

sportscotland



Assessing School Needs

A school's physical education (PE) curriculum should be based on national curricular guidance. This curriculum will consist of a range of activities, and in order to provide the most appropriate teaching environment for each of them a number of specialised facilities are required.

This Appendix expands upon the advice given in Part 1 of the document and sets out a model that calculates the physical education facilities required for any school. Basic parameters such as the school's roll, class sizes, details of the physical education curriculum and so on are used to calculate requirements in number and types of teaching spaces and changing facilities.

The following worked example demonstrates this model in detail. It is important to note that the assumptions made will not necessarily be applicable in every case. Those in this worked example have been chosen to represent a realistic set of assumptions for a secondary school. Each local authority must, however, determine its own. These may be the same across the authority or may vary from school to school. For example, relative sizes of year groups or proportions of students studying for a physical education qualification may vary from school to school within the same authority.

These parameters are the sole input to the model and are the only factor in determining the result. They must therefore be chosen with great care, and the model should be run more than once to test the result of different management practices or changing circumstances on the numbers of teaching spaces required.

Following the recommendation of the Scottish Physical Activity Strategy, 'Let's make Scotland more active', the worked example assumes a minimum entitlement of 2 hours of core PE for every pupil. This represents a significant increase in the levels of core PE which the majority of Scottish schools currently provide. The worked example is not definitive, but it does show the potential facility implications if Scotland aspires to follow the recommendations of the Strategy for physical education.

Basic Assumptions

School Roll

This should be the maximum number of pupils that the school is likely to have to accommodate in its lifetime. Demographic trends and predicted future population levels in the school's catchment area should be considered, as should any likely changes to the popularity of the school, changes to its admissions policy, possible school closures and so on.

Period Length

The length of a standard period for physical education. If there is a chance this figure may change, the model should be run using all options, as the influence of this parameter on the final results can be significant. Schools in Scotland typically operate using period lengths of between 40 and 55 minutes.

Number of Periods per Week

This is related to the previous parameter, and represents the number of available periods in the school week. This is usually 40 for schools operating 40 minute periods and 30 for those operating 55 minute periods. It is probably a good idea when making the calculations to reduce this figure by at least two periods to allow for times when there will be no PE classes scheduled (to accommodate staff meetings, for example).

Class Size

This may vary depending on the year group and the qualification being studied for. In most schools class sizes for those studying for a PE qualification will tend to be lower than those for core PE. Whether or not the school considers PE to be a practical subject is also important. Practical subjects typically have a maximum class size of 20, and non-practical subjects a maximum of 33. Many practitioners take the view that PE should be considered as a practical subject and that consequently the maximum class size for all groups should be 20. This approach has been used in our worked example. It is important to note that this parameter refers to the size of group that will be taught in one teaching space. All the teaching spaces must therefore be able to accommodate the largest of these groups. This parameter will have a significant impact on the results of the calculations.

Minimum Requirement for Physical Education

This parameter relates to the minimum time pupils are required to spend in PE, and will vary depending on year group and the qualification being studied. Reference should be had to national curricular guidelines. It is also advisable to consider the possibility that requirements may change over time, so running the model with a greater figure may be worthwhile as the impact on the level of facilities required can be assessed. The worked example is based on a minimum entitlement of 2 hours per pupil.

Weekly Period Allocation

This is determined by period length and each year group's requirement for PE, and represents the number of periods each group needs each week to receive the required minimum amount of PE.

Year Group Sizes

This applies to the size of the basic year groups taking part in compulsory physical education and to the groups studying for qualifications. Assumptions therefore have to be made about the proportion of pupils remaining at school beyond S4 and S5 and about the proportion of pupils in S3 to S6 electing to study for a physical education qualification.

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Table 1: Worked Example - Basic Assumptions

School Role	Worked Example Inputs
School Role	1200
Periods Per Week	30 (28* for calculations)
Period Length	55 minutes
Max. Class Size S1-S4	20
Max. Class Size S5-S6	20
Max. Class Size SG S3-S4	20
Max. Class Size NQ S5-S6	20
Minimum Recommendati	on for Physical Education
S1-S2	120 minutes per week
S3-S4	120 minutes
S5-S6	120 minutes
SG S3-S4 (30% of Group)	150 minutes (addition to core)
NQ S5-S6 (20% of Group)	270 minutes (addition to core)
Weekly Period Allocation	Periods
S1-S2	2
S3-S4	2
S5-S6	2
SG S3-S4	3 (addition to core)
NQ S5-S6	5 (addition to core)
Year Groups as Pro	portion of Total Roll
S1	20% - 240 pupils
S2	20% - 240 pupils
53	20% - 240 pupils
S4	20% - 240 pupils
S5	15% - 180 pupils
56	504 4.0 11
	5% - 60 pupils
SG S3	5% - 60 pupils 6% - 72 pupils
SG S3 SG S4	6% - 72 pupils

SG - Standard Grade

NQ - National Qualification

* The school operates with 30 periods in the week but 28 has been assumed to allow two free periods for staff meetings or similar.

Some of the figures in Table 1 have been separated for every year group, and some counted together. Each local authority will have to decide on the most appropriate method. For example, in the worked example all the National Qualification pupils are counted together in working out the size of year group. This makes sense if programming of classes allows S5 and S6 pupils to be taught together. If they are always separate, then the distinction should be made in the table as this may affect the total number of PE classes. Although in our worked example the minimum recommendation for PE is two hours per pupil per week, it is possible that a school operating with 55 minute periods may choose to allocate just two periods, as has been assumed in the example. Such a situation perhaps represents the most likely way of increasing levels of physical education with period lengths of 55 minutes.

Teaching Spaces

The set of assumptions above relate to the size and operation of the school. Equally important assumptions also have to be made about the physical education curriculum. These relate to the variety of teaching spaces required to accommodate the range of PE activity, and the relative frequency with which these spaces will be used. The curriculum is ideally delivered using all of the teaching spaces below, but most schools, depending on their size, should have at least some of these spaces. For very small schools in island and remote communities, however, a more flexible approach to delivering physical education may have to be adopted.

Sports Hall

In this guidance, the term sports hall refers to a fourbadminton-court hall unless stated otherwise. The sports hall provides the opportunity for the development of skills for indoor court games, individual activities and the practice of some skills and techniques for outdoor activity. The most likely games which will be taught are badminton, basketball, volleyball, netball, indoor hockey, handball and table tennis. In addition, skills practice such as athletics, football, golf and cricket may be taught. Gymnastics activities needing a large floor will also be taught.

A four-court sports hall is considered as one teaching space and should not be sub-divided for teaching separate classes. Doing so tends to result in a deterioration in the learning experience due to the distraction and disturbance caused by the other teacher and class. In addition, the full four-court hall is required to give sufficient room to teach a class of pupils the activities listed above. The sports hall is the most flexible indoor teaching space and one should be provided in every school.

Gymnasium

This space should have the flexibility to be used for schoolbased gymnastics and for skills practice for a range of other activities. School based gymnastics teaches pupils the principles of flight, rotation and balance and requires a range of specialist equipment. Much of the work in the gymnasium will require individual and small group work in an environment conducive to problem solving, concentration, creative thinking and skilled performance. In smaller schools, the gymnasium and dance studio functions may be provided in a single dual-use space designed to meet the functional requirements of both. A gymnasium is likely to be needed in all but the smallest of secondary schools.

Dance Studio

This space will be used primarily for movement and dance. The specialised facilities and equipment needed for these disciplines and the particular qualities required of the space means that a dance studio is a much more appropriate teaching environment for these activities than a gymnasium or sports hall. A dance studio can also be used for the teaching of other activities such as yoga, martial arts, aerobics, circuit training, keep-fit and other exercise disciplines. In smaller schools, the gymnasium and dance studio functions may be provided in a single dual-use space designed to meet the functional requirements of both. A dance studio is likely to be needed in all but the smallest of secondary schools.

Fitness Room

The existence of a well-equipped fitness room in a physical education department provides an environment in which pupils can focus on preparation for physical activity and on how their bodies react to this activity. The effects can be monitored in a controlled environment, lessons learned and theories tested. A fitness room should be considered important to the delivery of the physical education curriculum.

Classroom

Used on its own or together with one of the other teaching space, the classroom also offers opportunities to use ICT, video and other aids to help pupils appreciate, analyse and improve performance. This 'Analysis and Investigation' will often mean the classroom is used either at the start or end of a lesson using one of the other teaching spaces. A well-equipped classroom should be considered essential to the delivery of the physical education curriculum.

Swimming Pool

Whether or not to provide a pool at a school is a complex decision because pool use is typically less than the other teaching spaces and because swimming pools are the most expensive spaces to construct, operate and maintain. The demand for pool space from all schools in the area should be taken into account as it may be sensible for a cluster of schools to share rather than each school having its own. Another consideration may be the opportunity for specialisation in the size and type of pools provided at different schools. It may also make more sense to use an existing community swimming pool if there is one nearby but for both these options the time and expense spent travelling to such a pool may be a serious constraint. Further guidance is given in Appendix III: Swimming Pools.

A swimming pool in a secondary school should be suitable for teaching children to swim for the first time and for further developing existing skills in swimming and diving. The larger the school, the more sense it may make to provide a pool onsite, but all secondary schools should have a swimming pool or easy access to one within reasonable travelling time.

Outdoor Teaching Spaces

The requirements of extra-curricular sports activities and the fact that grass playing fields can accommodate only a limited amount of use per week without deterioration in their quality makes the decision on which and how many outdoor teaching spaces to provide somewhat more complex than for indoor spaces. Synthetic grass is suitable for match play and skills practice for football, hockey, tennis, netball, basketball and some rugby skills practice. Pitches can be either full-size or a smaller multi-court area. Natural grass playing fields can provide for match play and skills practice for hockey, football, rugby, rounders, shinty and cricket, for which a synthetic wicket may be provided. A running track and facilities for field events are also required. See Appendix II: Playing Fields for further advice.

Synthetic grass pitches have several advantages over traditional grass ones. They can cope with much more intensive use, require significantly less maintenance and are significantly less affected by severe weather. It is recommended that all secondary schools have access to a synthetic turf area suitable for use as a teaching space. Larger schools may require a second, although this may not necessarily be full-size. In addition, all schools should have sufficient grass playing fields to accommodate both curricular use for physical education and extra-curricular use by school teams and clubs for match play and training. The provision of mineral-based playing fields is not recommended.

Changing Accommodation

Changing accommodation is required for the number of classes likely to be doing PE at any one time and for after-school use by school clubs and teams. Sufficient changing accommodation must be provided to cater for maximum levels of use for physical education and extra-curricular activity.

Assigning Time to Each Teaching Space

Assumptions have to be made about the proportion of curricular time spent in each of the above teaching spaces. These assumptions may differ by year group and qualification being studied: pupils studying for a national qualification are, for example, likely to spend a higher proportion of time in the classroom and fitness studio than S1 and S2 pupils.

The school's physical education curriculum should be examined, and the amount of time spent on each type of activity by each year group calculated. These activities should then be assigned to the most appropriate teaching space from those types described above.

Some activities can take place in more than one type of teaching space, but for the purposes of the following calculations it is the most suitable space which should be chosen at this stage. Assignment to outdoor teaching spaces should reflect the vagaries of the weather and therefore be based on an average throughout the year.

	Sports Hall	Gymnasium	Dance Studio	Fitness Room	Outdoor	Pool
S1	25%	20%	15%	-	25%	15%
S2	25%	20%	15%	-	25%	15%
S3	25%	20%	15%	10%	20%	10%
S4	25%	20%	15%	10%	20%	10%
S5	30%	20%	15%	10%	15%	10%
S6	30%	20%	15%	10%	15%	10%
SG S3	30%	15%	15%	15%	15%	10%
SG S4	30%	15%	15%	15%	15%	10%
NQ S5-6	30%	15%	15%	15%	15%	10%

Table 2 : Use of Teaching Spaces





Fitness Room	% of Roll	Year Group Size	% Taking Part	P.E. Group Size	Class size	No. of Classes	Periods Per Week	Total Periods
S1	20%	240	100%	240	20	12	2	24
S2	20%	240	100%	240	20	12	2	24
S3	20%	240	100%	240	20	12	2	24
S4	20%	240	100%	240	20	12	2	24
S5	15%	180	100%	180	20	9	2	18
S6	5%	60	100%	60	20	3	2	6
SG S3		(240)	30%	72	20	4	3	12
SG S4		(240)	30%	72	20	4	3	12
NQ S5-6		(240)	20%	48	20	3	5	15

Table 3: Number of Physical Education Classes in School

Table 2 shows these assumptions for the school in our worked example. It is possible to simplify this table by deciding an average time in each space for the whole school rather than differentiating between year groups but this may give a less precise estimate of the overall need for each type of teaching space. It is for users of the model to decide what figures to use and whether or not to vary them by year group. As with the previous set of assumptions, it may be worthwhile to test several different scenarios, for example to plan for changes in the physical education curriculum which might take place over the lifetime of the school.

The next stage is to determine the maximum number of physical education classes the school is likely to have and how many periods per week this results in. Table 3, based on our worked example school of 1200 pupils shows how this is calculated.

Working through each row in Table 3 shows how the number of classes for each year group is calculated. The year group size is a proportion of the total roll, and the 'PE group' size is a proportion of the year group. Dividing this PE group size by the maximum class size gives a total number of physical education classes for that group. Finally, the number of classes in the group is multiplied by the number of periods of physical education per week for each to give the total number of PE periods in a week for each group.

In our worked example, therefore, adding the figures in the final column shows that this generates a need for 159 periods of physical education in a typical school week.

In deciding the structure of such a table, decisions have to be made on how the school is likely to be managed. For example, if the S6 PE group size was, say, 63, the group could probably

		S 1	S 2	S 3	S4	S5	S 6	SG S3	SG S4	NQ S5-6	Total
Sports Hall	Proportion Total Periods Period Load	0.25 24 6	0.25 24 6	0.25 24 6	0.25 24 6	0.3 18 5.4	0.3 6 1.8	0.3 12 3.6	0.3 12 3.6	0.3 15 4.5	42.9
Gymnasium	Proportion Total Periods Period Load	0.2 24 4.8	0.2 24 4.8	0.2 24 4.8	0.2 24 4.8	0.2 18 3.6	0.2 6 1.2	0.15 12 1.8	0.15 12 1.8	0.15 15 2.25	29.85
Dance Studio	Proportion Total Periods Period Load	0.15 24 3.6	0.15 24 3.6	0.15 24 3.6	0.15 24 3.6	0.15 18 2.7	0.15 6 0.9	0.15 12 1.8	0.15 12 1.8	0.15 15 2.25	23.85
Fitness Room	Proportion Total Periods Period Load	- - -	- - -	0.1 24 2.4	0.1 24 2.4	0.1 18 1.8	0.1 6 0.6	0.15 12 1.8	0.15 12 1.8	0.15 15 2.25	13.05
Outdoor	Proportion Total Periods Period Load	0.25 24 6	0.25 24 6	0.2 24 4.8	0.2 24 4.8	0.15 18 2.7	0.15 6 0.9	0.15 12 1.8	0.15 12 1.8	0.15 15 2.25	31.05
Pool	Proportion Total Periods Period Load	0.15 24 3.6	0.15 24 3.6	0.1 24 2.4	0.1 24 2.4	0.1 18 1.8	0.1 6 0.6	0.1 12 1.2	0.1 12 1.2	0.1 15 1.5	18.3

Table 4: Periods Required from Each Teaching Space

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still be accommodated in only three classes rather than the four which would be required if the maximum class size was rigidly adhered to. There may also be some mixing of year groups within a class which might reduce the total number of classes (as has been assumed for NQ S5-6 in our worked example). Local authorities should refer to best practice and to their own policies in making such decisions.

The next task is to calculate the school's total need in periods per week for each type of teaching space.

Table 4, using the figures from our worked example, shows the calculations needed to arrive at the number of periods per week which each type of teaching space will be required to deliver (shown in the extreme right hand column). This is achieved by multiplying, for each year group, the proportion of time spent in each space (from Table 2) by the total number of periods required by that year group (from the final column of Table 3). The result of that calculation is the demand for that particular teaching space from each year group, and adding together the results for each year group gives the total requirement for each space.

The calculations assume all classes in a year group use every teaching space each week in proportion to their overall need for that space. In reality, of course, a class doing two periods of P.E a week and whose proportionate use of outdoor teaching space is 0.2 will use that space periodically rather than 0.4 of a period every single week. It is the function of the school's timetable to organise use of the teaching spaces to ensure that the demand for each of them remains reasonably consistent throughout the week and indeed throughout the year.

Prioritising Facilities

Having established the likely demands on the various options for teaching spaces in the school, the next stage is to decide which facilities to provide. It may not necessarily make economic sense to provide every type of teaching space listed above: in smaller schools this will lead to spaces being underutilised. Table 4 assigned each activity to the most suitable space, but some activities can be taught in more than one type of space, and some spaces are more flexible than others in terms of the type of activity they are suitable for.

In order to ensure an appropriate mix of facilities to deliver the curriculum, indoor teaching spaces should normally be prioritised to ensure that for any given size of school (but particularly for smaller schools) the most flexible teaching spaces are chosen first. The individual circumstances and requirements for each school should, however, ultimately determine which teaching spaces are selected. In all cases, an adequate number of spaces should be provided to cope with the total period load.

Table 5 shows the teaching and changing spaces required for a range of school sizes, based on the parameters used in the worked example. It should be noted that the full calculation should be done for each size of school. Simply doing the calculations for one size of school and then extrapolating the results for different sizes will not necessarily give the most accurate results. Neither does it allow for changing any of the parameters or for common-sense decisions about how each size of school is likely to be managed in terms of maximum class sizes and so on. The fourth row of the table, Classes per Period, shows the average number of classes which will be doing PE at any one time, and is calculated by dividing Row 2: Total Period Load by Row 3: Periods in Week. The number of teaching spaces, shown in the fifth row, should be greater than this number. In this regard, timetabling is important: an average of 3 classes per period, for example, may mean there are usually three being taught, but sometimes perhaps 2 or 4. For each school, therefore, careful consideration should be given to how classes will be timetabled: if there are regularly 4 classes being taught at any one time (regardless of the average number) then 4 teaching spaces must be provided. The figure for Classes per Period has therefore been rounded up to the next whole number (or to the next again round number if the decimal component is above .75) to give the Total Spaces in the next row.

Some flexibility in timetabling is afforded by this rounding up, but the period load for the swimming pool is also in effect 'free' every week to give even more leeway: these periods will be delivered at a pool off-site or at the school's own pool (not counted as a teaching space for these calculations). The period load in the pool in Table 5 accounts for about 12% of all PE at the schools and the calculations therefore have this built-in allowance for flexibility.

This is perhaps a reasonable proportion of free time to allow flexibility in the timetable but Local Authorities should refer to their own experience and practices at existing schools. For example, particularly in smaller schools, the sports hall may be used for assembly instead of PE, or the dance studio used for drama. When such spaces are unavailable for PE there must always be sufficient numbers of other teaching spaces to cope with the numbers of classes. The impact of severe weather on the use of outdoor teaching spaces, and the consequent knock-on effect on the demand for indoor spaces, must also be considered.

An alternative method of building flexibility in timetabling and the use of spaces into the calculations is by reducing the 'Periods in Week' parameter even further than simply allowing for staff meetings and the like. Doing so will in effect reduce the estimate of the amount of periods each space can accommodate in a week, so mirroring the real-life situation where timetabling may mean that each space is only used for a certain proportions of the available periods each week. Local authorities should again refer to the practices at existing schools to guide them on how many 'vacant' periods to plan for. If PE teaching spaces are unused for an average of 4 periods each week (for example) in a typical school, then a similar assumption for the 'Periods in Week' parameter will build this scenario into the calculations for new school facilities.

In smaller schools, flexibility can also be assured by providing perhaps one more teaching space over and above the number that the calculations indicate are required, but one which can also accommodate non-PE use. For example, providing a shared dance studio also used for drama and/or music or providing a separate assembly hall which can also be used for PE. Such dual-use of teaching spaces may prove to be an ideal solution for local authorities wanting to provide a full range of teaching spaces in smaller schools where the demand for each activity may not justify a dedicated space.

It can be seen from Table 5 that the suggested numbers of teaching spaces do not always appear to be sufficient to cope with the individual period loads for each space. For example, there is no fitness room in the smaller schools. Another example is that for the school with 1400 pupils there is only one gymnasium even though the period load on that space of 35 suggests that two are required.

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School Roll		400	500	900	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800	2000	2200	2400
Total Period Load		57	69	84	100	108	120	130	151	159	171	187	197	210	238	256	289	313
Periods In Week		28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
Classes Per Period		2.04	2.46	ო	3.57	3.86	4.21	4.64	5.31	5.68	6.11	6.68	7.04	7.5	8.5	9.14	10.32	11.18
Total Spaces		ო	ო	4	4	ъ	പ	വ	9	9	7	7	ω	ω	6	10	11	12
Total Changing		ო	ო	4	4	2	2	വ	9	9	7	7	ω	ω	6	10	11	12
llell strong	Load	16	19	23	27	29	32	35	41	43	46	50	53	57	64	69	78	84
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	Load	11	13	16	19	20	23	25	28	30	32	35	37	40	45	48	54	59
oymnasium	Spaces	*	*	-	-	-	-	-	-	-	-	-	2	2	2	2	2	ო
	Load	6	10	13	15	16	18	20	23	24	26	28	30	32	36	38	43	47
Dance Hall	Spaces			-	-	-	-	-	-	-	-	-	-	-	2	2	2	2
	Load	9	ω	10	11	12	14	15	17	18	20	22	23	24	27	30	33	36
1001	Spaces	(1)	(1)	(1)	(1)	(1)	(1)	(1)	[1]	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Citnocc Doom	Load	വ	9	ω	ω	6	10	10	13	13	14	15	16	17	19	20	23	25
	Spaces					-	-	-	-	1	-	-	-	-	-	-	-	-
Indoor Changing		2	2	ю	ю	4	4	4	D	വ	വ	വ	9	9	7	8	ω	6
Outdoor Coarce	Load	11	13	16	20	21	23	26	29	31	33	36	39	41	46	50	57	61
	Spaces	٦	1	1	1	-	-	-	-	1	2	2	2	2	2	2	ю	ю
Outdoor Changing		-	1	1	1	-	-	-	-	-	2	2	2	2	2	2	ю	ო

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Table 5: Accommodation Required

Period Load for each space has been rounded to the nearest whole number

* For schools without a separate dance studio and gymnasium, this space should be designed as a dual-use space meeting the requirements of both.

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In all schools, therefore, the PE curriculum may have to be adapted somewhat to suit the types of teaching spaces available. In addition, some of the PE activities best suited to the dance studio or gymnasium may nevertheless be delivered in a larger teaching space to an acceptable standard.

Such adaptation in the curriculum and in the use of teaching spaces is a realistic and necessary compromise between delivering the curriculum in an ideal environment and providing school facilities at a reasonable cost. For schools smaller than those covered in Table 5, flexibility in the type of space provided is essential, but this must be balanced against the need to effectively deliver the PE curriculum.

Changing Accommodation

Table 5 also shows the total number of changing units required (each of these sufficient to cater for a whole class/group). This too should be more than the average number of classes per period, as it would clearly be unacceptable to ever have a situation where there are more PE classes at any one time than there are changing units in the school. The management of the timetable has again, therefore, to be considered to ensure that a maximum number of classes per period can be inferred from the average, but providing the same number of changing units as there are teaching spaces should be the most sensible option.

The split between indoor and outdoor changing units should be on the basis of the relative period loads for indoor and outdoor teaching spaces. For outdoor activities, the requirements of extra-curricular school use and of community users must be carefully considered as these may impose a need for more changing accommodation than curricular use alone demands, particularly for schools with large playing fields.

We have therefore, using the same parameters as the school in our worked example, arrived at a suggested schedule of accommodation for a range of school sizes, as set out in Table 6. It is essential, however, that local authorities derive their own parameters and assumptions, make their own calculations and then come to sensible, local decisions about which facilities to provide and to consider also whether additional facilities are required for community use.

Playing Fields

The number of outdoor teaching spaces given in Table 5 will be less than the total number of playing fields required. Whatever balance of natural grass and synthetic grass playing fields is provided, these should be sufficient to meet all of the schools needs for curricular and extra-curricular activities. The typical solution for most schools will be a synthetic pitch in addition to several grass pitches which provide flexibility of use and a greater at-one-time capacity. Where the calculations suggest two or even three outdoor spaces are required, this should be the number of synthetic turf teaching areas provided.

The School Premises (General Requirements and Standards) (Scotland) Regulations set out minimum site areas for schools based on the number of pupils. The Regulations also set out the minimum area of playing fields that should be available to the school. More detailed advice on school playing fields and outdoor teaching spaces is set out in **Appendix II: Playing Fields**.

PE in Bad Weather

Throughout the school year, there will be times when the weather conditions rule out any outside activity. Physical education, however, will still be timetabled at these times and will therefore have to be delivered. Consideration should therefore be given as to how the maximum number of PE classes which will be run at any one time could be accommodated indoors should weather or ground conditions preclude the use of playing fields. One option would be to ensure that the school has enough indoor teaching spaces to cater for this number of classes. This may, however, lead to more expense by requiring more indoor facilities than the calculations shown above might suggest is required. Provision of an additional shared assembly/sports hall and/or dance/drama studio may help in this regard. Local authorities must carefully consider how they can deliver PE in quality teaching environments over the winter months when poor weather or ground conditions may render outdoor teaching spaces unavailable. If the playing fields are regularly unavailable or if PE is not taught outdoors in the winter months, schools should have sufficient indoor teaching spaces to cope with the maximum number of classes likely to be doing PE at any one time.



School Roll	Sports Hall'	Gymnasium ²	Dance Studio	Fitness Room	Indoor Changing Units	Pool (Period Load)³	Outdoor Teaching Spaces⁴	Outdoor Changing Units
400	1	1	-	-	2	6	1	1
500	1	1	-	-	2	7	1	1
600	1	1	1	-	3	8	1	1
700	1	1	1	-	3	10	1	1
800	1	1	1	1	4	11	1	1
900	1	1	1	1	4	12	1	1
1000	1	1	1	1	4	13	1	1
1100	2	1	1	1	5	15	1	1
1200	2	1	1	1	5	16	1	1
1300	2	1	1	1	5	17	2	2
1400	2	1	1	1	5	18	2	2
1500	2	2	1	1	6	20	2	2
1600	2	2	1	1	6	21	2	2
1800	2	2	2	1	7	24	2	2
2000	3	2	2	1	8	26	2	2
2200	3	2	2	1	8	29	3	3
2400	3	3	2	1	9	31	3	3

Table 6: School Facility Requirements

1 For larger schools where the tables suggest more than one sports hall, it may be more sensible to provide one larger hall which can be subdivided. See **Design Note 2**.

2 For smaller schools without a separate gymnasium and dance studio, the design of the gymnasium should be altered to act as a dual use space meeting the requirements of both.

3 Due to the complex issues involved in deciding whether to provide a pool at a school, the demand is expressed simply in periods per week. See Appendix III. 4 This is not equivalent to the number of pitches which a school requires but rather the number of outdoor teaching spaces (ideally synthetic grass) which must be available for curricular use throughout the week. The limited hours which grass surfaces can be used and requirements of extra-curricular use mean that more pitches should be provided than simply the number of required outdoor teaching spaces. Further guidance is given in Appendix II.

It should be noted that the above table includes activity spaces only: in addition, a PE classroom should be provided at all schools of reasonable size.



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