The modified curriculum of gymnastics could raise the status of gymnastics in secondary school

Introduction
Gymnastics has long been included in the school curriculum. However, as early as the 1990s, school gymnastics, especially secondary school gymnastics, had reached a low ebb where most of the physical education teachers had put it aside or even tried to ignore it in their teaching. Current physical education programmes include a much wider variety of activities than there would have been the past, and this has produced inevitable pressure on the more traditional aspects of the physical education curriculum such as gymnastics. It seems to be a losing ground when compared with other topics such as ball games, bowling or golf in current physical education programmes. The decline of gymnastics status in schools has become a trend in Hong Kong. In fact, gymnastics must have its own value in the curriculum of physical education.

In curriculum planning, Lawton (1986) classified three curriculum models. The first one is the objectives model; this is also called the factory model, or the output, or the product model. The second one is the input model, or process model. The third one has been described as the situational analysis or cultural analysis model of curriculum. I have adopted the situational model because it includes some aspects of both the objectives approach and the process model depending on which aspects of the curriculum are being designed. Curriculum development is a continuous process, the situational model can be summarised as a sequence of 5 steps (Figure 1)
Figure 1: Situational model

**External Situation**

Normally, in the curriculum of Hong Kong secondary education, there are at least two periods per week per class allocated to physical education and the duration of one lesson should be at least 35 minutes. In planning the curriculum for junior levels, it is necessary to link up the programmes with that of the primary section. Thus, the Primary Physical Education Syllabus is the framework in which this purpose must be considerable.

Only qualified teachers who are professionally trained may teach the subject. This indicates that recognition of the physical educator status has significantly improved. Since 1989, physical education has become one of the subjects in the Hong Kong Certificate of Education Examination, causing an enormous reaction in society. It also
has increased the value and importance in secondary education and aroused the public's awareness of physical education in society.

**Current Situation of Gymnastics in Hong Kong**

Hong Kong is a fast-pacing society. People are used to being very busy, doing relatively less sports in their leisure time. Most of sports in Hong Kong are amateur sports. Recently, more indoor sports centres have been built which encourage people to play indoor games such as squash, badminton and table-tennis. However, gymnastics seems to have remained in a situation which no newcomers would participate in. Research has shown that less than 5% of the secondary schools in Hong Kong have a gymnasium. The existing apparatus in schools is usually old and lacks maintenance. This shortage of equipment means that the number of new-comers to the sport must be restricted.

In fact, there are only two well-equipped gymnastics exercise centers in Hong Kong. One is located in Kowloon Park indoor game center organized by the Leisure and Cultural Services Department and the other one is located in Hong Kong Sports Institute. Moreover, Hong Kong Amateur Gymnastics Association (A G A) is the only official gymnastics association in Hong Kong. Gymnastics in Hong Kong is still a growing sport, recently, courses run to train the coaches of gymnastics have increased its popularity in the society to a certain extent.

Government support constitutes a crucial factor in promoting a sport successfully. However, there has been little support gained by government and society for gymnastics development. Unlike sports like wind surfing and table-tennis, government put more attention and sufficient funding in it especially after winning international-level medals. Moreover, sponsoring bodies such commercial organizations, seem to lack interest in supporting the local gymnastics development financially. It is undeniable that investing
in popular sports such as football would be beneficial rather than in gymnastics which is unpopular.

**Internal Situation**

We have about one thousand students in twenty-nine classes. One basketball court, one volleyball court, and one covered playground are available. Adequate equipment is provided according to the list of standard physical education equipment suggested by the EMB.

Usually, most of the students take part in extra-activities after school. Ball games such as football, basketball and volleyball are their favourites. They also frequently participate in competitions both inside and outside school. They often have remarkable results in inter-school competitions. However, they seldom participate in inter-school gymnastics competitions, thinking that hard training and high level of skills are needed.

Every year we have funding from the government to improve existing facilities and purchase some new equipment to substitute for the old items. Although we can afford to buy some new equipment for gymnastics, the equipment will lack maintenance and become old. Moreover, the resources for gymnastics are not fully utilized by both the teachers and the students; they are wasted.

After I have introduced the internal situation of the school, I am going to modify the curriculum of gymnastics based on the objectives, content and teaching methods.

In the gymnastics lessons, we usually have some behavioral objectives; however these mainly concentrate on the skills produced and it is more likely to be a skill-oriented approach. Therefore, in the modified curriculum, behavioral objectives will concentrate on at least five areas of knowledge. Firstly, the technical and aesthetic aspects of
gymnastic movement. Secondly, the body and how to develop and use its muscular
resources safely and to optimum effect. Thirdly, the process of skill development and
how to practice safely and efficiently. Fourthly, the gymnasium and how to use its
resources safely and imaginatively. Lastly, the differences between individuals,
self-knowledge and how to work co-operatively with others. All these aspects should be
evenly distributed as behavioral objectives in the gymnastics lessons. At the end of each
lessons, evaluation should be made in order to assess how many objectives have been
fulfilled.

In order to modify the curriculum planning, core skills should be introduced to the class,
initially by the presentation of a number of activities which familiarize the students with
the movement pattern of a particular skill. Orientation activities may therefore be
considered as the first step in a series of progressive practices. Following the
introduction of orientation activities, the technique of the core skill should be taught to
the class using a direct teaching manner.

Once the technique of the core skill has been taught, the teacher can progress to
introducing skill-expansion activities, where the skill is developed in a more
challenging environment. Cartwheels, for example, may now be performed along
bench-tops.

When students have become proficient at a core skill, it is possible to introduce
variations. During this stage of learning, the whole class should be made aware of the
wide variety of options. With the forward roll, for example, students may perform a
forward roll to straddle-sit or forward roll with straight legs. Following the teaching of a
number of variations, students will be asked to practice them in a skill-expansion
situation. With careful planning of apparatus, students will work at their own level in
challenging and demanding ways which will offer every opportunity for skills development. (see Appendix 1)

Gymnastics teaching also emphasizes the creativity of the students. In the lesson, opportunity will be given to each student to create a routine to perform. Both group work and individual work are encouraged. One minute for free performance will be based on the knowledge which they have learnt in the previous lessons.

At the same time, I am going to modify the teaching methods into four areas. These are the diversity of grouping activities, time allocation, ability grouping and safety.

Often the gymnastic lesson is taught in a situation which contains limited activity-levels as pupils always queued at apparatus for considerable portions of the lesson. In the modified lesson, the whole class will be divided into six groups usually six persons in one group during group activities session. I shall diversify three different activities for the groups in each lesson. To cite an example, group one and group three do the forward roll and backward roll practice; group two and group five do the handstand practice and group three and six do the apparatus work i.e. squat vault.

It is sometimes very easy for students to answer challenges without extending themselves physically, this being especially true in the case of the more able students. On the other hand, students may fail to perceive targets and may thus lack a sense of achievement. Basically, the problem is similar to that of the English teacher taking a mixed-ability class. Thus, in the second lesson, ability grouping should be introduced which means that I will observe the student's ability in gymnastics performance in the first lesson, then those with similar ability in gymnastics will be grouped in the same group. This approach should overcome the problems.
P.E. lesson should be comprised of four parts. The first part should provide an opportunity for students to warm up and set apparatus (10 mins). The next part should be devoted to the teaching and practicing of skills and movements (30 mins). The third part is group activities, where learned skills are applied in the activity situation (15 mins). The final part is closing activities (10 mins). Therefore, it is vital to combine two P.E. lessons into one in the modified curriculum.

Safety constitutes a crucial factor which discourages P.E. teachers from including gymnastics in their curriculum. Thus, I should select a group leader from each group in the first lesson in order to provide support and protection for their classmates. In addition, the supporting techniques should be properly taught and practiced. Apparatus, including mats, must be properly positioned for safe use; heights should be carefully selected in relation to pupil competence in which all are under the supervision of the teacher.
Illustration Example

Lesson Plan

Topic: Gymnastics
Theme: Floor exercise
Age of students: 15-yrs-old
Duration of the lesson: 60 mins

Students' previous knowledge
Students are able to do front roll and back roll on the floor.
Students are able to identity the asethetic aspects of the movement e.g. point toes

Aims/Objectives of the lesson
Students will able to do cartwheels and handstands on the floor.
Students will able to do dive forward rolls.
Students are able to create their own sequences of movement including dive front roll, cartwheel and handstand.

<table>
<thead>
<tr>
<th>Teaching Procedures</th>
<th>Teaching points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up apparatus</td>
<td>5 mins</td>
</tr>
<tr>
<td></td>
<td>• The apparatus must be positioned so that it may be used safely.</td>
</tr>
<tr>
<td></td>
<td>• It must not be too close to other groups.</td>
</tr>
<tr>
<td>Warm up</td>
<td>5 mins</td>
</tr>
<tr>
<td></td>
<td>• Both physical and mental preparation for the lesson.</td>
</tr>
<tr>
<td></td>
<td>• Whole body activities should be included followed by flexibility and mobility exercises involving large muscle groups.</td>
</tr>
</tbody>
</table>

High-ability groups will be in group 1,2 & 3 and low-ability groups will be in groups 4, 5 & 6. All supporting techniques should be taught before any practice. Demonstration may be done by (a) an individual, (b) several individuals, (c) part of the class, for example half, (d) the teacher. Apparatus planning (see Appendix II)
### Skills practice

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartwheel group 1 &amp; 4</td>
<td>10 mins</td>
<td>- face forward to start&lt;br&gt;- chest towards knee of bent leg&lt;br&gt;- arms straight&lt;br&gt;- body straight</td>
</tr>
<tr>
<td>Headstand group 2 &amp; 5</td>
<td>10 mins</td>
<td>- head and hands in triangle on floor.&lt;br&gt;- forehead on floor.&lt;br&gt;- walk feet up towards hands, on toes.</td>
</tr>
<tr>
<td>Dive forward roll group 3 &amp; 6</td>
<td>10 mins</td>
<td>- hands about a shoulder width apart, fingers forward.</td>
</tr>
</tbody>
</table>

This should be the high point at which the students have been aiming all the time while practising their basic skills. Apparatus planning (see Appendix III)

### Group activity

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free performance</td>
<td>15 mins</td>
<td>- Containing their own skill-variations and combinations, reflect individuality and personality.&lt;br&gt;- If it is necessary, teacher tries to indicate the ways in which combinations, can be made or improved.</td>
</tr>
<tr>
<td>Closing activity</td>
<td>5 mins</td>
<td>- To provide feedback&lt;br&gt;- Remind them of the order in which things are to be put away.</td>
</tr>
</tbody>
</table>
**Justification**

I have modified the existing curriculum of gymnastics teaching in the previous section. Now I am going to justify the objectives, content and teaching method.

In the modified curriculum, I have chosen the use of behavioural objectives in teaching gymnastics. Although the objectives of P.E. curriculum are mostly concerned about the psychomotor domain which is the motor skills, there are also other aspects which we must address such as the aesthetic aspects. With using behavioural objectives, we can diversify our aims into different aspects. Curriculum should be planned for a 'balanced' experience. Behavioural objectives in gymnastics teaching are valuable because they focus attention on specific behaviour-knowledge, attitude and skill. Thus, I do think that the use of behavioural objectives is the most suitable method for teaching gymnastics in lower secondary school.

**Justification of the content**

Progression is a prerequisite in order to teach gymnastics successfully. The gradual progression tends to make movement look good and feel good. Thus, it is reasonable that the simple tasks should be introduced at the beginning of the lessons and then variations and sequences should be added in later lessons. Williams (1997) concluded that if gymnastics is to be a successful part of the physical education curriculum, there must be progression both within a block of work and from theme to theme.

There is no doubt that children do work better and learn more effectively when they are interested in what they are being required to do. Thus, I do think that it is bound to be boring when the whole curriculum has no diversity of teaching content.
Free performance in the lessons is invaluable in teaching gymnastics. The student can create their routine according to their ability, limitations and interest to perform, therefore, the students are enthusiastic because they will achieve any new challenge and explore their own ideas, potential and creativity in gymnastics lessons. Moreover, it also provides a chance for the students to have sense of achievement and at the same time, evaluation could be done in this part of the lessons which we will discuss later.

**Justification of teaching method**

Diversity of grouping activity is essential in a gymnastics lessons. In the modified curriculum, each group will practise the different skills in the lesson and then rotate to another group. When children have become proficient at a core skill, it is possible to introduce variations. With an inexperienced teacher there is a danger that there will be pointless repetition and consequent boredom.

Whatever approaches are used to teach gymnastics, they will be limited in their effectiveness if insufficient time is available for the subject. Time has been identified as a major problem. Ability grouping provides a solution for teaching a mixed-ability group in a class. It ensures that each student experiences meaningful success in every lesson.

Safety should be particularly mentioned in teaching gymnastics. A disciplined working atmosphere must be maintained in order to establish good habits of concentration. Poor discipline leads to unforeseeable accidents in gymnastics lessons and poor learning environment. Gymnastics should be taught with constant reference to safety procedures.
Evaluation

On a broad scale, evaluation of curriculum itself plays an important role in curriculum development. When the new curriculum program has been fully developed, evaluation data makes it possible to determine the degree to which the new curriculum is effective in meeting the instructional objectives for which it was designed. The first type of curriculum evaluation has been called formative evaluation; the second has been termed summative evaluation.

Free performance in the gymnastics lesson provides a chance to evaluate the performance of the students, which is a rules and regulations of gymnastics assessment.

After finishing the unit, first and foremost teachers must want to know about the effectiveness of their own classroom performance. Thus, a self-evaluation form has been devised to evaluate the effectiveness of teaching the gymnastics unit. The self-evaluation form comprises of four aspects to evaluate the lesson. (see Appendix IV)

In addition, students' feedback is also a crucial element of evaluating the curriculum. The questionnaire has been designed and will be given to the students in order to gain the information to improve my teaching and modify the curriculum.(see Appendix V)

At the same time, colleagues can also provide invaluable advice and experience with a view to improving the teaching quality. Therefore, it is essential to have discussion with colleagues to gain more constructive opinion. In fact, different levels from senior staff to students and different ways (discussion or questionnaire) should be used to evaluate the curriculum.
Limitation of modification

I do think that the modification which I describe will be successful in the school. This is because it does not involve a tremendous and subtle change in the curriculum. The modified curriculum is based on the existing resources and situation and designed to be specially suitable for our own school environment. One of the objectives of the modified curriculum is to raise and retain the interest of the students in gymnastics, provoking their interest to participate not only within the school but also regularly outside or after school. Life long participation should be one of our ultimate goals in Physical Education.

Although the modified curriculum of gymnastics could raise the status of gymnastics in lower secondary school to a certain extent, it is bound to have limitations if teacher training is not going to be reinforced. The quality of teaching is directly related to the training of the teacher. Only through in-service training, may we hope that we can ensure the best quality of teaching in Physical Education.

Insufficient resources constitute a basic problem to improve the teaching of gymnastics in secondary schools. We usually do the gymnastics lessons in the open court. In fact, a gymnasium does not have a direct relationship with the skills that we teach. However, we should not underestimate the contribution of a gymnasium in a school. Not only does it provide an ideal place for students to practice which encourages learning inevitably, but also it furnishes a site for placing the equipment of the gymnastics which is usually lacks maintenance. The decline of teaching gymnastics should arouse public awareness. The government should increase the funding in order to promote gymnastics which is still a growing sport in Hong Kong.
### Appendix 1

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Orientation activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 2</td>
<td>The technique of the core skill</td>
</tr>
</tbody>
</table>
| Stage 3 | Skill expansion activities  
on mats  
on benches  
between ropes etc.  
Possibility of sequence development |
| Stage 4 | Skill variations  
roll to sit  
roll to back lying  
Possibility of sequence development |
| Stage 5 | Skill-expansion activities based on the variations  
Each of the variations may now be practiced in a variety of situations, e.g. on mats, along benches...etc.  
The variety of skills with their relative difficulties, coupled with the many possible apparatus situation, allows each student to work on activities suitable to his/her individual ability level. |
Appendix II

Apparatus planning and rotation among groups

group 1  group 2  group 3

group 6  group 5  group 4
Appendix III

The apparatus planning of the free performance in the group activity

The direction of the performance

mat
Appendix IV
Teacher's Self-evaluation form

<table>
<thead>
<tr>
<th>Topic: __________________________</th>
<th>Theme: __________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class: __________________________</td>
<td>Date: ____________________________</td>
</tr>
</tbody>
</table>

Please circle the appropriate number

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

A. Organisation of subject matter

1. The objectives included all important outcomes of the lesson. 1 2 3 4 5
2. The teaching aids were effectively used. 1 2 3 4 5

Observation and reacting to what is seen

1. The class was working safely. 1 2 3 4 5
2. Students actively participated in the activities. 1 2 3 4 5
3. Sufficient reinforcement was given to students. 1 2 3 4 5

Organisation of demonstration

1. The whole class could see. 1 2 3 4 5
2. Students were demonstrating they knew what they were required to do. 1 2 3 4 5

Questioning

1. Questions were to emphasise particular teaching points. 1 2 3 4 5
2. Questions were to provoke thought and promote mental activity. 1 2 3 4 5

Classroom management

1. The environment was good for learning. 1 2 3 4 5
2. Teacher's voice was loud and clear. 1 2 3 4 5
3. There were no discipline problem. 1 2 3 4 5

Other comments. ___________________________________________________________
Appendix V

Students' Feedback Sheet

Name:___________________     Class:____________ Class no:_________

Please circle the appropriate number. Your opinions are very useful to our future planning and will be kept confidential.

1. The content was interesting.                       Strongly agree Strongly disagree
   1     2     3     4     5
2. The content was suited my level.                  1     2     3     4     5
3. I enjoyed taking part in the activities.          1     2     3     4     5
4. The teacher gave individual help.                 1     2     3     4     5
5. I enjoyed the part of free performance.           1     2     3     4     5
6. I have decided to take part in regularly outside/after school                  1     2     3     4     5
7. I enjoyed the gymnastics lessons.                 1     2     3     4     5

9. Recommendations:________________________________________________________


Lawton, D. 1986  The curriculum planning in the study of curriculum  
Batsford Academic and Educational

Williams, A.E. 1997  Curriculum Gymnastics  
Hodder & Stoughton