

CHAPTER 3

ASSESSING LEARNER PERFORMANCE: EQUITY – QUALITY TRADE-OFFS

A nation's capacity to provide an Education of Quality For All will depend more than ever upon its success in guaranteeing a defined and acceptable minimum learning experience for all its citizens, irrespective of their gender, regional, socio-economic and cultural differences or disparities. Providing universal access to basic education opportunities, and at the same time, assuring that the basic learning competencies of all learners are met still remains a dream for most African educational systems. These everlasting challenges are not always studied empirically. The human rights to a minimum quality of basic education for all in Africa remain the main concern of this chapter.

Attending school hardly means having an equal chance to learn and to succeed. The World Conference on Education for All held in Jomtien, Thailand, in March 1990, challenged the very notion of formal education, pedagogy and teaching and learning processes with a view to providing new perspectives on quality of education for all. More recently, a similar approach was used by the International Commission on Education for the Twenty-first Century "Learning: The Treasure Within" [Delors et al. 1996]. Four pillars of Learning were introduced namely, Learning to know, Learning to do, Learning to live together, and Learning to be.

Africa has a unique and historical opportunity to raise its voice at the dawn of the 21st century with an assessment of the quality of education for all. Independent of the specific contexts of each participating country in the EFA 2000 Assessment's exercise, additional attempts are made here to critically examine several learner performance indicators. Rigid procedures have been designed and implemented as described in Chapter Two in order to ensure the comparability of the results from the 1999 Monitoring Learning Achievement [MLA] project. The learner performance profiles of the participating African countries are examined in the first Section of this Chapter. The most salient feature of any single or composite indicator of African education development is the marked between- and within- country differences. This aspect is underestimated in most regional or comparative educational surveys and research studies. In order to ensure that both aspects of equity and quality of educational opportunities are assessed and reported, this section presents detailed profiles of learner performance across the region for the countries surveyed in 1999.

Hardly ever has any regional survey opened up the examination of 'learning achievement' so as to allow for a specific assessment of a minimum level of knowledge, skills and competencies of learners as compared to the desirable level to be reached by all using a criterion-referenced testing approach. The strength of the MLA survey resides in this approach which has been developed over time. Since 1992, pupils have been assessed in the three learning areas of Literacy, Numeracy and Life Skills. This approach is made operational through the measurement of a minimum level of mastery learning measurement of a desirable level of mastery learning [MML] on the one hand, and the measurement of a desirable level of mastery learning [DML], on the other. In the second section of this chapter, MML and DML results of the countries are presented and discussed.

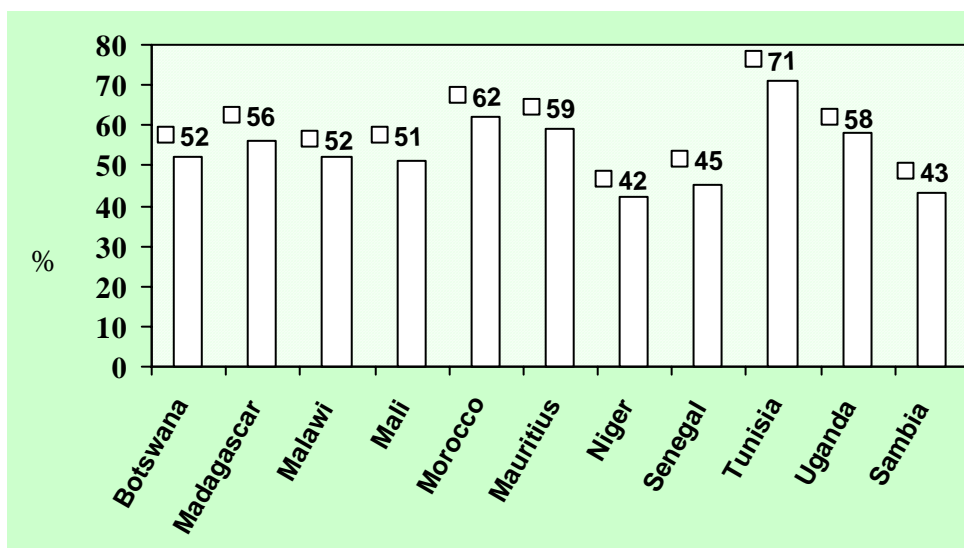
For the majority of African learners, many structural and personal factors work against access to an equal quality of education for all. In the third section of this Chapter, many more intensive between- and within-

country analyses are carried out to examine learner performance across gender [boys v/s girls], geographical [rural v/s urban], and school type [public v/s private] divisions. Finally, a short presentation of selected results from the previous MLA surveys [1993-1998] in the African region is given.

ACHIEVING QUALITY OF EDUCATION FOR ALL - LEARNER PERFORMANCE PROFILES ACROSS THE REGION

Most African countries started to invest heavily in their human resources immediately after their independence. Their major educational policies were, in the first place, oriented towards nation building of the “critical mass”. These countries could not conceive of policy without an emphasis on the provision of equal educational opportunities for all. Despite tremendous efforts made since the 1960s, the inherited educational backlog of the majority of African countries has neither been adequately redressed, nor sufficiently improved in qualitative terms. Furthermore, equity-quality trade-offs have not yielded optimal results in most African educational systems. Comparisons of learning achievement across the African countries surveyed in 1999 may lead to a better understanding of how each country fared in improving student knowledge, skills and competencies after controlling for gender in terms of equity and redress, and for learning opportunities in terms of access. Since learners differ in many ways as individuals, at home, at school and in the community they belong to, the main tasks of the educational system and sub-systems are to adapt teaching and learning in order to meet these different needs and opportunities.

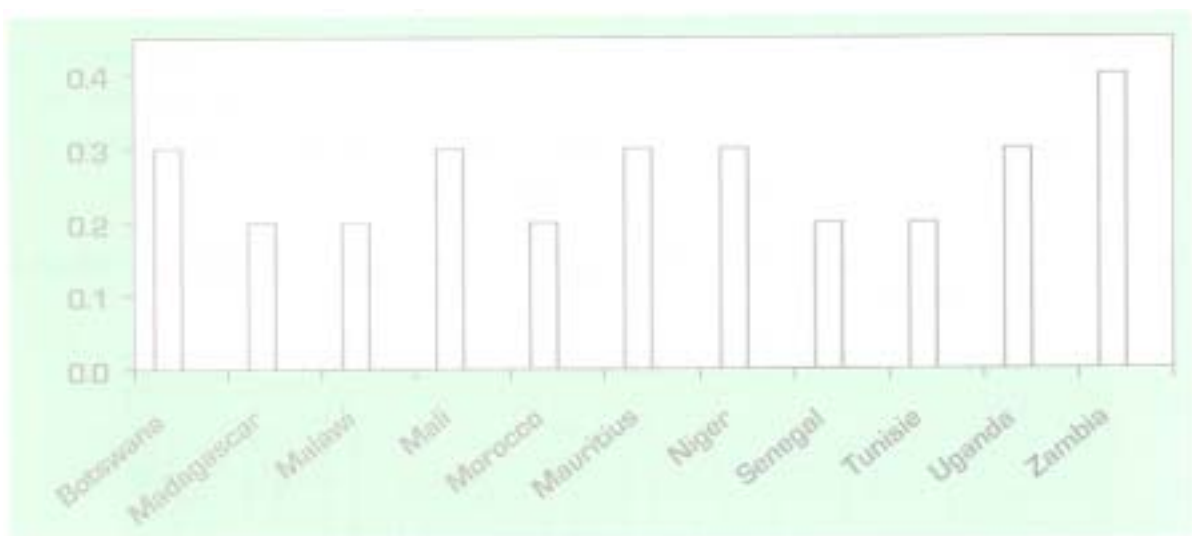
FIGURE 3-1: MEAN OF COMBINED LIFE SKILLS, LITERACY AND NUMERACY SCORES BY COUNTRY



The comparison of learner performance scores [a combined measure of the mean scores in Literacy, Numeracy and Life Skills] across the 11 countries shows how marked the between- country differences are [Figure 3.1]. For instance, a between-country difference as large as 30 mean points in national scores is observed from the highest achieving country [Tunisia] to the lowest achieving country [Niger]. However, having a higher national mean achievement score does not always guarantee improvement in the elimination of between- learner performance differences. Firstly, the results show that countries with higher mean scores do not always succeed in eliminating differences in learners' performance, as is the case in Mauritius and Uganda. Secondly, countries with the lowest performance profiles [Niger and Zambia] also have the highest differences in the performance of learners. The last group of countries are those portraying a picture which is rather mixed, notably showing high learning achievement profiles with low between-learner

performance differences in some countries, and low learning achievement profiles with high between-learner performance differences in other countries. The heterogeneity-homogeneity continuum of the surveyed African countries' with regards to learner performance profiles i.e., the between- and within- countries differences, can easily be examined from the results in Figure 3.2. We have used the coefficients of variation ¹[CV] as a summary measure for this purpose, i.e. the lower the coefficients are, the more homogeneous the learner performance score distribution in the country. The higher the coefficients are, the more heterogeneous the learner performance score distribution in the country proves to be. This measure serves our purpose of assessing countries, and thereby ensuring their progress towards the twin goals of providing educational access and quality of learning for all. Two interesting profiles emerge from the analysis. Madagascar, Malawi, Morocco, Senegal and Tunisia have been relatively more successful in assuring equal access and higher quality of education for all than Botswana, Mali, Mauritius, Niger, Uganda and Zambia have been.

FIGURE 3-2: COEFFICIENT OF VARIATION BY COUNTRY



One major policy recommendation can be drawn from the above-mentioned findings. Quality of education for all in Africa should no longer be a perpetual dream. It can be an attainable reality, provided that genuine efforts are made to address the problems of educational access in the light of the quality of education offered, and to successfully reduce observed between - and within - country differences in students' learning.

To what extent has Africa Realised the 1890 Jomtien Goals Towards Quality Education for all? A Regional Attempt

This section addresses the most pertinent concern of the Educational For All 2000 Assessment, namely how has the Jomtien Framework of Action for the World Declaration of Education for All been evaluated. Is there any available evidence to attest to this? The response to this question is a definite "yes", at least in the area of quality education for all, because the MLA [1992-1999] surveys are specifically designed to respond to Article 4 of the Jomtien Declaration as mentioned earlier. This Africa regional report is a direct outcome of the efforts and processes followed at regional, national and sub-national levels which, through intensive capacity-building mechanisms moves us towards the Jomtien imperatives for African learners and for African education as a whole. "With Africa For Africa" is not only the title of an interesting story to be

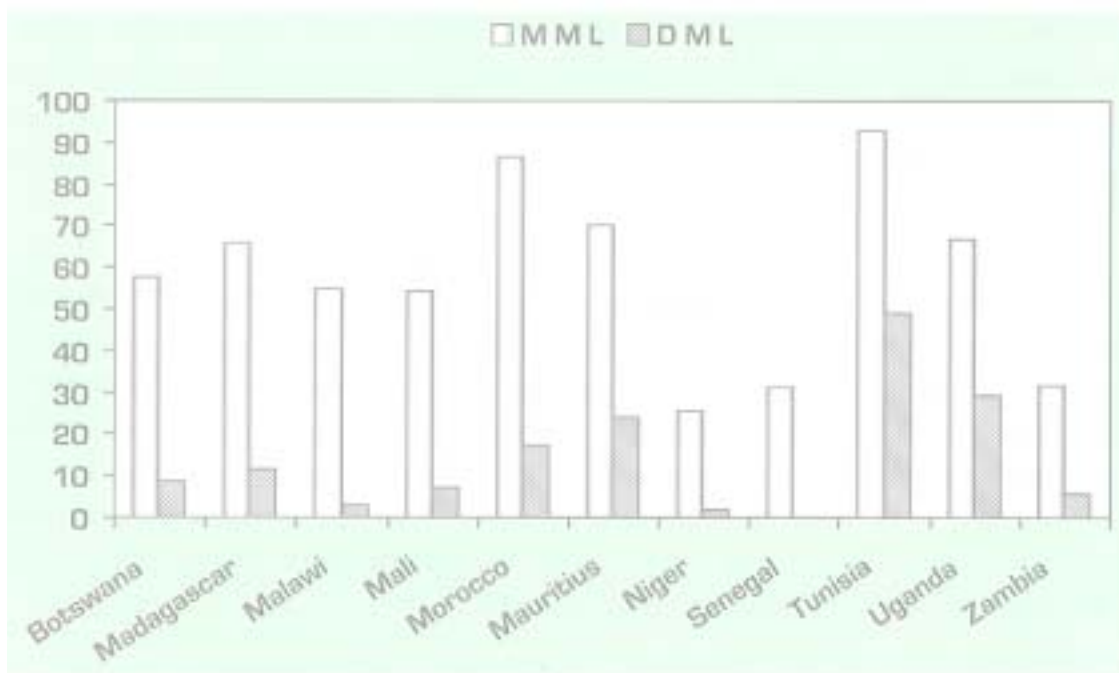
¹ The coefficient is calculated by dividing the standard deviation with the mean

told and heard, but it is also a reality that all MLA teams have lived with, are living with, and will live with in the future. The MLA movement can only grow because of its evident strengths: an emphasis on building, strengthening and sharing sustainable national capacities for a ‘critical mass’ of expertise; its focus on the quality of learning for all within a learner-centred approach; and its action-oriented interventions in the areas of policy, curriculum, teaching, learning and assessment.

In the foregoing section, the MML and DML concepts were introduced and their measurement properties explained. Based upon the Jomtien principle that an agreed percentage of an appropriate age cohort of learners should attain or surpass a defined level of necessary learning achievement, the participating countries in the 1999 MLA survey in Africa have agreed on 50% of the correct scores for the minimum level of mastery learning [MML] and 70% and above of the correct scores for the desired level of mastery learning [DML]. For the MML, it was suggested that at least 80% of the age cohort should reach that level to satisfy the target set at Jomtien in 1990.

“Mastery learning” as such, is neither a new concept nor a revolutionary one. Unfortunately, it has not been taken far enough beyond the theory and the rhetoric. MML and DML were hardly practised in Africa and were therefore not optimally used in order to guide intervention in areas such as: assessment, curriculum reforms and improvement in teaching and learning, just to mention a few of them. Within the generic framework of quality education for all, mastery learning should serve two purposes. First, it should guarantee quality learning over a life-time through continuous monitoring and corrective measures [the diagnostic-therapeutic continuum], and second, it should reach the often marginalised mass of learners who turn out to be forced “failures”, “dropouts” and “pushouts” of the educational systems. The formation of elites is often achieved at the cost of the mass of learners. However, ensuring the minimum learning needs for all [MML] should be the first step towards excellence [DML]. The MML and DML results of the combined tests of Literacy, Numeracy and Life Skills for the 1999 MLA surveys in 11 African countries are shown in Figure 3.3.

FIGURE 3-3: MINIMUM AND DESIRED LEVELS OF MASTERY LEARNING



Two countries [Morocco and Tunisia] have exceeded the Jomtien target, with 87 % and 93% respectively, while Niger, Senegal and Zambia have remained far behind it with only 26%, 31% and 32%, respectively. The remaining countries have achieved varied success in approaching the defined target, from 70% in Mauritius to 54% in Mali. An important question follows from these results. Can the same target be applied to markedly different countries? Should educational achievement be treated without due reference to achievement in other pertinent areas such as politics, history, economy, culture and demography? The DMLs of the respective countries may provide us an indirect measure of how achievable this target can be if all the external and pedagogical conditions are optimally met. With the few exceptions of Tunisia, Morocco, Mauritius, Uganda and Madagascar, 9 out of 10 students surveyed in the participating countries have not yet reached the desired level of mastery learning.

TABLE 3-1: PERCENTAGE OF LEARNERS WHO ATTAINED THE MINIMUM [MML] AND DESIRED [DML] LEVELS OF MASTERY LEARNING

	Combined		Literacy		Numeracy		Life Skills	
	MML	DML	M.M.L	D.M.L	M.M.L	D.M.L	M.M.L	D.M.L
Botswana	57.8	8.7	46.2	6	55.4	5.4	71.8	14.9
Madagascar	66.1	11.7	56.9	20.6	34.4	5.6	97.3	60.3
Malawi	54.9	3.0	15.3	1.4	30.7	1.4	95.4	69.4
Mali	54.4	7.3	50.4	13.1	37.9	6.2	69.8	23.7
Mauritius	70.3	24.1	75.5	35.4	69.4	26.4	69.9	32.4
Morocco	86.6	17.2	85.9	45.5	63.6	25.5	72.2	23.1
Niger	25.6	2.0	39.3	3.6	15.3	5.7	44.9	7.0
Senegal	31.2	2.0	45.6	6.7	22.9	3.0	36.3	7.0
Tunisia	92.6	49.2	95.1	70.8	31.6	33.0	95.1	56.7
Uganda	54.4	14.4	64.3	23.3	41.9	10.2	78.8	51.1
Zambia	31.9	5.6	37.8	7.3	19.9	4.4	49.0	26.1

The MMLs and DMLs of the 11 countries across the three learning areas, Life Skills, Literacy and Numeracy are presented in Table 3.1. The situation becomes more complex at this level as it reveals certain concrete interventions that are specific to the learning areas and not to the global learning achievement trends observed earlier. In Life Skills, Madagascar, Malawi, and Tunisia met the Jomtien target, in Literacy only Morocco and Tunisia, whereas in Numeracy none of the 11 countries met the target. The DMLs of the different learning areas show that only in very few cases have half of the students attained the desired level.

Reaching an acceptable quality of education for all, the Jomtien target for minimum mastery level - is not an impossible task in Africa. The evidence shows that some countries in this survey have even gone beyond that target, and others are coming closer, while a few still have a long way to go. Much more improvement will be needed in both Literacy and Numeracy. In the latter learning area, not a single country has reached the Jomtien target. Without improving and sustaining a minimum level of mastery learning in all the learning areas at all Grades, Africa's education system may continue producing elites [1 out of 10 students]. Unfortunately, it will at the same time continue reproducing a massive number of "failures", "dropouts" and "pushouts".

How does Learner Performance Differ Across Countries?

To date, there is not a single comparative study of basic education in Africa which during one and the



assessment methods, but not to replace them. For this very reason, basic learning competency levels were established for the three learning areas, i.e. Literacy, Numeracy and Life Skills and a criterion-referenced approach was used. It should be noted, however, that the 1992-1998 MLA Surveys were based on country-specific items [see discussion at the end of this chapter] while the 1999 MLA African surveys have both common-core and country-specific instruments. Pilot-testing, standardisation and normalisation procedures were fully exploited to assure the comparability of the test items for data analysis and report writing [See Chapter Two and Appendix B, Tables 1 and 2].

The experience from earlier MLA surveys in some 15 developing and developed countries during the period 1992-1998 showed one major consistent pattern of learner performance across these three different learning areas, namely that students' performance in Life Skills was much higher than their performance in Literacy and in Numeracy despite historical, socio-economic, cultural and educational differences between the participating countries. Detailed results are given in Appendix C.

As a next step in the analytical approach, it was expected that some common as well as some specific patterns will be observed across the different learning areas in the 11 African countries surveyed. The information may lend to the improvement of assessment practices, teaching-learning processes and curriculum development through focusing on the unique and complementary patterns in the findings for the three different learning areas. The results are shown in Table 3.2. Firstly, the highest mean achievement scores in the

	Life skills		Literacy		Numeracy	
	Mean	SD	Mean	SD	Mean	SD
Botswana	56.0	15.0	48.0	15.0	51.0	15.0
Madagascar	72.1	10.3	54.7	21.2	43.7	17.4
Malawi	77.0	14.0	35.0	14.0	43.0	14.0
Mali	56.9	19.1	51.8	19.4	43.6	16.8
Morocco	62.3	16.2	67.6	15.5	56.4	18.9
Mauritius	58.0	20.0	61.0	21.0	58.5	19.2
Niger	47.7	17.6	41.1	18.9	37.3	15.8
Senegal	46.7	16.2	48.9	18.1	39.7	15.6
Tunisia	74.7	13.4	77.9	15.1	60.4	18.4
Uganda	66.8	20.3	58.7	17.6	49.3	18.1
Zambia	51.0	23.0	43.0	18.0	36.0	17.0

three learning areas are 77, 78 and 60 for Life Skills, Literacy and Numeracy, while the lowest ones are 47, 35 and 36 respectively. Secondly, in the majority of countries the student performance scores are the lowest in Numeracy as compared to their scores in Life Skills and Literacy. Comparisons of the highest and lowest mean achievement scores across the three learning areas show a 29 mean-point score difference in Life Skills [between Malawi the highest, and Senegal the lowest]; a 43 mean-point score difference in Literacy [Tunisia being the highest, and Malawi being the lowest], and a 24 mean-point score difference in Numeracy [Tunisia being the highest, and Zambia being the lowest]. It is worth noting that the relatively big differences across countries in Literacy are accounted for by the medium of instruction and learning among other factors. Countries whose learners have their mother tongue as medium of instruction and learning, namely Tunisia, Morocco and Madagascar, outperformed the others in most learning areas. Mauritius, the overall fourth performing country is an exception to the rule where instruction and learning take place in two foreign languages simultaneously namely, English and French.

A closer look at the within-country learner performance profiles in the three different learning areas shows more complex, but revealing patterns. The three highest achieving countries [Tunisia, Morocco and Mauritius] do not always perform at equally high levels in all three learning areas. A similar concern exists for the profiles of the three lowest achieving countries [Niger, Senegal and Zambia] which also reveal fluctuations in performance across the learning areas. A controversial picture is found among the remaining five countries. Nearly all countries have a high between learner performance difference in Numeracy and Literacy, while nearly half of them have much lower differences in Life Skills. In the latter case, the results of the previous MLA surveys are confirmed. There are smaller differences between learners from the different countries in terms of their performance in the Life Skills learning area than in the Numeracy and Literacy learning areas. These salient features from the regional analysis further support reservations concerning rigid across-the-board applications of education policy “solutions” undertaken in Africa. Unfortunately, this policy rigidity continues to persist through support from both external and internal educational role players.

The inconsistent patterns of learner performance observed across the countries and between the three different learning areas point at one constant. This statement should be supported by the results of the path analysis in Chapter Five. More attention should be given to curriculum planning, teacher education and training, and textbook development to identify only a few areas for intervention. Teaching and learning outcomes are not only influenced by the specificity of a particular country, its teachers and learners, but equally by the specific characteristics of each and every learning area.



How Learner Performance Differs Across Each Learning Domain in the Different Countries

Further analyses of the learner performance profiles are needed in order to provide guidelines for teaching and curriculum development in the specific learning areas. The MLA Surveys have serious concerns about the role of examinations in failing and passing students without proper diagnosis of their different capacities and weaknesses. For this reason, since 1992 considerable emphasis has been given to the development of domains of learning in order to generate more holistic and comprehensive assessment procedures. A number of actors in every country were called upon to develop, pre-test and validate a whole battery of test items for every domain in each learning area. Consequently, following a criterion-referenced approach as mentioned earlier, specific items were developed to measure every domain as one single unit of mastery learning. This process was based on the principle that most pupils should know at least 50% [MML] or 70% and above [DML] of the content in

TABLE 3-3: LEARNER PERFORMANCE PROFILES BY COUNTRY AND BY LEARNING DOMAIN

	Mean per domain									
	Literacy				Numeracy			Life Skills		
	Vocabulary	Compre hension	Grammar	Writing	Numbers	Measurement	Geometry	Health	Civics & Environ	Science & Technology
Botswana	70.0	53.0	49.0	27.0	53.0	39.0	54.0	54.0	69.0	49.0
Madagascar	53.0	72.0	48.0	56.0	49.0	32.0	43.0	80.0	72.0	76.0
Malawi	54.0	37.0	35.0	23.0	42.0	43.0	47.0	78.0	80.0	70.0
Mali	85.0	57.0	43.5	45.3	34.1	49.9	48.3	56.2	58.1	55.6
Mauritius	86.0	68.0	57.0	49.0	61.0	51.7	61.1	56.0	66.0	55.0
Morocco	76.9	98.7	65.8	57.9	47.2	55.6	70.6	61.6	65.3	56.8
Niger	80.6	50.5	43.2	32.7	35.9	42.6	45.8	46.2	48.7	48.5
Senegal	75.2	48.4	48.7	36.1	28.9	39.4	38.4	47.6	48.4	40.6
Tunisia	74.5	81.4	76.4	77.8	63.3	54.8	70.3	70.2	79.6	72.1
Uganda	80.0	62.0	59.0	47.0	48.7	47.6	52.6	68.4	66.3	64.0
Zambia	72.0	45.0	49.0	28.0	36.0	35.0	37.0	52.0	52.0	48.0

each domain [the strict minimum at a given grade and time for every learning area]. Life Skills consisted of three learning domains - Health, Civics and Environment, Science and Technology; Literacy of four learning domains -Vocabulary, Reading Comprehension, Grammar, and Writing; and Numeracy of three learning domains - Numbers, Measurement, and Geometry. The definitions, properties and procedures for constructing the domains have been already elaborated on in Chapter 2 and more detailed information is given in Appendix B, Tables 1 and 2.

A detail analysis of the learner performance profiles across the 11 countries should offer more appropriate yardsticks for educational decision-making, implementation strategies and corrective measures for the assurance of quality education for all. The more specific the results, the more relevant the observations and recommendations for actions become. The results in Tables 3.3 can be used for this end. We have chosen to report only the major policy-relevant trends here. Firstly, students from the different countries performed consistently high or low in specific domains for given learning areas. In Life Skills, higher performances are recorded in the Civics/Environment domain; in Literacy the Vocabulary domain is higher: and in Numeracy, the Geometry domain reflects a higher performance. A similar trend appears of lower performance for Science and Technology in the Life Skills learning area,

for Written expression in Literacy, and for Measurement in Numeracy. Secondly, the between-country comparisons of the highest and lowest mean achievement in given domains of the same learning area

TABLE 3-4: LEARNING IMPROVEMENT INDICES BY COUNTRY AND BY LEARNING

	Coefficient of variance for each domain									
	Literacy				Numeracy			Life Skills		
	Vocabulary	Compre-hension	Grammar	Writing	Numbers	Measurement	Geometry	Health	Civics & Environ	Science & Technology
Botswana	0.39	0.32	0.65	0.67	0.32	0.46	0.41	0.31	0.35	0.47
Madagascar	0.66	0.35	0.54	0.43	0.41	0.75	0.47	0.18	0.19	0.25
Malawi	0.52	0.46	0.66	0.91	0.38	0.49	0.57	0.22	0.21	0.29
Mali	0.20	0.42	0.59	0.57	0.57	0.49	0.48	0.45	0.36	0.41
Mauritius	0.28	0.28	0.49	0.57	0.35	0.43	0.40	0.38	0.42	0.45
Morocco	0.38	0.04	0.34	0.42	0.47	0.45	0.31	0.33	0.26	0.39
Niger	0.34	0.51	0.78	0.66	0.51	0.60	0.54	0.47	0.39	0.49
Senegal	0.42	0.46	0.67	0.67	0.50	0.54	0.61	0.39	0.41	0.54
Tunisia	0.36	0.19	0.29	0.23	0.34	0.44	0.34	0.23	0.19	0.28
Uganda	0.31	0.32	0.49	0.58	0.41	0.47	0.46	0.34	0.38	0.38
Zambia	0.42	0.44	0.65	0.89	0.53	0.57	0.68	0.50	0.52	0.52

showed marked differences between the countries. In Life Skills, for example, the highest mean achievement score [80] was found in the Civics/Environment domain for Malawi and the lowest one [40] i.e. half as much, in the domain of Science and Technology for Senegal. In Literacy the highest mean achievement score was found in Reading Comprehension for Morocco [98] and the lowest in Grammar for Malawi [23]; and in Numeracy, the highest mean achievement score was observed in Geometry [71] for Morocco and the lowest score, in Measurement for Madagascar [32].

Needless to say, there is much more to report on this regional analysis, but the aim is to allow countries to understand where their strengths and weaknesses are in the attainment of quality learning for all by using such benchmark measures. Other important features of the learner performance profiles in the different domains are presented in Table 3.4. The results show that there are very high between-student variations at the domain level. These point to the fact that quality education for all can only be ensured on the condition that educational role-players can properly understand the dynamics of the teaching-processes where learners remain at the centre as a target for any interventions, be it at the curriculum, teaching, and learning environment level. The evidence shows that not a single country has been successful in maintaining the expected balance in the trade-off between equality of educational opportunities and quality learning at the level of the domains. The following example serves to illustrate the point. In Morocco the coefficient varies from 0.04 in a given domain [Reading Comprehension] to a coefficient of 0.47 in another domain [Numbers]. In Madagascar the coefficient varies from 0.18 in the Health domain to a coefficient of 0.75 in the Measurement domain.

Educational surveys of the MLA type can produce very crucial information and empirical evidence for the better of the humankind. In some of the Eastern and Southern African countries, a special emphasis on HIV/AIDS was given in the 1999 MLA survey. It formed one of the domains in the Life Skills Test. Box 3. 1 provides the information on HIV/AIDS from this survey.

The empirical evidence obtained from this regional 1999 MLA survey for Africa offers serious challenges to contemporary pedagogy, learning and education, as a whole. It addresses serious concerns about the state of comparative educational research and studies. For the sake of our learners, systematic and continuous learning assessment schemes are needed in most educational systems at all grades and educational levels,

in order to capture - and meet - their varying needs and difficulties in all the learning areas and domains. Failing or passing our children does not justify what is learnt and what is not learnt. There is a need to understand the dynamics in teaching and learning so as to establish what and how each of our learners must be better taught so that she/he can learn to optimise and not minimise her/his learning potential and attributes.

BOX 3.1 KNOWLEDGE OF HIV/AIDS TRANSMISSION AND PREVENTION BEHAVIOUR

Information on how HIV/AIDS is spread and prevented is critical for any learner in Africa. The Life Skills tests posed several questions to ascertain knowledge about how HIV/AIDS is contracted, how it is spread and sexually related behaviours, which are linked to the prevention of HIV/AIDS. While the table above indicates that the highest awareness is in Malawi and Uganda, and the lowest awareness is in Zambia and Botswana, it is evident that a significant percentage of learners still do not have

MEAN PERCENTAGE SCORE FOR LEARNERS REGARDING THEIR KNOWLEDGE OF THE SPREAD AND PREVENTION OF HIV AIDS.

Country	Knowledge Mean [%]	S.D.	HIV Prevalence [%] 15 - 49 year olds
Botswana	42.3	21.1	25.1
Malawi	72.8	32.4	14.9
Mauritius	53.4	28.2	0.1
Uganda	65.6	29.9	9.5
Zambia	47.2	31.1	19.1

information they need regarding the issue of HIV/AIDS.

A high percentage of learners were aware that HIV/AIDS could be contracted through exposure to the blood of another person. It is, however, still disturbing that a substantial percentage did not know this [i.e. Botswana 31%, Malawi — 30%, Mauritius - 49%, Uganda — 36% and Zambia 45%]. Regarding learners' knowledge about how HIV/AIDS is spread, only 17% in Botswana, 75% in Malawi, 46% in Mauritius, 69% in Uganda and 45% in Zambia indicated that they were aware that HIV/AIDS could be spread through the sharing of needles. The results indicate that there is a great need for HIV/AIDS education among learners. Additional research will certainly provide more comprehensive information about learners' knowledge of HIV/AIDS, how it is spread and how it can be prevented.

Success in striking the optimal balance between equity and quality education for all is often obscured under the quantitative number-game agenda that perpetuates educational inequalities. Educational systems can either breach or reinforce these inequalities. From the Jomtien perspective, the assessment of learning achievement across gender, regional and school environments is more a human right and a necessity than simply a need for stock-taking. The previous sections provided us with a clear-cut picture of the regional between- and within- country differences in learning achievement, followed by an

outline of learning achievement in the different learning areas and learning domains. Attempts were made to provide some empirical evidence so as to answer questions about how to use regional analyses to address concerns and interests and to point towards country-specific educational policies and strategies to meet the needs of African learners. In the present section, we shall move a step further towards the sources and causes of good or poor quality of education for all. It should be noted that to date several 1999 MLA surveys [e.g. Angola, Burkina Faso, Cameroon, Comoros, Cote d'Ivoire, South Africa, and The Gambia] are still in

the phases of data analysis and reporting. Similarly, all available MLA 1999 survey data on personal, socio-economic, linguistic, and cultural background of learners are not presented here for two reasons. Firstly, this regional report is just the beginning of a long-term process of data collection, analysis and report-writing. Secondly, the background characteristics, processes and learning environments as well as their impacts on learner performance need some further analysis beyond those to be presented and discussed in the next chapter. Lastly, it is expected that greater detail will be included in the national and sub-regional MLA reports.

Gender Disparities in Learning Achievement

Many surveys of learning achievement have demonstrated over the years that girls outperform boys at lower grades while boys outperform girls at the upper grades. Girls usually excel in Literacy while boys do better in Numeracy. Being a successful learner, a girl may bring tremendous benefits to herself, her family, and society in the various areas of education, economy, health and human development as a whole.

The main results of the gender analyses of the 1999 MLA survey data are presented in Table 3.5 while

TABLE 3-5: GENDER DIFFERENCES IN LEARNER PERFORMANCE

Difference in overall mean score per country				
	Boys	Girls	DIF	Sig
Botswana	46.8	50.8	4.0	0.0
Madagascar	55.7	56.3	-0.6	0.2
Malawi	53.2	49.9	3.3	0.0
Mali	52.2	49.4	2.8	0.0
Mauritius	58.0	60.6	-2.6	0.0
Morocco	62.0	62.1	-0.1	0.8
Niger	41.4	42.6	-1.2	0.2
Senegal	45.5	44.8	0.7	0.1
Tunisia	71.2	71.2	-0.0	1.0
Uganda	59.9	59.3	0.6	0.2
Zambia	40.7	41.4	-0.7	0.2

the detailed ones are given in Appendix C. The general trends emerging from the detailed results show that Tunisia consistently stands out as the highest achiever with 71% for girls and boys respectively. The lowest mean achievement scores only vary between countries and between girls and boys, e.g. 43% and 41% in Niger on the global scores; 47% for both girls and boys in Life Skills in Senegal; 34 % and 35% in Literacy in Malawi; and finally 38% and 37% in Numeracy, in Niger. It is important to note that the gender differences are either small or non-significant, while comparisons of the between-country differences show as large as 37 mean score differences. In 4 out of 8 countries boys do slightly better than girls on the overall results. Statistically significant gender differences were found for boys in Botswana, Malawi and Mali and for girls in Mauritius.

A closer look at the between-country observations of gender differences across the three learning areas, shows that gender parity in learner performance in the lower grades of African basic education is more present than ever [see Appendix C]. Statistically significant gender differences with mean score point differences of 2 and above are in favour of girls in all three learning areas in Botswana, and in Mauritius and Tunisia for Literacy. In the case of boys, the same trend is observed for all three learning areas in Malawi; in Literacy in Uganda and Tunisia; and for Numeracy in Uganda.

Pointers and recommendations for gender parity in quality basic education for all in Africa are many as evidenced through the 1999 MLA survey results. Gender parity in learner performance at the lower grades of basic education is an achievable goal. Gender differences are statistically non-significant in the majority of the reported observations across countries and by learning areas. One of the greatest challenges for girls

and the education of women in 21st century Africa are the actions required to replace the theoretical vision of gender parity for all types and forms of education. This will represent an everlasting value added to African education and to humankind as a whole.

Urban-Rural Disparities in Learner Performance

Several decades of school survey research studies in the developing world have constantly confirmed the fact that the school as an institution has helped to reproduce and reinforce regional inequalities in learner performances as a result of general inequalities [economic, social, cultural, demographic and linguistic] between- and within- regions. The 1999 MLA surveys have data by regions/provinces/ districts and four regional strata [urban, semi-urban, rural and rural remote] for most participating countries. Countries were advised to prepare and to present their national reports in accordance with this common stratification principle where appropriate. The urban-rural dichotomy was chosen instead of a continuum for this regional analysis, as the reduction of between-country rural-urban disparities is a precondition for reducing within urban and within rural disparities.

TABLE 3-6: RURAL-URBAN DISPARITIES IN STUDENT LEARNING

Difference in overall mean score per country				
	Urban	Rural	DIF	Sig
Botswana	49.8	47.4	2.4	0.00
Madagascar	62.8	54.0	8.8	0.00
Malawi	53.2	51.1	2.1	0.00
Mali	54.3	47.8	6.5	0.00
Mauritius	62.8	57.2	5.6	0.00
Morocco	64.2	60.1	4.1	0.00
Niger	42.8	41.7	1.2	0.01
Senegal	46.6	44.0	2.6	0.00
Tunisia	73.1	65.6	7.6	0.00
Uganda	59.9	59.4	0.5	0.17
Zambia	45.3	37.8	7.4	0.00

As it is often argued, the urban learning environment, e.g. a literate milieu with greater access to social, cultural and economic facilities and services, produces a high performing learner while in the rural situation, a 'poor' performing learner. In developing this nurture-nature debate, the 1999 MLA surveys may have their own stories to tell. Table 3.6 summarises the extent to which learner performances differ between urban and rural areas of the 11 African countries. One major finding from the detailed results [refer to Appendix C] is that the observed gender disparity patterns are often reproduced in the urban-rural disparities across these countries. However, urban school children outperformed rural school children overall and in all learning areas. In only 6 out of the 33 valid observations, the urban-rural differences are statistically non-significant. The predominantly rural African countries, showed how far and distant is the realisation of urban-rural parity vis-à-vis quality education for all.

Urban-rural parity in learner performance must remain a top-priority policy intervention in all countries surveyed. It would not only enhance parity, but would also create the value that is added in order to successfully reduce, among other things the existing gender and socio-economic inequalities among Africa's present children, future youth and parents. Revitalising Africa's education hopes must go hand in hand with appropriate corrective measures for redressing urban-rural disparities in learner performance, while simultaneously boosting education growth in both quantitative and qualitative terms. This should serve as an open agenda for action at national, regional and international educational policymaking levels. Otherwise, Jomtien 1990's goal for quality education for all will leave Africa before it has even arrived on the continent.

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Disparities in Learner performance by Type of School

Despite the variety of definitions of what makes a school public or private and of what makes education a free or a paid service; the most common categorisation still used is public versus private. In some countries, however, public school children have some fees to pay and private schools are partially or heavily state-subsidised. A striking feature of the public-private school difference is that it reflects rather accurately the socio-economic status difference of the two student population groups. Emphasis on academic excellence, stringent disciplinary behaviours, management leadership and style, among other things, are what makes the two types of schools more or less effective in terms of learner performance.

TABLE 3-7: DISPARITIES IN LEARNER PERFORMANCE BY TYPE OF SCHOOL

Difference in overall mean score per country				
	Public	Private	DIF	Sig
Botswana	48.3	72.4	-24.1	0.0
Madagascar	53.6	61.9	-8.3	0.0
Malawi	51.3	57.5	-6.2	0.0
Mali	49.5	53.4	-3.9	0.0
Mauritius	59.8	56.6	3.2	0.0
Morocco	61.3	67.0	-5.7	0.0
Senegal	44.6	50.2	-5.6	0.0
Uganda	58.6	69.6	-11.0	0.0
Zambia	40.5	57.4	-16.9	0.0

The detailed results of the regional analysis of learner performance by type of school [public and private] are presented in Table 3.7 and in Appendix C. It should be noted that in both Niger and Tunisia, private schools were not sampled in the 1999 MLA surveys. In the majority of the 1999 MLA surveys in

Africa, private-public differences in learner performance are statistically significant. Botswana private schools have three of the four highest mean achievement scores [72, 82, 75] for the overall three learning areas, Literacy, Life Skills and Numeracy respectively. The highest score in Malawi private schools [81] is in Life Skills, Senegal public schools has three out of the four lowest mean achievement scores [45, 47, and 38 for the overall three learning areas, Life Skills and Numeracy respectively] while Malawi public schools had the lowest [34] in Literacy. Taken as a whole a very high mean difference of the size of 24 points separates the lowest achievers from the highest achievers.



The only exception to the rule is Mauritius where public school children outperformed private school children overall and in all three learning areas. The same trend was observed in the 1994 MLA survey in Mauritius, half a decade ago.

The adaptation of schools to children instead of children to schools, is an indisputable challenge of quality education for all which needs to be re-addressed and further emphasised by educational planners and front-line educational agents of change and innovation. School effectiveness may not always need as many additional economic resources as compared to the different soft resources - such as discipline, working in a reinforcing collective milieu, partnership and commitment to guarantee excellence, and conducive managerial leadership — which can boost learning. Private schools often have the advantage of having both

the additional economic resources and the soft resources. Learning from what makes schools more effective may serve to reduce learning achievement differences observed between learner attending public schools and learners attending private schools.

THE 1992-1998 MONITORING LEARNING ACHIEVEMENT [MLA] SURVEYS IN AFRICA: REPEATED LESSONS TO BE RE-LEARNT

This Joint UNESCO-UNICEF International MLA Project has been successfully implemented in 15 developing and developed countries across the globe during the period 1992-1998. All of them were national surveys with country-specific design, instrumentation and analyses. The majority of these countries have published their national reports and have had broad-based consultations, seminars and workshops for integrating the experience learnt into concrete reforms and changes in policy, curriculum, teaching, and teaching-learning processes. Having started with five pilot countries in 1992 [China, Jordan, Mali, Mauritius and Morocco] the MLA project is now a movement with a national critical mass constantly empowered through different capacity building modalities in order to institutionalise a monitoring system for quality improvement in education. In its second phase, the MLA project proposed to each participating country a global framework for action. The Handbook "Monitoring Learning Achievement — Towards Capacity Building "[Chinapah, UNESCO 1997] based upon the experience and lessons from these first five pilot countries has been produced, printed and disseminated across the world.

The second MLA group consists of 12 additional countries. They are: Haiti, Lebanon, Kuwait, Mozambique, Nigeria, Oman, Rodrigues Island of Mauritius, Sao Tome and Principe, Slovakia, Sri-Lanka, Sudan, and Tanzania [Zanzibar]. Several lessons can be drawn from the experience accrued during this period. Many countries have chosen to benefit from the MLA global framework and its country-specific approach. In several cases, such surveys focus on a specific grade [e.g. Grade I in Slovakia] or on different grades over a period of time [e.g. China, Jordan, Kuwait, Lebanon, Mozambique, Morocco, Oman, Slovakia and Sri Lanka]. The end-result makes the monitoring of the quality of education into a flexible and continuous process. Thus, it could be said that those countries using basic learning competencies were acting within the spirit of the Jomtien resolution which requires each nation to set levels of learning competence and devise mechanisms for monitoring the attainment of these levels.

The national ownership of the MLA project became an important element of further capacity building, strengthening and sharing. It also became a "think-tank" mechanism for national, regional and international networking and mobilisation of available human resource expertise to keep the movement a sustainable one. As an illustration, the present Africa regional MLA report is entirely prepared by a pool of African resource persons under the guidance and support of UNESCO and UNICEF.

To conclude this chapter, we have selected the major trends from the 1992-1998 MLA national surveys in the Africa region to complement the results presented and discussed in the foregoing sections. Six African MLA surveys were carried during this period: Mali [1994], Mauritius [1993], Morocco [1993], Nigeria [1995], Mozambique [1995] and Sao Tome and Principe [1997]. The detailed results have been reported in the respective national reports and often used in the MLA global reports and working documents for capacity-building workshops.

TABLE 3-8: 1993-1998 MLA COUNTRIES. SOME SELECTED RESULTS

MEAN SCORE DIFFERENCE	NUMERACY			LITERACY			LIFE SKILLS		
	Urban/Rural	Girl/Boy	Private/Public	Urban/Rural	Girl/Boy	Private/Public	Urban/Rural	Girl/Boy	Private/Public

Mali	2.3	-1.7	4.1	3.6	-0.1	1.0	3.2	0.9	-0.4
Mauritius	11.6	-1.1	-13.7	11.8	3.1	-15.2	-3.2	-0.8	-9.8
Morocco	13.6	1.4	19.8	18.4	-2.8	19.3	15.4	5.0	13.2
Nigeria	4.7	-0.5	13.3	5.9	1.1	17.6	4.0	0.2	12.5
Mozambique	0.7	-4.5	-	3.5	-0.8	-	-1.1	-1.1	-
Sao Tome & Principe	8.0	1.1	-	12.7	3.3	-	2.97	4.5	-

A summary of some selected results from the 6 African MLA surveys conducted during the period 1992-1998 is given in Table 3.8. The disparities in learner performance between boys and girls, between urban and rural schools, and between public and private schools followed the same patterns as the ones observed later in the 1999 MLA African surveys. Girls perform equally well as boys and the differences are in most cases statistically non-significant. Statistically significant differences were observed between urban and rural students and between learners attending private schools and learners attending public schools. The between-country differences across the learning areas show the following trends: [1] the differences are consistently the highest for the private as opposed to public school children, e.g. as high as 15 and above mean-score point differences observed in Mauritius, Morocco and Nigeria; [2] children tend to be less discriminated due to their gender, school location and school type in their performance in Life Skills than in their performance in Literacy or Numerically, e.g. the largest discrepancies are found in Mauritius and Morocco and the lowest ones in Mali; and [3] from an equity-quality trade-off, both Mauritius and Morocco which have relatively higher levels of achievement as compared to other countries still require much effort to redress the large between learner differences due to gender, school location and school type. These tendencies confirm the results and explanations provided in the previous sections.

EFA 2000 Assessment is turning into a movement, as has been the case of the MLA for some years now. In this chapter, the major between- and within- country differences in learner performance were reported, assessed and discussed in the light of quality education for all and more specifically, the Jomtien goal for countries to attain or surpass a defined level of learning achievement. Knowing the differences is a first step towards knowing the root-causes of such differences. This will be the purpose of the next chapter in which the environments of teaching and learning in the 1999 MLA surveys in Africa will be described and critically examined.

It is important to recognise two other initiatives within the African region, which are also using the survey design methodology to monitor learning achievement. These are the Southern African Consortium for Monitoring Educational Quality [SACMEQ] and Program d'Analyse des Systemes Educatifs des pays de la CONFEMEN [PASEC]. The first started in 1993 to focus on the inputs into the educational system and also the reading achievement of pupils of the upper primary school level. It has grown into a fifteen-member organisation covering countries in both Southern and Eastern Africa. It has also expanded its assessment programme to include primary Grade 6 and assessment of English and Mathematics. The second, which is an initiative of some Francophone countries, started its operations in 1993. Its main objectives are to carry out assessment of the level of achievement of pupils in their second and fifth year of primary school in Mathematics and French. There are nine participating countries.