188–190	from educational indicators, 68–70
"revolutionary" schooling in, 520–521	(see also Indicators, educational) failure to provide, 13
Cultural capital, education and, 10	gaps in, 38–39
Cultural revitalization movements, 269–270	input measures (See Input measures)
Culture	international, shortcomings of, 67
biases against technical subjects, 185	outcome measures, 37, 38, 43, 68, 69
compulsory school laws and, 135–136	output measures (See Output measures)
diversity, policy recommendations	on participation, 39
and, 201–202	on performance, 277
dominant, 145 in modern educational practices, 164	process measures (See Process
	measures)
Curriculum narrowing ("teaching to the test"), 17, 377–378	quality of, 100–101, 341
	research directions and, 105
	sources, 45–67

statistics, reliability of data and, 49 educational improvements (see Assessments) UNESCO, 45-50 educational interventions (see Decentralization Interventions, educational) consequences of, 166 education in (see Education; spein national education systems, cific aspects of education) 151 - 153health, education and (See Healthprivate schools and, 14, 156-157 education relationship) questions for further study, 25 low-income (see Low-income countries) World Bank and, 196 middle-income (see Middle-income De-contextualization, 201-204 countries) Demand for education, 259-273 opportunities, educational (see competing crises and, 259 Opportunities, educational) electoral politics and, 270-272 political obstacles to educational expansion (see Political presfemales and, 399-401 sures and obstacles) ideological competition and, secondary education in (see Sec-269 - 270ondary education; Secondary income levels and, 260-265 education costs) information and, 268-269 Development. See Socio-economic development organization and, 264-265 universalization and, 251 De-worming programs, 373–374, 390-394, 547 weak, 273 Disabilities, education and, 549 Democratic education, 167–168, 172 Discrimination, absence of, 308 Democratization Distance learning, 19 educational expansion and, 271-272, 496, 517-521 Domestic rivals, neutralizing, 249 - 253of secondary education, 191 Dropout rates, xi, 52, 102, 256 Demographics. See also Population changes, female literacy rates and, Е 262-263 USAID Demographic and Health East Asia and Pacific region Survey, 51 educational expansion, 239 Developing countries. See also specific gender disparity in secondary developing countries enrollment, 78–79 attainment in (see Attainment) income classifications, 484 educational expansion (see Educaprimary education costs, 421–425, tional expansion) 439-444

East Asia and Pacific region (cont.) health and (see Health-education relationship) primary enrollment, 75 history (see History, of educational private schools, 154–155 efforts) school-age population, 484 as humanitrian and development school expenditures, primary, 7 goals foundation, xi UPC progress, 416-421, 450 as human right, 11, 123, 245, 246, Economic benefits indicators (see Indicators, educaindividual welfare, educational tional) expansion and, 496, 502-507 political obstacles and pressures of schooling, 39 (see Political pressures and of universal primary and secondary obstacles) education, 9 private (see Private schools) Economic development. See Socioas public good, 244-245 economic development Educational expansion Economic mobility, education and, 508 barriers, 260–268, 273 Ecuador, compulsory school laws, clientelism and, 253-255 consequences of, xv, 521-524 "Educated-Unemployed-Gramsci" controversies, 231, 521-522 phenomenon, 251 corruption and, 12-13, 253, 254, Education. See specific aspects of 253, 254 agenda for future research, 23-25, costs to teachers and beneficiaries, 277-278 assessments (see Assessments) cross-national research, 125 consequences of (see Health-educadegree of, 252-253 tion relationship; Socio-economic development) demographic change and, 261-262 costs (see Costs) ethnic inequality and, 510-511, current global status of, 2-7, 521 - 52270 - 99extent, compulsory school legislademocratic, 167-168, 172 tion and, 131 facts and data on (see Data) fertility rates and, 261-263 funding of (see Financing) financing of, 285 future trends, 23, 99-106 gender inequality and, 508-509 general vs. health-specific, globalization and, 237-240 551-553 health and, 496, 511-517 goals (see Goals, educational) historical legacies and, 14

human capital stock and, 496, national (see National education 497-502 systems) individual economic welfare and, performance, weak accountability 496, 502–507 mechanisms for improving, 274 national economic development religious values and, 165 and, 246 UNESCO data, 47 nation building, national solidarity variations in, 283-284 and, 150 Efficiency, educational, 276–277, 308 patronage and, 253-255 Egypt, 204 political decision-making, 496, Elective principle, 178–179 517-521 Electoral politics, demand for educain postcolonial states, 171–174 tion and, 270-272 quality improvements and, Elitist education 101-102 historical legacies, 167-168 quality of education and, 284 public schools and, 144, 154 rationales for, 8-11 Employment, education and, 25, resources and, 123 502-507, 514-515 routes for, 246 Emulation, educational expansion "self-generating" forces, 232-233 and, 247 social inequalities and, 496, England 507-511, 508 colonial governments, Christian speed of, 283-284 mission schools and, 162 variations in, 233–236 national education system, Education-economic growth concept, 144-145 194-198 public schools, 154 Education for All Initiative, 197, vocational training, 175-178 495-496 Enrollment Education stocks, 47, 53-61 access to education and, 69-70 Education systems attendance and, 3-4 centralized, 151-153, 156, 166 compulsory school laws and, 131 cross-country comparisons (see current and 2015 estimates, 72-73 Cross-country comparisons) in developing countries, 4, 5-6 human resources, 325 exaggeration of, 39, 68 improvements, data-driven, 342 gender gaps in, 4 international, de-contextualization and, 202-204 gross enrollment ratio, 2, 3 internationalization of, 192-198 gross national product and, 497-500

Enrollment (cont.)	Europe. See also specific European
health and, 373, 548, 551	countries
incentives, 39	colonial, 190
increasing, costs requirements for, 478–480	compulsory education laws, 129 education systems, religious values
as input measure, 47, 50–56	and, 165
as measure of educational expansion, 44, 50–56, 69–70	income classifications, 485–486 national education system,
net, 34	144–145
net enrollment ratio, 2–3, 4	"national elites," 249
nutrition and, 548	national school systems, 141, 142
primary education (see Primary	postcolonial states, 190
enrollments)	primary education costs and,
quality of education and, 4	421–425
school choice initiative, 401-403	primary enrollment, 75
secondary education (see Sec-	primary school expenditures, 7
ondary enrollments)	school-age population, 485–486
service sector growth and, 238	shift from elitist to inclusive educa tion, 168–171
statistical shortcomings of, 68–70, 72–79, 98–99	UPC progress, 416–421, 450–451
subsidies, 445–446	vocational education and training, 180–182
survival rates and, 50	Evaluations
under-reported, 13, 39	
UNESCO data, 49	definition of, 313
universal primary, estimates of, 426–434	randomized (see Randomized eval- uations)
wealth gaps in, 4, 7	Examination systems
Entry age, for compulsory education,	as benchmark outputs, 41
138–141	national entry, 169
Equal education opportunity, 169–170	secondary education, 327
Equity-based analysis, 191–192	Exit age, for compulsory education, 138–141
Equity of opportunity, 44, 191, 308–309	Expenditures, educational, 480–482
Ethnic inequality	global, 3
educational expansion and, 510–511	on increase school space, 475, 477–478
scarcity of data on, 44	

market reforms in Latin America and, 241–244	fertility rates (see Fertility rates)
	literacy rates, 262-263, 505
on primary education, in develop- ing countries, 7	scholarship programs for, 399-401
primary level, in developing coun-	school fees and, xii
tries, 7	Ferry Law of 1882, 154, 158
secondary education (see Sec-	Fertility rates
ondary education costs) trade and, 240	educational expansion and, 261–263
unit cost of education (spending	education and, 9, 514-516, 543
per student), 257–258, 456–460	health and, 537-538
Expertise, state-level, 275–276	maternal educational attainment and, 514–516, 550
External validity, of randomized eval-	population growth and, 511
uations, 356, 364–365, 404–405	Financing
F	assessments and, 17-18
	centralized public, 156
Fairness, validity and, 319	corruption and, 12-13
Family income, demand for education	domestic resources, estimates of, 438, 439–444
and, 260–261	political obstacles, 12
reducing educational costs for, 274–275	private, 38
socialization, mass schooling and,	for private schools, 155–156
128–129	quality of education and, 40
subsidies, for schooling, 274	questions for further study, 23
Father, educational status of, 550, 552	secondary education, 325
"Fear of education," 238, 251–252	state-run, 231
Females	UNESCO data, 48
	of universal education, xv-xvi, 22
completion of education, xii, 549	Flip charts, 379
discrimination against, 260, 509	Foreign direct investments, 239
economic disincentives for education, 11–12	Formative assessment, 340
educated, economic benefits for, 9	France
educational improvements, effects on health outcome, xi	colonial governments, Christian mission schools and, 162
educational opportunities for, 312	compulsory school laws, 132

GNI (gross national income), and
education finance, 22 GNP (gross national product), 240,
257–258, 265, 497–500
Goals, educational. See also Millennium Development Goals
applying rigor toward, xiii–xiv, xvi
attitudes, 16–17
knowledge, 16
loyalty, to state, 248–249
proposed, 15
questions for further study, 23
skills, 15–16
universal primary completion (see
Universal primary completion)
universal primary education (see Universal primary education)
universal secondary education (see Universal secondary education)
Government. See also specific govern-
mental agencies and organizations
constraints and incentives, xiv–xvi
(see also Political pressures and obstacles; Politics)
corruption, education funds and,
12–13
education advocacy, 245-246
educational expenditures, 231
education purchases, 68-69
Grade repetition, 39, 435, 474
Gross enrollment rate (GER), 2, 3, 50, 281
in 2015, 110
calculation of, 233n
estimates, 436-437
family costs for schooling and, 274
UNESCO data, 107-108
WDI data, 458

Gross national income (GNI), educa-Health programs, school-based, 18-19, 389, 390-394 tion finance and, 22 Health-seeking behavior, education and, 550, 552 Η Health services, school-based, 542 Harambee schools, 281 Helminth infections, de-worming Hawthorne effect, 407 programs, 373-374, 390-394, Health. See also Health-education 547 relationship High-income countries, 21–22 anemia, 551 High Schools that Work Initiative, cognitive development and, 541 definition of, 537 High-stakes tests, consequences of, development and, 537 High-technology firm investment indicators, 537-538 sites, educational attainment levels information, 512-513, 542 and, 237 mental, income and, 543 History, of educational efforts, 14, 123 - 127mother and child, relationship of, 541, 544 comparative historical scholarship, obesity and, 552 compulsory mass schooling (see population growth and, 537-538 Compulsory education) USAID Demographic and Health compulsory school legislation (see Survey, 51 Compulsory school legislation) Health-education relationship global education system, internaconsequences of expansion and, tionalization of, 192-198 496, 511-517 legacies of elitist and democratic education effects on health, xi, education, 167-174 542-543, 549-554 lessons from comparative sociohealth effects on education, xi, historical analysis, 198-207 541-542, 547-549 national school systems (see importance of, 536-540 National school systems) infant mortality and adult literacy, in secondary education, 174-192 539-540 vocational education (see Vocapolicy making and, 538-539 tional education and training) questions for further study, HIV/AIDS 543-545 education and, 541, 548, 551-554 randomized evaluations, 10, education of females and, xi 372-374, 380-381, 546 health information, xi, 539 research methods, 545-547 orphans, 435-436

HIV/AIDS (cont.)	voucher systems (see Voucher sys-
teachers infected with, 430-431,	tems)
437–438, 548	weak, 283
UPC estimates and, 430-432	Inclusivity, definition of, 308
Human capital stock, 523, 524	Income
Human resources, secondary education, 325	classifications, country-specific, 485
Human right, education as, 11, 123, 245, 246, 537	country-level, compulsory education duration and, 140
I	demand for education and, 260–265
IALS (International Adult Literacy Survey), 41, 44, 46, 523	as educational expansion barrier, 265–268
IBE (International Bureau of Educa-	enrollment and, 466, 497-502
tion), 138, 192	gross national, 22
IDB (Inter-American Development	health and, 542-543
Bank), 33	mental health and, 543
Ideological competition, demand for education and, 269–270	secondary education costs and, 466–469
IEA. See International Association for the Evaluation of Educational	TIMSS scores and, 466-469
Achievement	India
IFPRI (International Food Policy Research Institute), 397	Balsakhis remedial education program, 394–395
IIEP (International Institute of Edu-	compulsory school laws, 132-133
cational Planning), 195, 332	de-worming program, 405
Illiteracy, 1, 3	economic development, 68
IMF (International Monetary Fund),	educational expansion, 261
240	primary completion rate, 433
Immunization rates, maternal education attainment and, 513–514	school participation, school-based health programs and, 392–394
Incentives, for educational expansion	test movement in, 305–306
cash payments, 376–377	Indicators, educational
for education data production, 68	assessment data, 306
political, 231, 236–237	assessment for policy and, 305
questions for further study, 23	cross-country comparisons, 68
state-based (see State-based incentives, for educational expansion)	databases (see Barro-Lee dataset;
for teachers, 377-378	Cohen-Soto dataset)

health-related, 512-513, 542 data collection for, 44 data-oriented research directions, Information technology, 19-20 Innovations, educational, 173–174 data quality of, 100-101 Input measures ease of measurement vs. applicabilassessment for policy and, 305 ity, 42-43 attainment rates (see Attainment) getting better data for, 104–105 completion rates (see Completion health-education interaction and rates) (see also specific educational cross-country comparisons, 68 indicators) description of, 37, 38-40, 43, 69 input measures (see Input measures) duration of schooling, 140 outcome measures, 37, 38, 43, 68, education stocks, 53-61 enrollment (see Enrollment) output measures (see Output measimproving quality, accuracy, reliability of, 276-277 PIRLS results, 96-98, 99 listing of, 43 process measures (see Process repetition rate, 39, 435, 474 measures) state-society partnerships and, scarcity of, 4 278 - 279TIMSS results, 92-96, 99 UNESCO data, 47, 536 UNESCO data, 44 vs. process measures, 36n Indira Gandhi National Open Univer-"Intention to treat" parameter, sity, 19 365-366 Indonesia Inter-American Development Bank primary education, 433-434 (IDB), 33 school-building project, 370–371 Internal validity, 356, 363 Industrialism hypothesis, 507–508 International Adult Literacy Survey (IALS), 41, 44, 46, 523 Inefficiency rates, in schools, 255–256 International assessments. See also spe-Inequalities cific international assessments ethnic, 44, 510-511 function of, 315-316 gender-based (see Gender dispari-Monitoring Learning Achievements in Africa Study, 325 poverty and (see Poverty) national decision-making and, 15 Infant mortality, 538-540, 550 participation in, 342-343 Information use of data from, 343-344 dissemination of, 328

global-country level tensions, 103

International Association for the Evaluation of Educational Achievement	randomized evaluations (see Randomized evaluations)
(IEA) cross-national studies (see Progress in International Reading Literacy Study; Trends in International Mathematics and Science	Intestinal parasite infections
	attendance and, 446
	de-worming programs for, 373–374, 390–394, 547
Study)	Investments, educational
founding of, 195	data for, 68
testing of educational quality, 61–65	efficiency of, 235
International Bureau of Education	health and, 541
(IBE), 138, 192	input measures, 536
International Food Policy Research	private and social returns on, 245
Institute (IFPRI), 397	public, 34, 38
International initiatives, 335–339	rationale for, 495-496
International Institute of Educational	wastage rates, 256
Planning (IIEP), 195, 332	Iron supplementation, 547
International measurements of educational status, 3	IRT (item response theory), 334
International Monetary Fund (IMF), 240	ISCED (International Standard Clas sification of Education), 38, 45, 47, 51
International organizations. See also specific international organizations	Islamic countries. See Muslim countries
compulsory education in newly independent countries,	Italy, 171
136–138	Item response theory (IRT), 334
education advocacy, 245	
institutionalization of global education system, 192–198	J Japan
universalization and, 283	compulsory school laws, 132
International Project on Technical and Vocational Education (UNE- VOC), 185	cultural values in modern educational practices, 164
International Standard Classification	national education system, 146
of Education (ISCED), 38, 45, 47,	John Henry effect, 407
51	Jules Ferry Law of 1882, 154, 158
Interventions, educational. See specific educational interventions	
quasi-random evaluations, 381	K
	Kenya

cost-sharing system, 274	compulsory education laws, 130
educational data, 51	cross-sectoral alliances, 276
enrollment, growth of service sector and, 238	decentralization policies, 152–153 166, 200
Harambee schools, 281	educational models, 149
primary enrollment, 281	education spending, market reforms and, 241–244
school-building project, 371	gender disparity in secondary
school fee elimination, xii, xv	enrollment, 78
school meals program, 398	income classifications, 485
school participation, school-based health programs and, 392–394	national education systems, post- colonial, 148–150
teacher incentives, 377–378 Koranic schools, 160, 172	national unity, minority cultures and, 149–150
L	postcolonial education, 148–150, 198–199
Labor force	primary education costs, 421–425, 439–444
children in, 261	primary enrollment, 75
earning capacity, 42	privatization, 156
educated, 204, 237	school-age population, 485
female participation, 509, 514	school expenditures, primary, 7
time spent, vs. time in school, 39	secondary education, 172–173
uneducated, 237, 238	self-managed schools in, 282–283
Labor market competition, globalization and, 237–238	social spending in, 239–240
Labor unions	student performance, 269
	UPC progress, 416–421, 451
as educational expansion barrier, 264, 265–268	U.S. foreign direct investment in, 237
teacher's, 266–268	
Language	Learning
of instruction and/or assessment, 329–330	accountability for, xiii
national, imposition of, 145	opportunities for (<i>see</i> Opportunities, educational)
skills, 16	out of school, 24
Latin America	questions for further study, 25
benefits of universalization on state	Length of school year, 135
efforts, 280	Life expectancy, primary enrollment ratios and, 511–512

Literacy rates	gender disparity in, 94, 96
cross-country comparisons, 37, 44, 47	international assessments (see Program for International Student
definition of, 41	Assessment; Trends in Interna- tional Mathematics and Science
democratic political systems and, 518	Study)
in developing countries, 3	MDG. See Millennium Development Goals
economic benefits of, 505	Measurement
female, 262–263, 505	definition of, 312–313
infant mortality and, 539-540	for progress assessments, 36–37
International Adult Literacy Sur-	Mental health, income and, 543
vey, 41, 44	Meritocratic ideal, 168–169
quality of education and, 34	Mexico
Literacy standards, 312	conditional cash transfers, 275
Loans, educational, 242-243	definition of education, 206
Low-income countries	PROGRESA program, 364, 376,
costs for secondary education, 475–476	377, 396–397
costs of universal education, 21	Middle East
definition of, 416	income classifications, 484
educational expenditures, 480–482	primary education costs, 421–425, 439–444
financing of universal education,	school-age population, 484
22	school expenditures, primary, 7
listing of, 483–486	UPC progress, 416-421, 452
UPC progress, 416–418	Middle-income countries
	definition of, 416
M	educational expenditures, 480-482
Madrassas, 160–161, 165, 172	listing of, 483-486
Malawi, 274	unit costs for secondary education,
Malnutrition, 551	475–476
Management of schools, 40	UPC progress, 416–418
Marital age, education and, 516–517	Millennium Development Goals
Marshall Plan, 179–180	(MDG). See also Universal primary completion; Universal primary
Mass schooling, compulsory. See Compulsory education	education
Mathematics education	adoption of, 415, 535
	progress indicators, 34, 39, 52

second, xi, xiii, 33	education systems, 165–167, 172, 206
MLA Africa Study (Monitoring Learning Achievements in Africa Study), 325	secondary education in, 173
Models, educational	N
de-contextualized, 201–204	National Assessment of Educational
international, inadequacy of,	Progress (NAEP), 321
204–206	National assessments
in Latin America, 149	Chile, 323
local context and, 204–206	focus of, 18, 315
Monitoring Learning Achievements in Africa Study (MLA Africa Study),	increased use of, 336
325	information from, 321, 341
Mortality rates	systemic validity and, 310
adult, education and, 511, 512,	National education systems
538, 549	centralization in, 151-153
child, 538	contemporary patterns, 155-157
infant, 538–540, 550	decentralization in, 151-153
maternal, 511, 512, 538	institutional structures, 506-507
Mothers attainment, health outcome of	in newly independent countries, 162–163
children and, 550–553	in postcolonial states, 147–151
health, child's health and, 541, 544	private-public school tensions,
immunization rates by attainment, 513–514	state-religious conflicts, 157–163
mortality rates, education and,	National good, education and, 244–245, 246
511, 512, 538	National Institute for Literacy, 312
Multinational firms	Nationalism promotion, 248-249
pressure for educational expansion, 240–244	National language, imposition of, 145
wages and working conditions,	National school systems
237–238	critical need for, 143-144
Multiple conjunctural causation, 284	early models of, 142-147
Muslim countries (Islamic countries)	formation, 141-142
educational expansion, 250-251	National Science Foundation, 62
education in, 159–161, 164–167, 202	Nation-state model, compulsory mass education and, 129, 131

NER. See Net enrollment rates	ODA (official development assis-
Net enrollment	tance), 22
data, 74–75, 111–115	OECD. See Organization for Economic Co-operation and Develop-
primary, 75-79, 233	ment
UNESCO data, 73–74	Official development assistance
Net enrollment rates (NER), 2-4,	(ODA), 22
107–115	Opportunities, educational
costs of secondary education and, 465–473	access to education and (see Access, educational)
by country, 111–115	disparities, 304
by gender, 111–115	economic welfare and, 496,
per capita income and, 466	502–507
WDI data, 458	educational reforms and, 508
Netherlands, 171	equity failures and, 319
NGOs (non-governmental organiza-	equity of, 191, 308-309
tions), 196, 207	for girls, 312
"No Child Left Behind" legislation, definition of scientific research,	Organization for Economic Co-operation and Development (OECD)
Non-governmental organizations	equal education opportunity, 169–170
(NGOs), 196, 207 Norm-referenced standardized tests,	formation of global education system and, 194, 195
317	international assessment (See Pro-
North Africa	gram for International Student Assessment)
income classifications, 484	output data, 536–537
primary education costs, 421–425, 439–444	Program for International Student
school-age population, 484	Assessment (PISA), 44
school expenditures, primary, 7	project on Definition and Selection of Competencies, 321
UPC progress, 416-421, 452	secondary education reform in
Northwest Territories, compulsory school ordinances in, 133–135	post-war Europe, 179–180
Numeracy, 16, 44	Organized interest groups, as educational expansion barrier, 265–268
O	Outcome measures, 37, 38, 43, 68, 69
Obesity, 552	Output measures, 269
Occupation, education and, 506–507	assessments for policy and, 305

benchmarks, 41	Performance indicators, generation of 276–277
cross-country comparisons, 68 description of, 37, 41, 43, 69, 536	Perpetual inventory method, 56
_	Phelps-Stokes Fund, 182
drop-out rates, 256 literacy rates (<i>see</i> Literacy rates)	PIRLS. See Progress in International Reading Literacy Study
numeracy, 16, 44 process measures and, 40–41	PISA. See Program for International Student Assessment
push-out rates, 256 scarcity of, 99	Policy recommendations, for local institutions, 201–202
testing of educational quality, 61–65	Political economy model, of project implementation, 366–368
UNESCO data, 47	Political market imperfection, 271, 273
P	Political pressures and obstacles, 10, 12
Pacific island nations. See East Asia and Pacific region	for educational expansion, 231–233
Pagoda schools, 150 Pakistan, school-building project, 371	emulating and surpassing peers, 247
Parents	globalization, 237-239
circumstances and incentives of, realistic view of, xiv	from multilateral organizations, 240–244
father, educational status of, 550,	sources, 236–237
552	spread of ideas and, 244-246
of healthy children, 541	Politics
internationally comparable data	clientelism and, 253-255
for, 68	compulsory education and, 129
mothers (see Mothers)	corruption and, 253, 254
Parochial schooling. <i>See</i> Schooling, at religious institutions	in creating national education systems, 143–144
Partial equilibrium effect, 356–357, 365	cross-country comparisons and, 66
Participation data, 39	decision-making, educational expansion and, 496, 517–521
Partnership for Educational Revitalization in the Americas (PREAL),	in educational centralization, 153
104	educational expansion and, 10,
Patronage, 253–255, 283	232–233, 264
Peer comparisons, of education achievements, 247, 271, 272	enhancement of participation, edu cation and, 149

Politics (cont.)	from multinational organizations,
funding of education and, 12	240–244
incentives for expansion, 13, 236–237	political (see Political pressures and obstacles)
patronage and, 253–255	sources of, 236–237
power of international ideas and, 244–246	Preventive health care, maternal education attainment and, 513–514
pressures, for educational expansion, 231–247	Primary education
	access, 455
in randomized evaluations,	attainment, 80-81
361–362	completion rates, 52-61, 84-85
realistic view of, xiv-xvi	data, lack of, 13
resistance to dissemination of edu- cational data, 277	definition of, xii
teacher salary scales and, 278	development, 33
Population	enrollments (see Primary enrollments)
education and, 514-517	global spending on, 3, 421–425
fertility decline and, 511	government expenditures, 231
health and, 537-538	gross enrollment ratio, 2
new World Bank UPC cost esti-	health improvements and, 553
mates, 434–435	ISCED level 1, 45, 47
school-age, 135, 262	net enrollment, 2–3, 75–77
Post-World War II educational initiatives, 180	repetition rate, 474
Poverty. See also Income	Primary education costs, 415–452.
consequences, 1	See also World Bank Universal Primary Completion cost estimates
as educational expansion barrier,	current, 421–425
260–261, 275	
primary enrollment and, 7	simulations, 439–444
quality of education and, 505-506	Primary enrollments
PREAL (Partnership for Educational Revitalization in the Americas),	cross-country comparisons, 100, 130
104 Pressures, for educational expansion	gross national product and, 497–500
	net, 75–79, 233
education as public good concept and, 244	poverty and, 7
emulation or competition with peers, 247	in private schools, 155
	progress in, 389

vs. secondary enrollments, 77-78	international comparisons, 65-67
Private schools	organization of, 64-65
decentralization and, 14, 156-157	participation in, 66
educational access and, 38	professional development, 339
funding for, 155-156	quality of education and, 92,
increased interest in, 156	96–98
primary enrollments, 155	Protestant reformation movement, compulsory education and, 128
questions for further study, 25	Prussian education system, 143, 144,
secondary enrollments, 155	154, 193
vouchers for, 401-403	Psychometrics, 334
vs. public schools, 142, 154–155, 358–360	Public examination systems, 315–317 321, 327
Process measures	Public health, education and, 39
cross-country comparisons, 68	Public investment, in education, 34,
description of, 37, 40-41, 43, 69	38
output measures and, 40-41	Public school system, 124
purpose, 40	elitist, 144, 154
UNESCO data, 47	inefficiency, 253–255
vs. input measures, 36n	societal role of, 202
Program for International Student	vs. private schools, 142, 358–360
Assessment (PISA)	Push-out rates, 256
characteristics of, 316	
competencies and, 65	Q
cross-country comparisons, 65–67,	Quality of education
329	assessment of, 72
data, 44, 46, 71	components of, 307-308
professional development, 339	cross-country comparisons,
PROGRESA program, Mexico, 364, 376, 377, 396–397	235–236
Progress, indictors of. See Indicators,	data on, 46, 67
educational	educational expansion and, 284
Progress in International Reading Lit-	enrollment and, 4
eracy Study (PIRLS)	financing and, 40
characteristics of, 316	further research directions, 105
core skills and, 71	getting better data for, 104–105
data, 44, 46, 72	improvements, 8, 20, 101-102

Quality of education (cont.)	of cash incentives, 376–377
indicators of (see Indicators, educa-	of class size, 360
tional)	control groups for, 356, 358, 366
innovations, randomized evaluation of, 377–380	costs, 403–404
of instruction, 235	educational quality innovations, 377–380
lack of data on, 102-103	ethics of, 356, 358–359
literacy rates and, 34	external validity, 356, 364–365,
measures, 46	404–405
obstacles to better data, 103	of health-education relationship,
output measures and, 37	372–374, 546
poverty and, 505-506	internal validity, 356, 363
purchasing decisions and, 68-69	interpretation of effects, 365–366
rate-of-return studies and, 504	of large-scale projects, 362
reallocation of resources and, 272	limitations of, 380
in rural areas, 505-506	political economy model, 366–368
standardized tests and, 61–67, 235–236	politics and, 356, 361–362, 366–38
variations in, 235–236	potential for, 358, 380
vs. quantity of education, 20, 25,	problems with, 404–405
34, 40, 101–103	project implementation, political economy model of, 366–368
Quantity of education. See also Access	sample-selection problems, 406
attendance variations and, 390	of school infrastructure develop-
databases on, 46	ment, 368, 369–372
improving, 20	selection bias elimination and,
purchasing decisions and, 68–69	359–360
vs. quality of education, 20, 25, 34, 40, 101–103	speed vs. comprehensiveness, 380
Quranic schools (Koranic schools),	spillover effects, 407
160, 172	student-teacher ratios, 372
	subgroup variability, 406
R	treatment group, 356
Racial disparities, 44	treatment intensity and, 365-366
Randomized evaluations, 18–19,	under-utilization, 19, 360-365
355–358	of voucher systems, 374–377
administrative data for, 363	vs. retrospective evaluations,
attrition bias, 406	406–407, 408

Rate-of-return studies, 503-504	Savings, pro-efficiency argument and,
Reading, PISA survey, 65	256
Reforms, educational	Scandinavian comprehensive schools, 170–171
opportunities to learn and, 508	Scholarship programs, for girls,
opposition to, 273	399–401
supply-side, enhancement of, 275–276	Scholastic theology, 160
	School attendance. See Attendance
Religion. <i>See also</i> Schooling, at religious institutions	School-based assessments, 314, 327
policy recommendations and, 201–202	School-based health programs, 18–19, 389, 390–394
Remedial education programs, 389,	School choice, 401-403
394–395 Remittances, 24	School construction, individual earnings and, 503–504
Repetition rate, 39, 435, 474	School fee elimination, xii, xv, 395–396
Reproductive health, education and, 551, 552–553	Schooling, at religious institutions
Research	Buddhist schools, 150
non-experimental designs, 358	Christian mission schools, 159
questions for further study, 24	compulsory mass schooling and, 127–128
scientific, definition of, 355	local schools, 159
Resources	Madrassas, 160–161, 165, 172
allocation for assessments, 312	modern education and, 163–167
inefficient use of, 273	postcolonial national education
Retrospective evaluations, 406–407,	systems and, 148, 150–151
408	privatization and, 156
Rural areas	secular education and, 142
enrollment subsidies for, 445–446 quality of education, 505–506	tension with secular education,
	157–163
0	School meal programs, 397–398, 548
S	School participation
Salaries, of teachers, 277–278	definition of, 390
Sample-selection problems, in retro- spective and randomized evalua- tions, 406	government-subsidized school meals and, 397–398
SAPs (Structural Adjustment Programs), 197	provision of school uniforms, 398–399

School participation (cont.)	core curriculum, 322
reducing education costs and, 395–396	costs (see Secondary education costs)
remedial education program and, 394–395	data, lack of, 13
	demand for, 8, 33-34
school-based health programs and, 392–394	enrollments (see Secondary enrollments)
Schools	entrance criteria, 322
availability of, 432-433	European models, types of, 181
health interventions, 544	evolution of gross enrollment in,
health services, 542	233–235
infrastructure development, 368,	examination systems, 327
369–372	exit exams, 322–323
management of, 40	expansion in postcolonial states,
questions for further study, 24	171–174
self-managed or Harambee, 281	facilities, 325
as social and political change agents, 203–204	fertility rates and (<i>see</i> Fertility rates)
variations in, 283-284	financial resources, 325
School uniforms, 398–399	gender disparities, 78–79, 81–83,
Science education	86
international assessments (see Pro-	global spending on, 3
gram for International Student Assessment; Trends in Interna-	government expenditures, 231
tional Mathematics and Science Study)	guides, frameworks, materials for, 321
PISA survey, 65	historical transformation, 174-175
research, definition of, 355	human resources, 325
in technical and vocational train-	incorporating science into vocational training, 175–178
ing, 175–178	in Latin America, 172-173
Secondary education, 174–192	post-World War II reform, 169–171, 179–182
assessments, 322–328, 323	
attainment, 81–83	quality of life and, 320
challenges of, 320–321	skills training in, 328
completion rates, 59–61, 85–86, 86	social stratification and, 181
	speed of expansion, 233
comprehensive high school and, 178–179	systems and structures, 326-327

teaching force, 323–325 universal (see Universal secondary education) Secondary education costs, xii-xiii, 455-489 best-practice countries, 487–488 calculations, 473–482 education finance variables and, 467-473 enrollment rate increases, 478-480 net enrollment rates and, 465-473 per capita income and, 466–469 school space expenditures, 475, 477-478 service delivery and, 467-473 study population, 460–465, 483-486 unit cost method, 456-460 Secondary enrollments gender disparity in, 78-79 gross enrollment ratios, 501-502 gross national product and, 497-500 international capital and, 237 in private schools, 155 rates, 325-326 vs. primary enrollments, 77–78 Secular education, tension with religious institutions, 142, 157–163, 166

Selection bias, elimination, 359-360

Self-managed schools, state-society

Self-motivation, for education, 238,

Service sector growth, enrollment

Sexual health education, 552-553

cooperation and, 281-283

239

and, 238

Social capital, education and, 10 Social factors, in educational expansion, 232–233 Social inequalities, educational expansion and, 496, 507-511 Socialist countries, expansion of "revolutionary" schooling, 520-521 Social services, quality and quantity of, 268 Society-based demand, for education. See Demand for education Socio-economic development drivers of, 535-538 educational disincentives, 11–12 educational expansion as, 123, 521 - 522education and, 67, 497-502 health-education relationship and (see Health-education relationship) national, education and, 497–502 questions for further study, 24 World Bank UPC cost estimates, new, 435 South Africa, 323, 324, 326, 327 South Asia gender parity in education, 76–77 income classifications, 484 primary education costs and, 421 - 425primary enrollment, 74 primary school expenditures, 7 private schools, 154-155 school-age population, 484 unit cost of education, 257 UPC progress, 416-421, 452 World Bank primary education cost estimates, 439-444

Southern African Consortium for Monitoring Educational Quality, 17	information technology for, 19-20
	internationally comparable data for, 68
South Korea, 38	outcomes, health innovations and,
Soviet Union, 145–146, 188	373
Spain, 158	performance of, 40, 236, 269
Spending. See Expenditures	Subgroup variability, in retrospective and randomized evaluations, 406
Sri Lanka, compulsory school laws, 132	Sub-Saharan Africa
Standardization	gender disparity in education, 77
American educational model and,	income classifications, 483
194 growth of national school systems	primary education costs, 421–425, 439–444
and, 141–142	primary enrollment, 74
Standardized tests	school-age population, 483
content, 317–318	school expenditures, primary, 7
criterion-referenced, 317	secondary enrollment, 77–78
format, 317-318	UPC progress, 416–421, 449–450
norm-referenced, 317	Subsidies
problems with, 66-67	for school enrollment, 445
quality of education and, 235-236	school meal, 397–398
State-based incentives, for educational expansion	Supply-side educational reforms, enhancement of, 275–276
clientelism, 253–255	Systemic validity, 309–312, 341
efficiency and, 255–259	Systemization, of educational
neutralizing domestic rivals, 249–253	processes, 141–167
promotion of nationalism, 248–249	T
State-society cooperation, 275–276, 278–283	Taiwan, school-building project, 370 Tanzania, xii, 281
Statistics, educational, 34–35, 48	Taunton Commission, 175
Structural Adjustment Programs	Teachers
(SAPs), 197	appraisal systems, 324-325
Students	autonomy, 40–41
achievement of (see Achievement)	costs of, 425
cost of educating (<i>See</i> Unit cost of education)	data on, 47

standardized (see Standardized HIV/AIDS-infected, 430–431, 437-438, 548 tests) inability to monitor or sanction, Textbook implementation, random-255 ized evaluation of, 378-380 Thailand, 238 inadequately trained/underpaid, Time information technology for, 19-20 spent in school, 39, 504 number of, estimates for, 436 Time-series data, on costs of secondprofessional development, ary education, 459 341-342, 343 TIMSS. See Trends in International Mathematics and Science Study questions for further study, 24 salaries, 277–278, 437–438 Totalitarian states, 249 shortages, projected, 8 Trade, education expenditures and, 240 technology-based training centers for, 332-333 Traditional educational practices, 18 training programs for, 323–324, Transfer rates, from primary to secondary education, 74 Teachers' unions, 266-268 Transnational agents, educational policv and, 199-200 "Teaching to the test" (curriculum Transnational institutional mechanarrowing), 17, 377–378 nisms of diffusion, 246 Technology Trends in International Mathematics information technology, 19-20 and Science Study (TIMSS) questions for further study, 24 achievement variations and, 236 for randomized evaluations, 362 benchmarking and, 44 role in assessments, 332-335 characteristics of, 316 Tertiary education data and results from, 46, 64, 71, enrollment, 497-502 72, 336, 462–465 entrance, 323 developing countries in, 41 spending, primary completion funding, 62 rates and, 265 international comparisons, 65–67 Testing participation in, 66 definition of, 313 professional development and, 339 technology-based, 332-335 quality of education and, 92-96 Tests scores, income and, 466-469 high-stakes, consequences of, 330 secondary research, 343 as output measures, 41 study population countries, 486 test content dimensions, 63

U vocational education and training, 184, 185 UBASE. See Universal basic and sec-**UNESCO** Institute for Statistics ondary education (UIS) Uganda data quality and, 104 educational data, gaps in, 38-39 educational indicators, 67-68 elimination of primary tuition fees, xii, 274-275 functions of, 49, 106 enrollment in, 39 Global Education Digest, 45, 50, gross enrollment ratios in primary education, 281 UNEVOC (International Project on Technical and Vocational Éduca-UIS. See UNESCO Institute for Station), 185 tistics UNICEF, 21, 51, 245, 246, 427-428 UNESCO Unification of state education system, conferences, 137-138, 205 data, educational, 45-50 Unions. See Labor unions educational access measures, 44, Unit cost of education (spending per student) education and economic developgross national product and, 240, ment studies, 195 257-258, 265, 497-500 enrollment data, 50, 70-71 methodology, 456-460 equal education opportunity, variations in, 257 169 - 170United Nations institutionalization of global education system and, 193-194 Children's Fund (see UNICEF) International Project on Technical Development Programme, 62 and Vocational Education, 185 education-economic growth con-International Standard Classificacept and, 194-195 tion of Education, 38 Universal Declaration of Human Rights, 11, 123, 136-137 net enrollment data, 73-75, 111-115 United States school fee data, xii comprehensive schooling in, secondary education reform in 178-179 post-war Europe, 179–180 compulsory education laws, 129 - 130Southern African Consortium for Monitoring Educational Qualforeign direct investment in Latin ity, 17 America, 237 1998 Statistical Yearbook, 41, 48 National Center for Education Sta-UPC estimate, 428-430 tistics, 62 UPSE cost estimates, 21 state educational systems, 145

state-religious education conflicts, 158–159	Universal primary completion (UPC), 447–452
Universal basic and secondary educa-	costs of, 444-447
tion (UBASE), 1–26	as Millennium Development Goal,
case studies, 70–99	415
challenges of, 7–8	obstacles for, 11–14
comparative historical strategy and, 126	primary education costs and, 421–425
costs and financing, 20-22	problems with estimates, 430-434
current status, 2–7	progress to date, 416-421
indicators for (See Indicators, edu-	questions for further study, 415
cational)	UNESCO estimate, 428-430
obstacles in achieving, 11–14	UNICEF estimate, 427-428
overcoming obstacles and meeting the challenge, 14–20	World Bank estimate, early, 426–427
rationale for, 8–11	World Bank estimate, new,
remaining work and research ques-	434–444
tions, 23–25	Universal primary education (UPE)
Universal Declaration of Human Rights (1948), 11, 123, 136–137	costs, 20–22
Universal education (universalization)	economic benefits, 9
benefits, 280	as goal, 1, 2, 33
causes and trade-offs, 283–285	obstacles and barriers to, xiii
changes needed for, 26	Universal secondary education
historical development, 123–126,	achieving, 482
198–199	costs and practicality of, xiii, 20-22
as human right, 11	economic benefits, 9
multiple conjunctural causation,	obstacles for, 11–14
284	rationale for, 8–11
obstacles and impediments, xii, 11, 273–274	target dates for achieving, 475
rationale for, 8–11	UN Millennium Development Conference, 2000, 1
research questions related to, 23–25	UPC. See Universal primary completion
socio-historical analysis, 198-207	UPE. See Universal primary education
steps toward, xiii-xvi, 14-15	USAID Demographic and Health
world-historical perspective, 124	Survey, 51

V	WHO (World Health Organization),
Validity	537
of assessment, 318–319	Women. See Females
construct-irrelevant variance and,	Workforce. See Labor force
318–319	World Bank
construct underrepresentation and, 318–319	cost estimates for universal education, 21
external, 356, 364-365, 404-405	data quality and, 104–105
internal, 356, 363	decentralization and, 196
systemic, 309-312, 341	educational funding, 62
Values, educational, 23	Education for All Initiative,
Vocational education and training	495–496
(VET)	education-related lending, 240–241, 243, 244
controversy, 185–187	
in Europe, 180–182	globalization and, 239
expansion policies, 191	policies, 192
funding, 184	randomized implementation and, 355
incorporating science into, 175–178	teacher salary scales, 278
in newly independent countries,	tertiary education and, 197
183 outcomes, 184–185	vocational education and training, 184, 185
postcolonial states, 182–187	World Development Indicators, 546
-	World Development Report, 245,
in postcolonial states, 182–187	268
vs. academic education, 200	World Bank Universal Primary Com-
Voucher systems	pletion cost estimates
Chilean, 374–375, 403	assumptions, 434–435
Colombian, 375–376, 362	early, 426–427
private school, 401–403	equations, 435-439
randomized evaluations of, 374–377	simulations, 439-444
randomized lotteries, 362–363	World Conference on Education for All, Jomtien, Thailand (1990), 1, 33, 197
W	World Development Indicators (WDI), 457–458
WDI (World Development Indicators), 457–458	World Education Forum, Dakar,
	Senegal, xii, 1

World Health Organization (WHO), 537

Worm infections, de-worming treatment programs for, 373–374, 390–394, 547