

Case Study – Results at Primary School Leaving Examination in a Rural District in Rwanda

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Abstract. The Rwandan system of classifying learners at national examinations in divisions has as a consequence that the performance of schools shows better at first sight than justified. Learners can pass in the lowest division (IV) although their results are very poor. Analysing results in terms of divisions is done quite regularly, but it gives little information about what lays behind the level of performance. In this study the distribution of marks is being introduced as a tool for getting grip. The study shows that in Rulindo District at national school leaving examination the majority of learners score the lowest marks (8 and 9). Poor mastery of English is reflected in low results for the other subjects, which are taught and examined in English. However, the number 1 school of the district, which is in no way a privileged school, shows that much better results could be achieved. Quality of leadership, mastery of the medium of instruction and learner-centred methodology seem to be crucial factors for making the difference.

Keywords: Primary school leaving examination; divisions; distribution of marks; medium of instruction; learner-centred methodology.

1. Introduction

Rwandan primary education has changed a lot in recent years. Net enrolment rate has gone up impressively from about 80% in 1999 to 98,7% in 2012, the highest in Sub-Saharan Africa (EFA, 2105 p78, 233). In the same period grade repetition has been brought down from 28% to 12% (EFA, 2015 p86).

In 2008 it was decided to replace French as medium of instruction by English in all public schools, initially for all levels of education. In 2011 this decision was overruled: Kinyarwanda would be the medium of instruction in lower primary. However, as most teachers were educated in French and did not master English, this really challenged education (Tolon 2014; Sibomana 2014; Reddick, 2015).

From 2006 to 2010 new curricula were introduced for all subjects. The English curriculum of 2010 “has been revised to integrate learner-centred methods and reflect the Information and Communication Technology (ICT) trends in education.” (Republic of Rwanda, 2010a).

Now, in 2016, the implementation of again a new curriculum is on its way (Republic of Rwanda, 2015f). By introducing a competence-based curriculum

the Rwandan government aims to contribute to the development of a knowledge-based society. This is seen as necessary because of the regional and global competition in the jobs market (Republic of Rwanda, 2015h)

Officially the results at primary school leaving examination in Rwanda are considered to be good. "According to Ministry of Education official, the results for 2013 academic year for both primary and ordinary level exams – a pass rate of 84 per cent – was impressive compared with the past four years." (Rwirahira, 2014). Pass rates were 85 % in 2014 and 2015 (Tashobya, 2016). However, under close scrutiny performance is less impressive. It appears that many learners pass although their results are very poor. The threshold for passing in the lowest division, that is division IV, is very low. Similar observations have been made for Tanzania, which also uses a division system. At school leaving examination 2010 50% of candidates did not pass, 39% passed in division IV (Kassile, 2014). "Strictly speaking, therefore, 88,6% of the candidates failed (...) as they cannot proceed with any further levels of education training"(HakiElimu, 2012).

In Rwandan Rulindo District the percentage of learners who failed plus the ones who passed in division IV at primary school leaving examination 2014 add to 66%. Taking into account that the completion rate is low, about 35% in 2010 (EFA, 2015 p82), this means that a large majority of children do not learn very much during their primary school career, as far as exams show.

Nevertheless, some schools succeed in performing much better than the average, although their socio-economic context in no way is exceptional. In order to find out what is behind this contrast between successful and average schools a case study has been done for one district: Rulindo District in North Province. The ultimate goal of this study is to provide head teachers and education officers at sector and district level with tools for analysing and improving performance of their schools.

This study analyses the results at primary six national school leaving examination. It addresses: distribution over divisions, distribution of marks, differences between subjects, comparison between the number one (#1)² school and an average school. Suggestions for improving teaching and leadership are given.

The examination itself (questions, setting, marking) is taken for granted³ in this study as it is outside the sphere of influence of head teachers and education officers.

2. Research Questions

In this case study the results at national examinations of all primary schools of Rulindo district – and so defining the 'average' school – have been compared to those of a few individual schools.

The research questions are: what tells the distribution over divisions about the performance of a school, what reveals the distribution of marks about

performance, in what respect differs performance of the #1 school from an average school and what factors are crucial for improving performance?

3. Methodology

The analysis has been done for schools in Rulindo district, North Province. Several sources were available:

Annual school questionnaire. Aggregated data collected by the district education office from head teachers in the annual school questionnaire. The spreadsheet contains data of all schools and calculates the district totals. The format comes from the Ministry of Education.

In this study the data of the 2014 questionnaire have been used (Republic of Rwanda, 2014a). They reflect the situation at the end of school year 2013.

Ranking of schools. The district education office has provided a spreadsheet that contains the results for national examinations for all schools of the district with numbers and percentages for subjects and divisions, leading to a ranking of schools according to results at national examination.

For the ranking of schools the results at national examinations 2013 have been used (Republic of Rwanda, 2014b).

Ranking of candidates. Head teachers receive a hard copy for their school of a list with all candidates and their marks for all subjects. Candidates are ranked according to the aggregate of their marks. The lists are produced by Rwanda Education Board (REB), an agency of the Ministry of Education, and distributed by the district office at the beginning of the following year. Aggregated results for the whole district about the marks for each subject were not available.

In this study the listings of results at national examination 2014 of a number of schools in Rulindo district have been used (Republic of Rwanda, 2015a, b, c, d).

School inspections. Above mentioned sources have been complemented by the author with observations – regarding both teaching and leadership – at school inspections in Rulindo district during his work⁴ as education leadership advisor for VSO⁵. During an exchange visit a group of twenty head teachers and sector education officers of three sectors spent a day at the #1 school of a neighbouring district. They observed lessons and discussed their findings with at a meeting with teachers and staff, using a checklist. Participants exchanged their views on what lays behind the success of that school.

4. Findings and Analysis

4.1. Grading system

In Rwanda there are five subjects which are examined at the national examinations at the end of primary school: mathematics, science and elementary technology, social studies, English and Kinyarwanda⁶. The school year runs from January/February till November. School leaving examinations are held in November. Independent teachers do the marking during sessions under

direction of REB in a few centres at national level. REB collects the marks. In January or February the results become available at district level.

For each subject a learner gets a mark between 1 (best) and 9 (worst). Then the aggregate is calculated. This runs from 5 (all subjects scored 1) to 45 (all subjects scored 9). According to their aggregated marks learners are classified in five categories. From the listed results of the schools in Rulindo district at 2014 examinations (Republic of Rwanda, 2015a, b, c, d) one can deduce that the following ordering criteria⁷ were used:

Marks aggregated	Classification
5 to 15	Division I
16 to 30	Division II
31 to 37	Division III
38 to 41	Division IV
42 to 45	Unclassified

So even with an aggregate of 41, for instance with four 9s and one 5, a learner will pass examination. As an example, this means that a learner who failed completely for math, science and elementary technology, social studies and English, and who has a mediocre result for Kinyarwanda would nevertheless pass. That means that this grading system allows learners to pass examination with extremely poor results.

So, when one wants to judge the performance of a particular school it is not sufficient to look at the pass rate. One should also look at the distribution over divisions.

4.2. Divisions

Only a very small proportion of learners earn a place in the first division. At national level at 2015 examination no more than 4.04 % of candidates were classified in div I (Tashobya, 2016). Learners who are classified in divisions I and II get an admission letter for secondary boarding school.

Now we turn to the schools of Rulindo District. The results at national examination 2013 were used to find the distribution of divisions. The largest group between all candidates of the district (6,021), is that of unclassified learners (37.3%). The second largest category consists of the ones who pass in division IV (28.9%). The smallest group are the ones in division I. The percentages for each category go down from div IV to div I.

However, passing in division IV is not at all a satisfactory result, as explained above. See figure 1 (by author, based on Republic of Rwanda, 2014a).

The pass rate at 2013 school leaving examination in Rulindo District was 62.7%, which is low compared to the nation-wide pass rate of 84% (Rwirahira, 2014).

The graph shows that in Rulindo District in 2013, notwithstanding a pass rate of over sixty percent, two out of every three learners left primary school with hardly any knowledge (div IV plus unclassified) as measured at national examinations. The same pattern is seen in many schools in the district. So,

thanks to the division system presentation of school performance in terms of pass rate is quite embellishing.

It is useful for head teachers to draw such a graph for their own school, in order to get a better insight in how the pass rate at their school is built up.

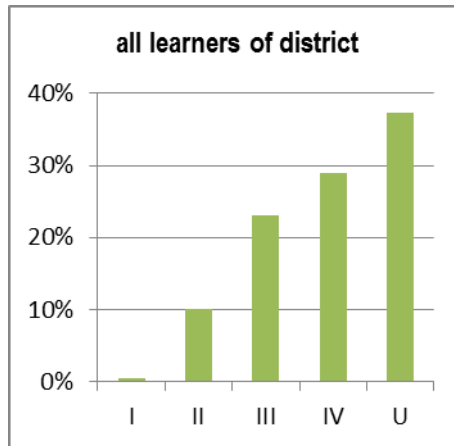


Figure 1: Distribution over divisions at national examination 2013 - all 6,021 learners of the district

However, some schools deviate sharply from this average pattern, for instance the #1 school of Rulindo district⁸. This is a rural public school, not at all in a privileged socio-economic situation⁹. It had 41 learners in P6. All of them passed: seventy percent in division II, no one in division IV. See figure 2 (by author, based on Republic of Rwanda, 2015a). The graph shows a kind of bell shape around an average value: the large majority of learners pass in division II, some perform better, some perform less good. No one fails or leaves school with poor knowledge (div IV).

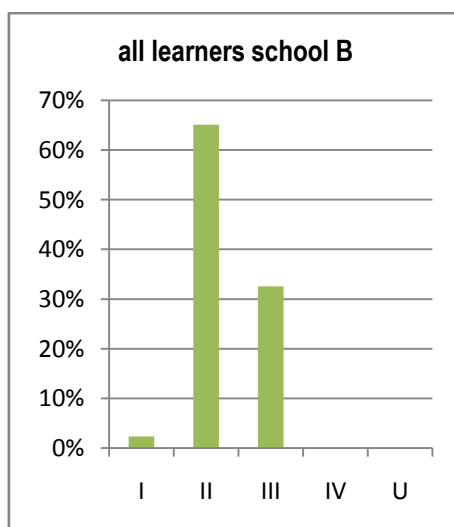


Figure 2: Distribution over divisions at #1 school of the district

4.3. Marks

As we have seen above (figure 1), the large majority of candidates in Rulindo District are performing poorly. In most schools the average mark for all subjects but Kinyarwanda is somewhere between 8 and 9. So it is quite useless to calculate the average mark for a certain subject if one wants to evaluate the effect of teaching in that subject. Therefore we decided to look at the distribution of marks. As far as we know this has not been done before in Rwanda.

As no aggregate results for all schools of the district were available, we calculated the distribution of marks from the listed results of individual schools, in this case at national examination 2014 (Republic of Rwanda, 2015a, b, c, d).

We singled out four schools to study the distributions of marks:

- A. a 'groupe scolaire' (or GS, combination of primary and secondary) with 73 learners in P6¹⁰. In many respects this school can be seen as an 'average' school.
- B. the #1 school of the district (mentioned above), an 'école primaire' (or EP, primary school), having 43 learners in P6¹¹.
- C. an EP with 79 learners in P6¹². In this school, in comparison with the average school, a relative large number of learners earned an admission letter to boarding school.
- D. a government aided GS, the #1 school of a neighbouring district, having 67 learners in P6¹³.

4.3.1. All subjects

The distribution of marks at school A for all five subjects combined and for all learners together is shown in the left graph of figure 3 (by author, based on Republic of Rwanda, 2015a). More than 40 percent of all marks are 9, which means complete failure. The next largest group is that of 8s etc., with a smaller number of learners for every better mark. Not one learner had an 1 or 2 for any subject. If we define a score of 5 or better (on a scale from 1 to 9) to be 'satisfactory', only 15% of marks are satisfactory.

Nevertheless, the pass rate is 64%. According to pass rate this school is in line with the district average, which was 63% in 2014.

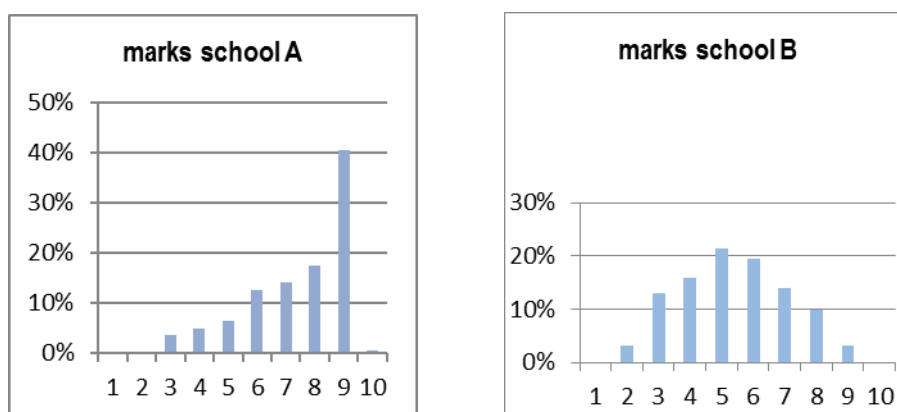


Figure 3: Distribution of marks for all subjects at an 'average' school and at the #1 school

Completely different is the situation at school B, the #1 of the district, which boasts a pass rate of 100% (Republic of Rwanda, 2015b). See right graph of figure 3. Here the distribution of marks shows the typical bell shape one would expect: there is a more or less symmetrical distribution around the average value. The average score lies between 5 and 6, which is just satisfactory. Although being the #1 school of the district, there clearly remains a lot of room for improvement: one would expect such a well performing school to have more learners with high marks.

4.3.2. Kinyarwanda, English, mathematics

To investigate whether some subjects are dominant in producing these differences between both schools, the distribution of marks for three subjects has been analysed: Kinyarwanda, English and mathematics. Kinyarwanda was chosen because it is the only subject (from primary four onwards) taught and examined in the mother tongue. So the results for this subject should reflect the intellectual abilities of the learners and the quality of education in general, without interference by mastery of English. English was chosen because it is the medium of instruction and examination in all other subjects. So mastery of English is an important prerequisite for successful participation in the other lessons (except those in the mother tongue) and consequently for success at national exam. Mathematics was chosen because it is by many considered to be the most difficult subject. If learners have problems with understanding the teacher because of the medium of instruction and because of the difficulty of the subject, they will be doubly handicapped when doing exam.

Kinyarwanda

We juxtapose the results of schools A and B for Kinyarwanda. See figure 4 (by author, based on Republic of Rwanda, 2015a, b). As could be expected, the results for mother tongue examination are better than the overall picture of all subjects together (figure 3). Both graphs have a similar form: more or less a bell shape. But when looking closer, one sees an important difference. In school B, the #1 school, about eighty percent of the learners have a satisfactory result (5 or better), whereas in school A, the 'average' GS, only a bit more than thirty percent of the learners have a satisfactory mark for the mother tongue exam.

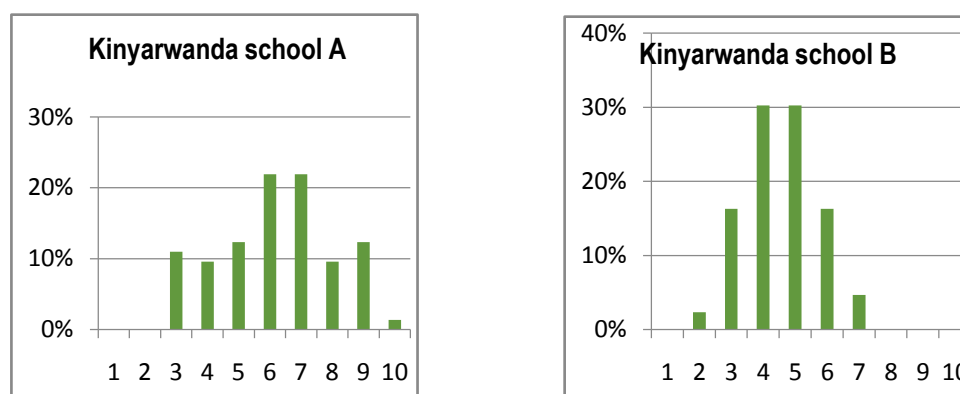


Figure 4: Distribution of marks for Kinyarwanda at an 'average' school and at the #1 school

As it is unlikely that the intellectual abilities of learners of both schools differ so much, one is tempted to suppose that this reflects the quality of teaching in these schools.

English

Because for all subjects except Kinyarwanda English is the medium of instruction and also of examination, it is essential that learners have a basic knowledge of this language to be able to perform in other subjects as well. However, a large majority of learners (57%) at school A have a very poor knowledge of English (mark 8 or 9). See figure 5, left graph (by author, based on Republic of Rwanda, 2015a). Clearly, learners do have problems to understand and answer the questions at the mathematics, science and social studies exams when their knowledge of English is inadequate. Only 17% of the candidates in this average school show to have good or satisfactory knowledge of English (marks 1, 2, 3, 4 or 5).

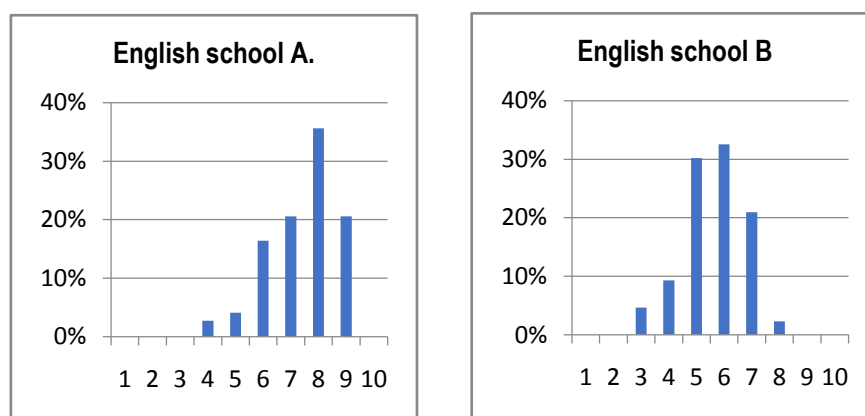


Figure 5: Distribution of marks for English at an 'average' school and at the #1 school

The situation is very different in the #1 school. See right graph in figure 5 (by author, based on Republic of Rwanda, 2015b). Here 44% of the candidates appear to have satisfactory knowledge of English. Only one learner got an 8 (2%), no one a 9.

* mathematics

Math is considered to be the most difficult subject. One can expect that learners who have difficulty with English are specially at a disadvantage when doing math exam.

Indeed, the results at the 'average' school A are extremely low: seventy percent of the learners got a 9. See figure 6 (by author, based on Republic of Rwanda, 2015a, b). A meagre 7% performed satisfactory (mark 5 or better). Although still poor, the results at the #1 school, school B, are clearly better. Here the graph shows the beginning of a bell shape. The percentage of learners who fail completely (mark 9) is not higher than 16%.

The impact of the results at mathematics on the overall distribution of marks is evident. One can assume the reason for very poor performance by candidates of the average school A at math is to be found in the weak results for English (compare the corresponding graphs in figures 5 and 6).

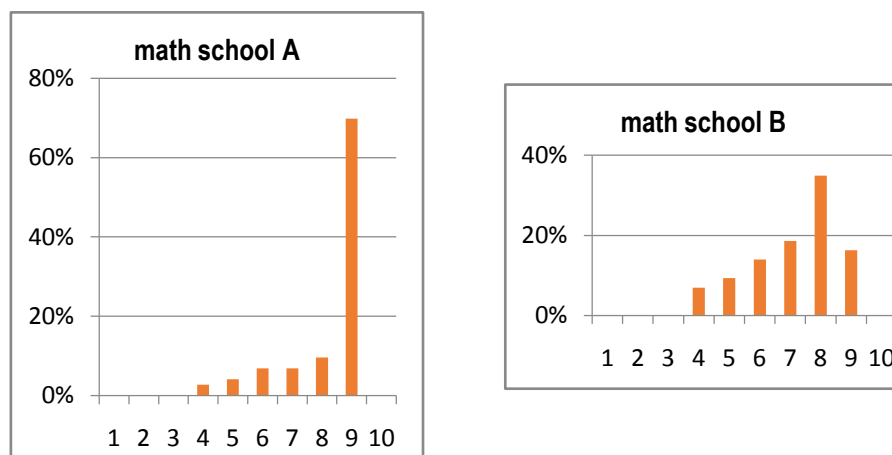


Figure 6: Distribution of marks for Mathematics at an 'average' school and at the #1 school

4.3.3. Partition

Now school C comes in. This EP (primary only) was praised rightly by district authorities for having a relatively large number of learners who got an admission letter for boarding school. So in this school talented learners are served well – at least in comparison with the 'average' school.

However, the distribution of marks for Kinyarwanda at this school has a peculiar shape. See figure 7, left graph (by author, based on Republic of Rwanda, 2015c). It looks as if two graphs have been superimposed. Although nearly forty percent of candidates score a 9, giving a high peak, the distribution for the other sixty percent is like a bell. Quite a few have a satisfactory result (5 or better), together 41% of the learners.

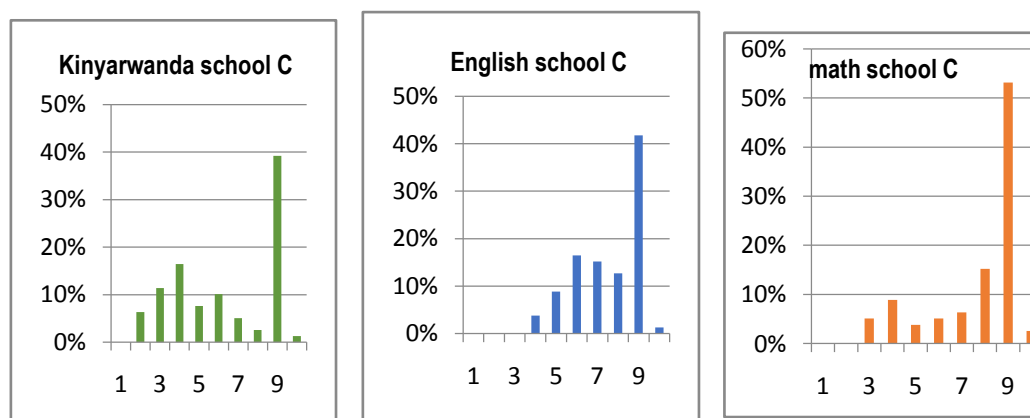


Figure 7: 'Partitioned' distribution of marks at school with many 'admission letters'

More or less the same applies to English and mathematics. See figure 7 centre and right graphs. Especially the result for mathematics is much better than that

of 'average' school A. A higher percentage of learners of school C have been able to pick up enough from their lessons to produce at least some good answers (marks 8 and higher).

How this reflects in the distribution of divisions in school C is shown in figure 8 (by author, based on Republic of Rwanda, 2015c). Compared to the average of all schools of the district (figure 1, above) the difference is striking. Although the percentage of unclassified learners (48%) is much higher than the average of the district (37%), the distribution over divisions of the ones who pass shows much more of a bell shape. The largest group in this partition is in division II.

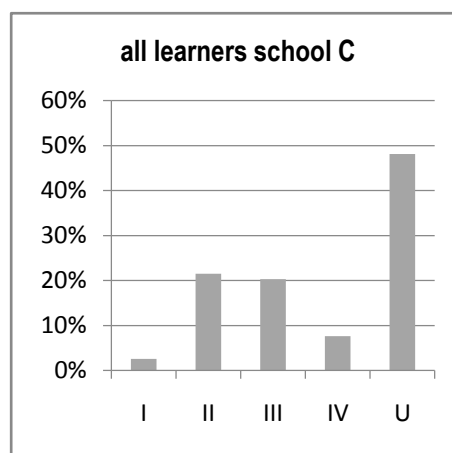


Figure 8: 'Partitioned' distribution over divisions at school with many 'admission letters'

So this school C shows two faces. The graphs suggest that the learners in this P6-class have been - unintentionally without doubt - partitioned in two sub groups. One sub group consists of learners who fail for all subjects. They seem to have been lost on the way: not even for Kinyarwanda they succeed. The teaching has not reached them. This regards about half of the learners.

In contrast, the second sub group seems to have been really involved in the educational process. For every subject the marks produce a bell shape. And so they deliver a bell shape for divisions. More than forty percent of the learners in this sub group are either in division I or in division II, earning them an admission letter to boarding school. So this is truly a result the school may be proud of, although the overall picture is less bright: the general pass rate (52%) is below the district average (63%).

4.3.4. Two #1 schools

In order to get more evidence about factors determining the difference between the #1 school and the average school, the results of two #1 schools, school B of Rulindo district and school D of a neighbouring district, have been studied for comparison.

Figure 9 (by author, based on Republic of Rwanda, 2015b, d) shows the distribution of learners over divisions. Essentially both #1 schools show the same traits: 100% pass rate, largest group in division II, no learners in division

IV. The only difference is: the percentages of learners in divisions I and II in school D are even higher than in school B.

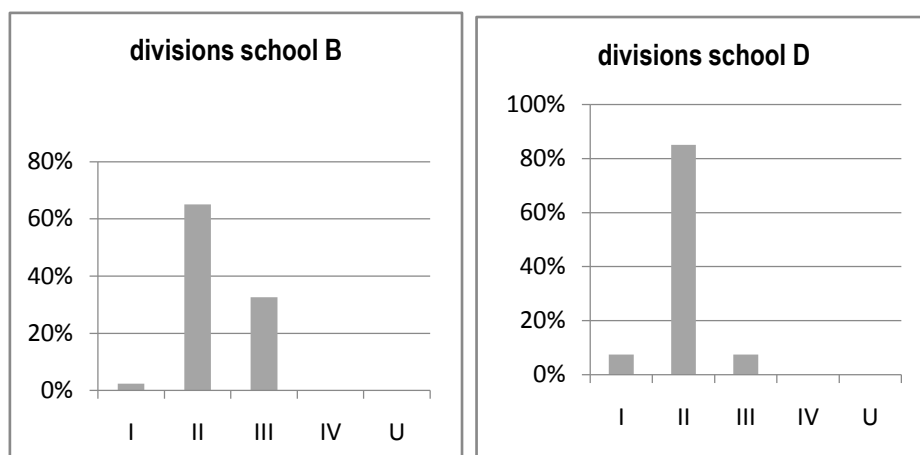


Figure 9: Distribution over divisions at the #1 schools of two districts

Also the underlying distributions of marks for Kinyarwanda, English and math are similar. See figure 10 (by author, based on Republic of Rwanda, 2015d). Still, in both schools there is space enough for improvement, especially with regard to mathematics.

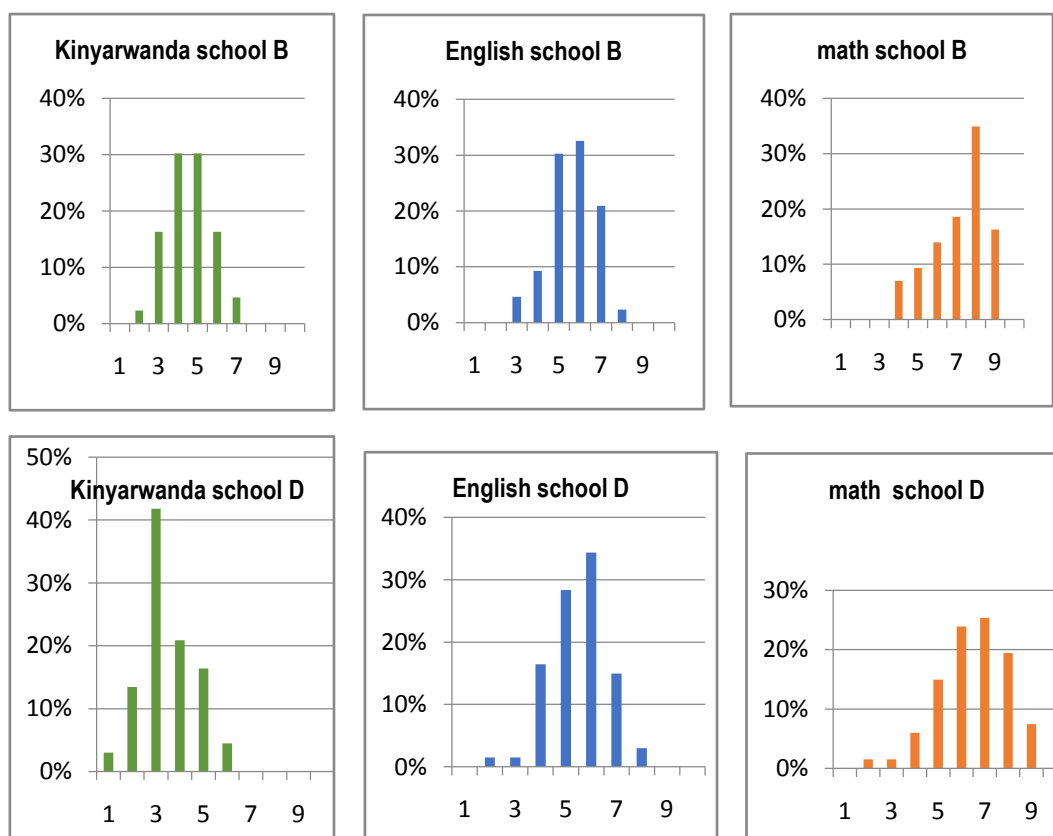


Figure 10: Distribution of marks at #1 schools of two districts

4.3.5. Pass rate is not enough

Concluding, this analysis shows that pass rate in itself doesn't tell a lot about performance of a school at national examination. Distribution over divisions adds useful information about how the pass rate is built up, but really valuable information about strengths and weaknesses for any subject is found by looking at the distribution of marks.

It would be worthwhile for head teachers and education officers to analyse the distribution of marks when evaluating school performance.

5. Critical Success Factors

Based on observations and discussions at an exchange visit¹⁴ to school D, the #1 school of a neighbouring district, the following factors were tentatively judged to be pivotal for making these #1 schools - in the rural context of the district - more successful than the average school:

Ownership. Head teacher and teachers cooperate closely; so do teachers and learners; the head teacher discusses educational policies with parents; the school has strong ties with local community and local authorities. Therefore all stakeholders experience ownership of this school.

Medium of instruction. English is used extensively in teaching as well as in daily school life; learners and teachers get accustomed to using English easily; balanced use of English and Kinyarwanda to make sure all learners understand the teaching.

Learner centred methodology. All learners are involved in the lesson; they are actively constructing knowledge and skills; progress is assessed continuously at individual level; didactic materials are exposed at the walls; teachers show personal interest in their pupils.

Leadership. The head teacher discusses educational policy and performance with teaching staff and stimulates the development of a shared vision; the head teacher sets an example (punctuality, behaviour, visibility); goals and targets are shared by all; the head teacher promotes cooperation between teachers and creates an atmosphere in which everyone is eager to learn from experiences; the head teacher masters a variety of leadership styles according to what is necessary in the specific situation. The result is shared leadership.

Incentives. Teachers and learners are praised or awarded for excellent performance; there are competitions to strive for the best.

Planning. Strategic plans, action plans and lesson plans are made according to a plan-do-check-act scheme; targets are formulated specific, measurable, achievable, relevant, time-bound ('SMART'); bench marks are used to compare school performance with other schools which serve as a reference.

These supposed prerequisites for success are in line with research findings. Essential factors for effective teaching and learning include: curriculum, pedagogy, didactic materials, continuous assessment, good teachers, learning

time. Quality education is dependent on school leadership and students' nutrition and health (Hewlett Foundation, 2006).

However, different studies lead to different conclusions. Recently there have been several systematic reviews and meta-analyses into the interventions that lead to improved learning outcomes in developing countries (Kremer, 2013). Some reviews show that the use of information technology leads to the greatest improvement in student learning, others find this is done by interventions regarding information about school quality. Sometimes even the availability of basic infrastructure proves to be most effective (Evans, 2015).

Although there are strong indications that the above-mentioned factors are critical for success of the #1 schools, they remain to be supported by further research.

6. Conclusion and Discussion

The above analysis shows on the one hand that the average results at national examination of the schools of Rulindo District are very weak. The division system for classifying learners, at which learners with very poor results still can pass, conceals this sobering fact. On the other hand the analysis shows that some schools are able to perform much better, although they are not in a socio-economic privileged situation.

So the optimistic conclusion could be that for all schools a considerable improvement in performance is within reach, if lessons to be learned from successful schools are taken into consideration.

The main reason behind the poor performance at the average school seems to be that a large proportion of learners did not really participate in the educational process. Their results for all subjects are very weak, even for the mother tongue subject. This is not because they are lacking intellectual abilities, as under similar circumstances their fellow learners at #1 schools perform well. So this suggests it must be a consequence of the way they are taught.

The performance of school C indicates what progress can be achieved by better addressing individual learners. Although half of the learners have not been able to produce any good result, the distribution of the marks of the other learners shows a bell shape around a mean value. Such a partition in 'haves and have-nots' is not desirable, of course. But the example of this school suggests that if the proficiency in English is better and the teaching is more learner-centred a larger proportion of learners can get satisfactory results.

Concluding, the first crucial factor for improvement seems to be mastery of the medium of instruction by learners. "According to a 2011 USAID study, 62% of Rwandan Primary 6 students were unable to respond correctly to even one comprehension question in a simple English text intended for children in Primary 1 and Primary 2." (Reddick, 2015). "In a study by Pearson (2014), none of the Rwandan teachers (from both rural and urban schools) reported to have sufficient skills to teach in English" (Sibomana, 2014).

Our research shows the correlation between poor performance at English and the results in other subjects that are taught and examined in English. Problems with English seem to be at the root of disappointing results. Change of this state of affairs cannot be achieved exclusively by better teaching in the English lessons. Learners should be surrounded by the English language for many hours each day. This can be achieved by a range of activities, such as meetings, debates, competitions, etc. (Sibomana, 2014).

The government recognizes the need for addressing the role of English. That is why in 2012 it introduced the English Language School-based Mentors programme, by which over 800 mentors were recruited and distributed across the country, but that programme has been suspended in 2015 to allow for restructuring. The government wants all schools to have a resident mentor (Buhungiro, 2015). It is yet unclear when and how the programme will be resumed. So, schools should not wait for the government. There is a lot which can be done, using the #1 schools as an example.

The second crucial factor for success regards pedagogy and didactics in general: learner-centred methodology. Although a lot of effort has been given to promote learner-centred teaching, in most schools teacher-centred methodology is predominant. The implementation of new curricula for primary and secondary schools between 2006 and 2010 in most schools of Rulindo has not done enough to change this situation.

In retrospect these curricula are called 'knowledge based' (Kwibuka, 2015), but in fact they were already explicitly aiming for learner-centred approach (Republic of Rwanda, 2010b). The new curriculum which is being implemented currently is even more explicit: "The curriculum must address learners' individual needs, interests, abilities and backgrounds, creating an environment where learning activities are organized in a way that encourages learners to construct the knowledge either individually or in groups in an active way." In short: a 'competence-based' approach (Republic of Rwanda, 2015g).

However, not necessarily the implementation of new curricula which are based on learner-centred methodology leads to teaching on that basis, as experiences from other developing countries show (Pritchett, 2012). In Uganda teachers told researchers that they did not feel well equipped to implement the new thematic curriculum. The confusion and inadequate information even lead to resentment and opposition, which was not supportive for effective implementation (Altinyelkin, 2010). In Tanzania, for secondary schools, it was found that the majority of interviewed teachers did not grasp what is meant by the concept 'competence-based' (Komba, 2015).

When many teachers do not understand the implications of the new curriculum for their way of teaching, they need to be trained to teach in a more learner-centred way. Leadership will be needed to bring along necessary changes. The quality of teaching and the quality of school leadership are dominant school-related factors for learning results (Peeraer, 2014). The evaluation document of 26 education innovation projects in Rwanda concluded, "Significantly, for

projects across all the themes, securing the support of head teachers was shown to be crucial in the implementation of any innovation implemented in the school. It became clear that head teachers need to be actively involved in some way with discrete roles that enable them to support innovation. (...) School leaders need to be clear of their given roles so that these are not at odds with their other priorities or responsibilities." (Innovation for Education, 2016a)

7. Further Research

The aim of any school improvement should be: achieving learning outcomes for all. It is clear that this goal is still far away for the average school in Rulindo district.

The new curriculum, of which the implementation began in 2016, is supposed to be competence-based. It requires schools to give skills and attitudes a prominent place in their educational programmes. However, any new curriculum will not change the situation for the better as long as there is no change away from traditional teacher-centred methods. That means, the new curriculum could and should be used as a stimulus to strengthen learner-centred methodology. In the Rwandan context it is a precondition that teachers and learners become versed in English.

Further research could be action research, connected to the introduction of the new curriculum, into the effects on performance of learner-centred methodology, emphasis on the medium of instruction, and of shared leadership. It would be worth while to include the points of view of head teachers, teachers and even learners.

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Notes

- ¹ Retired CEO in secondary education in The Netherlands, independent replacement head teacher and advisor. He worked for over a year for VSO as education leadership advisor in Rulindo district, North Province. Opinions expressed in this article are strictly his own.
- ² As the number one (#1) school is seen the school which performs best according to pass rate.

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- ³ That doesn't take away that it would be useful to do research on the examination itself. "Are the school children failing the national examinations or vice versa; that is, are the national examinations failing the school children?" (HakiElimu, 2012). "Because the instrument used to measure students' achievement is the cornerstone of a national assessment, its quality will affect the use that can be made of findings. (...) The tests used in many national assessments do not meet [the] conditions. They may be limited to measuring lower order levels of knowledge and skills, they may not contain a sufficient number of items, and they may be too difficult, with the result that potential users do not have a reliable basis for policy and decisions." (Kellaghan and Greaney, 2009).
- ⁴ January 2014 till March 2015, within the Achieving Learning Outcomes for All project, UK Department for International Development (Innovation for Education, 2016a, b).
- ⁵ "VSO is the world's leading international development organisation that uses volunteers to fight poverty and reduce inequality" (VSO International, 2016)
- ⁶ The Rwandan system is very similar to the system used in Uganda. Also the subjects are the same. However, in Uganda there are only four subjects in national primary school leaving examinations: there is no national examination in a local language.
- ⁷ For the national examination at the end of lower secondary education, the same division system is being used, with its own criteria for classifying in a certain division.
- ⁸ EP Ruvumba, a public school in Tumba sector
- ⁹ Data about the socio-economic context of the #1 schools compared to the average schools have not been found. The statement is based on oral information given by head teachers and district office.
- ¹⁰ GS Masoro, a government aided school in Masoro sector
- ¹¹ EP Ruvumba, a public school in Tumba sector
- ¹² EP Sayo, a public school in Kisaro sector
- ¹³ GS Musasa, a government aided school in Gitovu sector, Burera district
- ¹⁴ Head teachers and sector education officers of three sectors of Rulindo district.