POST DISTRIBUTION MODEL FOR THE ALLOCATION OF EDUCATOR POSTS TO SCHOOLS

PRINCIPLES ON WHICH THE MODEL IS BASED

1. The model is based on the principle that available posts are distributed among schools, proportionally to their number of weighted learners.

2. The concept of "weighted learner", instead of actual learner, is used to enable schools to compete on an equal footing for posts. As some learners and some learning areas require more favourable post allocations than others, each learner is given a certain weighting that reflects its relative need in respect of post provisioning. Other factors like the size of the school, the need to redistribute resources and the need to ensure equal access to the curriculum may require that additional weighted learners be allocated to some schools. A weighted learner enrollment for each school is determined, which, in relation to the total learner enrollment of the province, reflects its relative claim to the total pool of available posts in the province.

FACTORS THAT ARE BEING TAKEN INTO ACCOUNT IN DETERMINING THE POST PROVISIONING NEEDS OF SCHOOLS AND LEARNERS

3. Educational and administrative factors that impact differently on the post provisioning needs of learners and of schools for which specific provision is made in the model are the following:

    - The maximum ideal class size applicable to a specific learning area or phase. This ideal maximum value also takes into account complicating factors that may apply, such as additional contact time required between educator and learner and the requirement to attend to learners in more than one place at the same time. Although the situation in South Africa is such that ideal maximum class sizes cannot be complied with, these ideal values form a basis of comparison between the requirements of all the learning areas and grades.

    - Period load of educators. It is common practice that educators in the secondary school phases have a lower period load than educators in the primary school phases. This is mainly as a result of more complex time tables and subject combinations. A lower period load implies a more favourable overall learner-educator ratio. The norms used in this regard are based on average prevailing practices and do not represent workload policy.

    - Need to promote a learning area. By providing a more favourable learner-educator ratio in respect of a learning area in grades 10 to 12, schools can be motivated to promote such a learning area. This may only be done in terms of national or provincial policy in this regard.

    - The size of the school. The smaller a school, the more difficult it is to manage with a certain learner-educator ratio and the more favourable it should be. This matter is addressed by adding a certain constant number of weighted

learners to each school. The constant additional number of weighted learners could be seen as providing for a school's principal post, or for part of it, independently from the number of learners. It could also be seen as providing for posts to deal with certain basic responsibilities that each school has, irrespective of its size.

- The number of grades. Especially in respect of smaller schools, it is more complex to manage a school with a relatively large number of grades than a similar sized school with only a few grades. This matter is addressed by linking the additional number of weighted learners, referred to under the previous point, to the number of grades. A further increase in the number of weighted learners of a combined school is required to compensate for the management complexity of such a school.

- More than one language medium of instruction. In order to deal with this complicating factor, the number of weighted learners that is granted per grade in terms of the previous point, is increased if more than one language medium of instruction is used in the particular grade. A head of department may set a certain minimum number or percentage of the learners in a grade that must receive tuition in a second language before recognition is given in this way.

- Disabilities of learners. These learners require additional support from various categories of personnel. Norms with regard to the provisioning of educator posts, including teaching staff, therapists and psychologists still need to be determined. Until new norms have been determined, the norms for the allocation of educator (teaching staff) posts that applied in terms of the 1998 Post Provisioning Model, as published in Government Gazette No. 119627 on 18 December 1998, as well as the norms that applied in respect of therapist and psychologist posts, will continue to apply except in schools where the allocation is done in terms of a field testing of norms that are in the process of being developed. The weightings that apply to learners for purposes of allocating educator posts in terms of the Post Distribution Model are as follows:

Specifically Learning Disabled	3.0
Severely Mentally Handicapped	3.0
Epileptic	3.0
Cerebral Palsied	4.0
Physically Disabled	4.0
Severe Behaviour Problems	5.0
Hard of Hearing	5.0
Partially sighted	5.0
Blind	5.0
Deaf	5.0
Autistic	6.0

In accordance with specific circumstances in a department, each of the above weightings may be increased, after consultation with trade unions who are members of the ELRC, by between 0% and 20%. It is important to note that the weightings that apply to learners based on their curriculum, school phase,

instruction media or the fact that both primary and senior secondary phases are provided for, do not apply to these learners.

Learners who are mildly to moderately learning disabled are weighted in terms of the curriculum they follow and not in terms of their disability. If they are accommodated in so-called special schools where they receive vocational training, they are counted as 2.5 weighted learners each.

- Access to the Curriculum. In order to ensure affordable and fair access of learners to the curriculum, the numbers of learners that are fully funded in respect of subjects that are more expensive to offer need to be regulated. (Certain subjects are more expensive than others because they require smaller classes and/or special equipment and facilities.) A head of department, therefore, may identify specific schools at which the offering of such subjects should take place as well as the maximum number of learners at such schools that should take the subjects concerned. This means that a maximum number (or percentage) of learners may be set in respect of a particular subject at a particular school. Should a school exceed such a limit, the excess learners will be funded in terms of the norms applicable to the least expensive subject. It is possible that the maximum number of learners that will be counted as taking a particular subject at a particular school may be specified as zero even though such a subject was considered for post provisioning purposes in the past. This would mean that all such learners taking such a subject would be counted as if they are taking the least expensive subject for purposes of post provisioning.

  In order to assist a school to introduce such a subject, a certain minimum number of learners may be counted for post provisioning purposes during a phasing in period, even though the actual number of learners taking the subject is lower than this number. The implementation of these measures must be in accordance with a department's policy on redress in the implementation and promotion of the curriculum.

- Poverty. In order to compensate for the negative impact that poverty has on learning, the poverty grading of a school is also taken into account.

- Level of funding. Policy may require that different phases be funded at different levels. Currently, all grades are set at a 100% funding level while Grade R is set at a funding level of 0%. This is merely a tool that could be used if and when required.

- Ad Hoc factors. Certain factors that are not considered above, such as an unexpected growth in learner numbers, may exist at a particular school and may justify the allocation of additional posts to such a school. These posts must be allocated from an additional pool of posts that need to be created for this purpose.

WEIGHTING NORMS

4. The following norms and principles will apply in respect of all learners:

(a) Grades 1 to 9:

Based on the principle that uniform curricula apply to learners in schools in all phases up to grade 9, the following formula is used to determine the weighting of a learner:

c divided by the ideal maximum class size, divided by the average prevailing period load, multiplied by the funding level.

(w = c/m/l x f)

The value of c is set at 40 and refers to the highest ideal maximum class size in relation to which others are expressed.

Grade	Max Class size	Period load (%)	Funding level	Weight
	(m)	(l)	(f)	(w)
R	35	96	0	0
1 to 4	35	96	100	1,190
5 to 6	40	96	100	1,042
7	37	96	100	1,126
8 to 9	37	87	100	1,2426

(b) Grades 10 to 12:

- In view of the variety of learning areas, each learner is weighted separately in terms of his or her curriculum.
- A total number of weighted learners (subject-learner weight or slw) is determined for the learners in a particular grade (10, 11 or 12) taking a particular subject by means of the following formula:

  The number of learners taking the subject (l_s), multiplied by 40, divided by the ideal maximum class size, multiplied by the promotion factor (p), divided by the average period load (l), multiplied by the funding level (f), multiplied by the relevant weekly time allocation (t), divided by 27,5.

  ($slw = l_s$ x 40/m x p/l x f x t / 27,5)

  In view of the fact that some subjects are compulsory for all learners and others may be limited in respect of the number of learners that will be recognized for post provisioning purposes, the following procedure needs to be followed:

- All learners are required to take 4 subjects from Group A as follows: 2 official languages, Mathematics or Mathematical Literacy and Life orientation. Therefore, the total weighting of all learners in a particular grade (l_g) in respect of the subjects in Group A is:

wl(A) = (2 x (40/37 x 1/0.84 x 4.5/27.5) + (40/35 x 1/0.84 x 4.5/27.5) + (40/37 x 1/0.84 x 2/27.5)) x l_g

= 0,7374 x l_g

- In respect of Group B subjects, each learner may take any 3 subjects. Therefore, the maximum number of learner-subject combinations in respect of the various subjects in Group B (n_m), in respect of a particular grade in a school is 3 times the actual number of learners in that grade (3 x l_g). The calculation of the total weighting of learners in a particular grade in respect of Group B subjects is done as follows:
  (a) In respect of each subject listed under Group B (excluding "all other Group B subjects"), calculate the weighted learners by means of the formula slw = 40/m x p/l x f x t/27,5 x number of learners taking the subject. By adding the values of swl for all these subjects a value for swl(1) is obtained.
  (b) If the total number of subject-learner combinations (n_t) used for the calculation in (a) is less than the maximum number of subject-learner combinations (n_m) that can apply, determine the value of $n_d = n_m - n_t$.
  (c) Calculate slw(2) = n_d x 40/37 x 1/0,84 x 4/27,5 = n_d x 0.1872.
  (d) The total number of weighted learners for the grade in respect of Group B subjects is slw(B) = slw(1) + slw(2).
  (e) If the total number of learner-subject combinations (n_t) used for the calculation in (a) is higher than the maximum number of learners (n_m) that can apply, adjust the value swl(1) calculated in (a) above by multiplying it with n_d/n_m to obtain a value for wl(B).

- A total number of weighted learners for the particular grade is then determined as wl(A) + wl(B).

The following norms apply:

Subject	Ideal maximum class size	Promotion factor	Period load (%)	Time allocation	Funding level (%)
	(m)	(p)	(l)	(t)	(f)
Group A					
Official languages	37	1	84	4,5	100
Mathematics or Mathematical Literacy	35	1	84	4,5	100
Life Orientation	37	1	84	2,0	100
Group B					
Agricultural Management Practices	15	1	84	4	100
Agricultural Technology	15	1	84	4	100
Agricultural Science	37	1	84	4	100
Dance Studies	15	1	84	4	100
Design	12	1	84	4	100
Dramatic Arts	12	1	84	4	100

Music	6	1	84	4	100
Visual Arts	12	1	84	4	100
Civil Technology	15	1	84	4	100
Electrical Technology	20	1	84	4	100
Mechanical Technology	15	1	84	4	100
Engineering Graphics and Design	15	1	84	4	100
Computer Applications Technology	25	1	84	4	100
Information Technology	25	1	84	4	100
Life Sciences	32	1	84	4	100
Physical Sciences	30	1	84	4	100
Consumer Studies	25	1	84	4	100
Hospitality Studies	20	1	84	4	100
All other Group B subjects	37	1	84	4	100

Note: The values that appear in the table as promotion factors are all set as 1. This means that no provision is made in the table for the promotion of any of these subjects. Should provision be made in policy that a certain subject should be promoted by, say 7%, the value of "1" would become "1,07". The promotion factor per subject should be included in the provincial curriculum policy and would apply equally to all learners counted in the subject.

(c) A further distinction between schools is made based on the size of the school, the number of grades and whether or not more than one language medium of instruction is used. Provision for this is made by adding a certain number of weighted learners to a school's weighted enrollment linked to each recognized language group (maximum of 2 language groups) and each grade provided for at the school. The following values apply:

- A base number of weighted learners must be added to each school. Any value from 10 to 20, in accordance with a department's needs in this regard, will apply. A head of a provincial department must select a value that will ensure a proper balance in the allocation of posts to institutions of different sizes.

- Additional weighted learners must be added in respect of each grade in which learners are enrolled. If learners in a particular grade are taught in more than one language medium, a further additional weighting will apply in respect of that grade. (A minimum number (or percentage) of learners in a particular grade receiving tuition in a second language may be specified before the additional provision applies. This additional weighting only applies once, irrespective of the number of additional languages that may apply):

Grades	1	2	3	4	5	6	7	8	9	10	11	12
Primary language group	2	2	2	2	2	2	2	3	3	3	3	3
Second language group	4	4	4	4	4	4	4	6	6	6	6	6

Any of the values in the table may be increased by a maximum of 2, provided that the head of a provincial department is satisfied that such an increase would lead to a more equitable allocation of posts.

(d) In respect of a combined school, the base number of 10 to 20 weighted learners that is granted to a school in terms of paragraph (c), is granted in respect of both the primary school phase and the secondary school phase that the school has. For this purpose the secondary school phase must include learners in any of grades 10 to 12.

5. (a) The total number of weighted learners in each school is then adjusted in terms of its poverty ranking. The head of a provincial department must set aside a certain percentage of its available posts for poverty redress based on the department's relative level of internal inequality. The Minister may from time to time set the maximum percentage that provincial departments may use for this purpose. Until this limit is revised, it is set at 5%.

(b) The redress posts are to be distributed to schools based on the relative poverty of the learners of a school, using an appropriate index within the framework of the indices utilized by the province in the National Norms and Standards for School Funding. The basis on which the redress posts are to be distributed among schools is as follows:

School quintiles	Allocation from redress pool of posts
Poorest 20%	30% of posts
Next 20%	27,5% of posts
Next 20%	22,5% of posts
Next 20%	15% of posts
Least poor 20%	5% of posts

DISTRIBUTION FORMULA

6. After the total number of weighted learners for each school has been determined, the number of posts to be allocated to a school is determined by means of the following formula:

Posts = Total number of posts available, multiplied by weighted learners of school, divided by total weighted learners of all schools.

COMMUNICATION OF NEW POST ESTABLISHMENTS WITH SCHOOLS

7. Where a school's establishment is likely to change in any school year, the adjusted post establishment should, as far as possible, be communicated to the school on or before 30 September preceding the school year.

ROLE OF THE NATIONAL DEPARTMENT OF EDUCATION (DOE)

8. Provincial departments are required to adhere to the intent and spirit of these norms. Where a province deviates from any of these norms it needs to justify such deviation to the DOE. The DOE may require information from time to time from provinces in order to ensure that these norms are being implemented. Provinces are thus required to comply with these requests.