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A SURVEY OF GYMNASTICS  
IN SECONDARY SCHOOLS SERVED BY  
EASTERN ILLINOIS UNIVERSITY

A SURVEY OF GYMNASTICS  
IN SECONDARY SCHOOLS SERVED BY  
EASTERN ILLINOIS UNIVERSITY

A Term Paper  
Presented in Physical Education 530  
Eastern Illinois University

In Partial Fulfillment of  
The Requirements For The Degree  
Master of Science in Education

Plan B

By

Fred E. Gaines

March, 1962

A SURVEY OF GYMNASTICS  
IN SECONDARY SCHOOLS SERVED BY  
EASTERN ILLINOIS UNIVERSITY

This paper has been approved as partial fulfillment of the  
requirements for the Degree Master of Science in Education.

Approved:

A handwritten signature in cursive script, reading "Maynard O'Brien", is written over a horizontal line.

Dr. Maynard O'Brien  
Advisor  
Class Instructor

## PREFACE

High school gymnastics has grown by leaps and bounds in the northern part of the State of Illinois. Nearly every school in the Chicago area has a competitive gymnastics team with designated instructors on their staff for the development of that team. However, this is not true of the central and southern part of the state.

To determine what the secondary schools in a specific area are doing in gymnastics, the writer has attempted to gather some statistics on the status of gymnastics in the schools served by Eastern Illinois University (Appendix I. p. 18).

The writer wishes to express his appreciation to Dr. William Groves, Coach Robert Hussey, and Dr. Maynard O'Brien for their professional advice in helping to construct the survey questionnaire.

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## CHAPTER I

### INTRODUCTION

The rise of the Industrial Revolution has contributed much to the softness of our American Youth. It has brought about many labor saving devices which have greatly increased our leisure time and how it is spent. The decrease in the working day and the increase in automation is making our society more and more inactive. With the beginning of the Atomic Era and the use of nuclear energy even more leisure and inactivity may be prevalent in the future.

The results of our modern way of life have been made evident by the low scores on the Kraus-Weber<sup>1</sup> tests and the recent average scores of the AAHPER<sup>2</sup> Fitness tests. These tests indicate that there is much to be desired in the fitness of our American Youth. A well-rounded physical education program can contribute much towards the better use of leisure time and helping individuals to live a healthier and more vigorous life. The writer of this paper believes that gymnastics should be a significant part of such a program.

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<sup>1</sup>Hans Kraus and Ruth P. Hirschland, "Muscular Fitness and Health," Journal of Health, Physical Education, and Recreation, XXIV (December, 1953), p. 17-9.

<sup>2</sup>Paul Hunsicker, "AAHPER Physical Fitness Battery," Journal of Health, Physical Education, and Recreation, XXIX (September, 1958), p. 24-5.

There are many contributions which gymnastics makes toward the development of the individual. The movements in this activity are fundamentally big muscle movements and will develop greatly the muscle groups in the arms, shoulders, chest, and abdomen. These areas of the body are often neglected in some other sports. Tumbling and trampolining also develop the musculature of the legs. Besides building up strength and power, gymnastics also contributes to other factors of physical fitness such as agility, flexibility, coordination, and balance.<sup>3</sup> A general improvement in posture also can be derived from this type of activity.

In addition to these physical factors, gymnastics also develops such mental qualities as alertness and daring. Split-second timing is necessary in many of the stunts which call for quick thinking. Since gymnastics is an individual sport, the gymnast is the only person who can make himself overcome his fears in learning new stunts. Upon repetition of stunts the gymnast develops habits of definite decisions and actions which must be correct for the successful completion of the stunt.<sup>4</sup>

In gymnastics, the physical dimensions of the individual need not play a significant part. This was demonstrated in the 1959 National

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<sup>3</sup>Newton C. Loken and Robert J. Willoughby, Complete Book of Gymnastics (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1959) p. 2.

<sup>4</sup>*Ibid.*, p. 4.



A.A.U. Championships by two outstanding all around gymnasts--one well over six feet and the other barely over five feet.<sup>5</sup>

Such character traits as self-confidence, perseverance, and self-discipline are developed from gymnastic activities. Self-confidence is developed in the gymnast as he progresses from the most basic to the more difficult stunts. If the gymnast works to make progress, he quickly learns that he must develop perseverance to the highest degree. He must apply self-discipline and force himself to try repeatedly the same stunt until mastery is finally accomplished.

Creative ability has unlimited opportunity in the sport of gymnastics. Great pleasure is derived from working out possible combinations and routines. This develops in the gymnast an understanding of symmetry, continuity, coordination, balance, and timing. It also develops an understanding of the need for strength and endurance in order to complete some of the created routines set up by the gymnast.<sup>6</sup>

Because gymnastics is a self-testing activity each individual may progress at his own rate. A gymnast who is challenged by a particular advanced stunt or routine is not prevented from trying it by the lack of

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<sup>5</sup>R.L. Thornton, "Initiating High School Gymnastics," Scholastic Coach, XXX (October, 1960), p. 56.

<sup>6</sup>Loken and Willoughby, op. cit., p. 4.

progress of his fellow gymnast.<sup>7</sup>

Gymnastics offer an opportunity to those with orthopedic defects. Since apparatus is primarily for upper body development, the student with an afflicted leg can achieve success in hand-balancing, still rings, parallel bars, side horse, and rope climb. Performers on Northwestern State's gymnastic team in Natchitoches, Louisiana, have included students with skeletal defects, who have successfully lettered and won first place in collegiate competition.<sup>8</sup>

During World War II at Naval Pre-Flight School, thousands of cadets utilized gymnastics in their training program. Much of their training dovetailed with the physical training program. A developmental program was set up for the men who failed the initial tests given by the Mass Exercise Department. In six weeks, most all of the below par men attained the standards required after a progressive program of gymnastics. In summary, the objectives of the program to be achieved through tumbling (falling), vaulting, climbing, balancing, and apparatus stunts were:

1. To give training in the native sense of balance.
2. To equip the future pilot with strength and skill to extricate himself effectively from emergency situations requiring climbing, vaulting, tumbling, and balance.

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<sup>7</sup> ibid.

<sup>8</sup> John Piscopo, "Start Your Own Gymnastic Program Now," Journal of Health, Physical Education, and Recreation, XXIX (February, 1958), p. 67.

3. To develop daring and courage.
4. To accustom the cadet to being upside down for extended periods.
5. To teach falling and landing without injury.<sup>9</sup>

There is no doubt that gymnastic equipment is costly. However, this is a long-term investment, for the apparatus lasts for many years often times outlasting the life of the gymnasium. From a comparative budget viewpoint, the annual expense of football, basketball, and baseball would provide a school with several mats and gymnastic apparatus.<sup>10</sup> A complete program in gymnastics can be set up for approximately \$2400.00. However, if only limited funds are available, Barry L. Johnson,<sup>11</sup> in his article entitled, "Purchase and Maintenance of Gymnastic Equipment," sets up a five year plan on how to purchase a few pieces of apparatus each year. The cost of the apparatus and mats would average approximately \$475.00 per year.

#### Statement of the Problem

It is the purpose of this study to determine the number of gymnastic programs within a certain geographical area and some of the major problems in the anticipation of such programs.

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<sup>9</sup>Aviation Training Division, Gymnastics and Tumbling (Annapolis, Maryland: United States Naval Institute, 1944), p. 11-12.

<sup>10</sup>Irvin E. Faria, "Why No Gymnastics," Journal of Health, Physical Education, and Recreation, XXXI (January, 1960), p. 36-7.

<sup>11</sup>Barry L. Johnson, "Purchase and Maintenance of Gymnastic Equipment," Journal of Health, Physical Education, and Recreation, XXXI (January, 1960), p. 7.

### Procedures Used in Study

In attempt to actually determine what is being done in the area of gymnastics, a questionnaire was constructed by the writer under the careful supervision of Dr. Maynard O'Brien, advisor and Mr. Robert Hussey, gymnastics coach.

The main objective of this survey was to determine what type of gymnastics programs, if any, are in our secondary schools. The secondary objective was to determine what major problems schools thought they would encounter in initiating such programs.

The survey, of check list type, was sent to athletic directors in 115 schools. Ninety or 79 per cent of the schools returned the questionnaire.

The sources for the development of the survey was current professional literature. The writer then constructed a preliminary questionnaire of what seemed to be the most evident reasons schools would eliminate gymnastics from their curriculum. The questionnaire was then reviewed by a jury of four, which included Dr. William Groves, Coach Robert Hussey, Dr. Maynard O'Brien, and the writer. As a result of the jury meeting, ten questions were constructed pertaining to the problem.

### Definitions

To eliminate individual interpretations of what the word "gymnastics" means, in this study it is defined as body movement over pieces of apparatus with conjunction of tumbling, free exercise, and trampoline.

### Limitations and Delimitations

The limitations of the problem include the following:

The writer was unable to find any studies in gymnastics similar to the present study being conducted. The items for the survey were selected from professional literature.

The delimitations of the problem includes the following:

- (1) The study involved only secondary schools.
- (2) The schools were in a specific geographical area, the twenty-five counties served by Eastern Illinois University.
- (3) The writer also concludes that the limited geographical area in this study does not give a true picture of gymnastics throughout the State of Illinois.

## CHAPTER II

### INTERPRETATION OF DATA

The material presented in this chapter is summarized from the returns of the questionnaire sent to 115 schools in the twenty-five counties served by Eastern Illinois University as indicated in Appendix I, page 19. A total of 90 schools or 79 per cent returned the questionnaire.

It is the purpose of this chapter to examine the data obtained from the questionnaire in an attempt to determine, if possible, some of the major problems of secondary schools with regard to initiating such programs.

(1) Do you have at present, a gymnastics program in your school?

Forty-three and three-tenths per cent of the schools which returned the questionnaire indicated that they have some type of gymnastics in their high school program. Fifty-six and four-tenths per cent of these schools showed that gymnastics is not included in their program.

(2) If yes, does your program fall into one or more of the following areas?

In this item the surveyee had four general areas in which it could be indicated the type of gymnastic programs included in the curriculum. There were two main areas in which a majority of the schools indicated they have some type of program.

Fifty-two and two-tenths per cent of the schools showed that they

have some type of gymnastics being conducted in their physical education program. Five and five-tenths per cent of the schools stated that they had an exhibition team of some type. In regard to this item there were three schools which have an exhibition team and also offer gymnastics in their physical education program. There were no schools involved in the survey which have a competitive team or stunt club.

The reasons as to why more schools indicated that they have certain types of gymnastic programs in question number two as compared to the fewer number of schools that indicate they have a gymnastics program in question number one might be due to the interpretation some athletic directors may have put on the term "gymnastic program." It is entirely possible in question number one that "gymnastic program" was interpreted to mean interscholastic competition or some other concept of gymnastics other than those listed in question number two.

(3) If you do not have a gymnastics program, is your philosophy of physical education of the nature that would permit including such a program?

Only those schools which do not include a present gymnastic program in their curriculum were supposed to answer this question. Sixty-six and two-tenths per cent of the schools responded. This was somewhat higher than those who indicated in question number one that they did not have a gymnastic program included in their curriculum. The difference in these two returns may indicate that some of the athletic directors did

not understand the question as stated by the writer.

Eighty-six and nine-tenths per cent of the schools which do not have a present gymnastics program indicated that their philosophy would permit including such a program in their curriculum. Only 13.1 per cent of the surveyee's felt that their philosophy would not permit including such a program. This would seem to indicate that the limiting factors with regard to the inclusion of a gymnastics program is not the philosophy of the director but possibly other considerations, such as finances, space, time, and scheduling in the curriculum.

(4) If you have any of the following pieces of equipment please indicate if they are used in classes or other areas.

Question number four indicated that most schools involved in the survey have some type of gymnastics equipment. Ninety-one per cent of the schools indicated that they have mats which could be used for tumbling activities. Other pieces of equipment that ranked high were the climbing rope and trampoline, with sixty-one and thirty-five per cent respectively. Less than a fourth of the schools indicated that they have pieces of heavy apparatus, such as, traveling and still rings, side horse, horizontal bar, and parallel bars. In light of this, nearly 90 per cent of the gymnastic equipment available in the schools is being used in some type of program. This may indicate that if more schools had several pieces of equipment, they would be put to use.



(5) Could you purchase part or all the pieces of equipment necessary for a gymnastic program?

Eighty-eight of the schools involved in the survey responded to the question whether they could purchase part or all of the equipment necessary for a gymnastic program. Two schools stated that they were not sure. Only 42 per cent of the schools indicated they could purchase gymnastic equipment. Fifty-seven and nine-tenths per cent felt that they could not.

The reasons as to why a majority of the schools felt that they could not purchase gymnastic equipment may be due to several factors. Some of these reasons could be the athletic director's philosophy toward gymnastics, the philosophy of the schools, that sufficient funds are not made available in the budget, or that the funds available for physical education are insufficient to enlarge the present curriculum.

(6) Do you at present have a person on your staff who could instruct such a program?

Fifty-seven and three-tenths per cent of the schools indicated that they have a person on their staff who could instruct such a program. Forty-two and six-tenths per cent stated that they did not.

The writer of this paper was further interested in determining how many of the schools which stated they have a person on their staff who could instruct gymnastics actually have a program in this area.

This was determined by comparing the present question with question

number one.

Of the 51 schools which stated that they have a person on their staff who could instruct a gymnastic program, 30 of these schools offer nothing in this area. Only 26 of these schools are offering any type of program in gymnastics that have a person who could give such instruction. It is also interesting to note that out of the 38 schools which indicated that they didn't have a person on their staff who could instruct gymnastics, 13 of these were offering such a program in their curriculum.

Some of the reasons as to why more gymnastics programs are not being offered is some of the schools which have a person on their staff who could instruct such a program might be due to such factors as lack of time, finances, facilities, or that the individual has a greater interest in some other activity.

(7) Could your budget afford to hire another instructor experienced in gymnastics?

Only nine per cent of the schools felt that they could hire another instructor experienced in gymnastics. Ninety and nine-tenths per cent indicated that they could not afford to hire a person for the position.

The reasons as to why many of the schools can not afford to hire another instructor experienced in gymnastics might be similar to some of the reasons why many schools may not be able to purchase gymnastic equipment as stated in question number five, "the athletic director's philosophy, the philosophy

of the schools, that sufficient funds are not made available in the budget, or that the funds available for physical education are insufficient to enlarge the present curriculum."

(8) Do you have the adequate space to include such a program?

Fifty-four per cent of the schools stated that they have available space to include a gymnastic program. Forty-five and nine-tenths per cent indicated that their space is too limited to include such a program.

The per cent of the schools which stated that they have available space to include gymnastics in their program compared favorably with those schools that indicated in question number two that they have some type of gymnastics in their curriculum. This might indicate that more gymnastic programs may be included in the schools involved in the survey if the space were available.

(9) Do you feel that gymnastics would conflict with other sports or your physical education program?

Only fourteen and seven-tenths per cent of the schools involved in the survey felt that gymnastics would conflict with physical education classes or other athletics. Eighty-five and two-tenths per cent felt that it would not.

Since few schools indicated that gymnastics would not conflict with other sports or their present physical education program, the reasons as to why more programs in gymnastics is not included on the schools involved

in the survey might be due to other factors. Some of these reasons could be the lack of space, philosophy of the school, lack of funds in the physical education budget, or other factors not included in the questionnaire.

(10) If there are additional problems that you believe would exist in starting a gymnastic program, please list them below.

Most of the comments listed under this question were included in the questionnaire. Some of the comments made in regard to this question are as follows:

"Do not have facilities for storage of equipment."

"School board hard to convince when money and hiring are included."

"Financially unable -- school has only 75 students."

"Convincing adult community of need."

"Teams our size to compete with."

"Not a sport that would be acceptable to community."

"Could see no results for such a program."

"Money can be spent in a better way. There is no justification for cost of equipment in a small school."

The answers to question number 10 gives insight as to why such a program as gymnastics does not exist in many schools. The comments were so few and varied that definite conclusions, as to why schools do not start a gymnastics program could not be drawn.

## CHAPTER III

### SUMMARY AND RECOMMENDATIONS

The purpose of this study is to determine what the secondary schools in a specific geographic area are doing in the area of gymnastics and some of the problems involved in the initiation of such programs.

In attempting to determine what the secondary schools in the twenty-five counties served by Eastern Illinois University are doing in the area of gymnastics, a questionnaire of check-list type was constructed. Through this survey the writer has attempted to collect data regarding what may be some of the most evident reasons many of the schools involved in the survey do not include gymnastics in their curriculum.

#### Summary

The results of this study did give some indications as to the status of gymnastics in the schools involved in the survey. However, the study is not extensive enough or sufficiently clear to permit a deeper insight into the reasons many of the schools involved in the study did or did not have gymnastics in their curriculum.

As to the status of gymnastics in the area served by Eastern Illinois University a majority indicated that they included such a program in their physical education curriculum. There were five schools involved in the

survey which indicated that they have an exhibition group of some type.

None of the schools, however, showed that they participated in competitive gymnastics or have stunt clubs of some type.

In response to a question regarding their attitude, most of the athletic directors indicated a philosophy which would permit including gymnastics in their curriculum.

Most of the schools indicated in the questionnaire that they have some pieces of gymnastics equipment. It is interesting to note that nearly ninety per cent of the available equipment is being used in some type of program.

Many of the schools felt that they could not hire a person experienced in gymnastics or purchase the equipment necessary for such a program. However, most of the athletic directors indicated that their philosophy would permit including gymnastics in their programs. Many reasons could exist for not having a program of gymnastics, some of which may be, lack of funds, lack of space, community feeling towards gymnastics, or the feeling of lay or school persons. The study would need to be more extensive if the reasons of each school could be found for having or not having a program of gymnastics.

There were fifty-one schools involved in the survey that indicated that they have a person on their staff who could instruct a gymnastics program. However, only thirty of these were involved in such a program. Had the study been more specific, reasons as to why many of these

individuals are not instructing gymnastics may have been determined.

The survey shows that most schools which indicated that they have space to include gymnastics in their curriculum did offer some type of program in this area.

#### Recommendations

In order to obtain a more comprehensive view of the status of gymnastics in the schools served by Eastern Illinois University, the writer recommends that a more extensive survey be done in this area to give more conclusive evidence of the type sought in this study.

A second survey employing more specific questions in the general areas of the present study may help in better understanding the questions, thus, controlling the variability of the answers. From this, a better insight into the facts pertinent to gymnastics in the schools involved could be obtained.

## APPENDIXES



I

## COUNTIES INVOLVED IN SURVEY

Champaign

Coles

Christian

Clark

Clay

Crawford

Cumberland

Douglas

Edgar

Edwards

Effingham

Fayette

Jasper

Lawrence

Macon

Macoupin

Montgomery

Moultrie

Piatt

Shelby

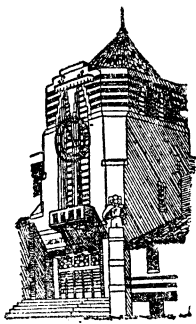
Vermillion

Richland

Sangamon

Wabash

Wayne



# EASTERN ILLINOIS UNIVERSITY

Department of Physical Education (Men)

Phone: Diamond 5-2165

CHARLESTON, ILLINOIS

January 8, 1962

Dear Sir:

As part of the requirements for a Master of Science in Education Degree at Eastern Illinois University, an extensive paper has to be approved and certified by the advisor of the candidate. For information toward completion of this paper, a questionnaire is being sent to all the high schools in the twenty-five counties served by this university.

Kindly fill out the questionnaire and return in the enclosed addressed envelope. One-hundred percent cooperation in this survey will give the writer a better analysis of this study. Results of this study may be acquired at your request.

Thank you,

Fred Gaines  
Graduate Assistant

FG:pac

Encl: 2

## GYMNASTIC SURVEY

## Introduction

This is a survey to determine the number of gymnastic programs within a certain geographical area and the anticipation of such programs.

The term gymnastics as used in this study is defined as: body movement over pieces of apparatus with conjunction of tumbling, free exercise, and trampoline.

The validity of this survey depends upon the honesty of the individuals being surveyed. Please answer each question honestly and thoughtfully. All information will held in strictest confidence. Thank you for your cooperation.

1. Do you have at present, a gymnastic program in your school?

(check one) Yes  No

2. If yes, does your program fall in one or more of these areas?

(Please indicate by checking one or more of the following)

physical education  competitive

exhibition groups  stunt clubs

3. If you do not have a gymnastic program, is your philosophy of physical education of the nature that would permit including such a program?

(check one) Yes  No

4. If you have any of the following pieces of equipment please indicate if they are used in classes or other areas.

(Please indicate by checking one or more of the following)

Have	Use	Do not use
<input type="checkbox"/> Mats for Tumbling	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Still Rings	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Traveling Rings	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Side Horse	<input type="checkbox"/>	<input type="checkbox"/>

_____ Horizontal Bar	_____	_____
_____ Parallel Bars	_____	_____
_____ Trampoline	_____	_____
_____ Rope Climb	_____	_____
_____ Vaulting Box	_____	_____
_____ Springboard	_____	_____
_____	_____	_____
_____	_____	_____

5. Could you purchase part or all the pieces of equipment necessary for a gymnastic program?  
(check one) Yes \_\_\_\_\_ No \_\_\_\_\_
6. Do you at present have a person on your staff who could instruct such a program?  
(check one) Yes \_\_\_\_\_ No \_\_\_\_\_
7. Could your budget afford to hire another instructor experienced in gymnastics?  
(check one) Yes \_\_\_\_\_ No \_\_\_\_\_
8. Do you have the adequate space to include such a program?  
(check one) Yes \_\_\_\_\_ No \_\_\_\_\_
9. Do you feel that gymnastics would conflict with other sports or your physical education program?  
(check one) Yes \_\_\_\_\_ No \_\_\_\_\_
10. If there are additional problems that you believe would exist in starting a gymnastics program, please list them below.

## IV

RESULTS OF ANSWERS IN PER CENT  
(Per cent figured on number  
of answers to each question)

ITEM	number	per cent
1	Do you have at present, a gymnastic program in your school?	
	yes . . . . .	39                      43.3
	no . . . . .	51                      56.4
2	If yes, does your program fall in one or more of these areas?	
	physical education . . . . .	47                      52.2
	exhibition groups . . . . .	5                        5.5
	competitive . . . . .	-                        -
	stunt clubs . . . . .	-                        -
3	If you do not have a gymnastic program, is your philosophy of physical education of the nature that would permit including such a program.	
	yes . . . . .	53                      86.9
	no . . . . .	8                        13.1

RESULTS OF USE OF EQUIPMENT  
(Given in number and per cent)

	Have	Use	Do not use
4	If you have any of the following pieces of equipment please indicate if they are used in classes or other areas.		
Mats for tumbling . . . . .	82	77	5
Still Rings . . . . .	4	3	1
Traveling Rings . . . . .	5	4	1
Side Horse . . . . .	11	8	3
Horizontal Bar . . . . .	20	17	3
Parallel Bars . . . . .	13	12	1
Trampoline . . . . .	32	32	-
Rope Climb . . . . .	55	52	3
Vaulting Box . . . . .	3	3	-
Springboard . . . . .	6	5	1
	Per cent	Per cent	Per cent
Mats for tumbling . . . . .	91.1	93.9	5.9
Still Rings . . . . .	4.4	75.0	25.0
Traveling Rings . . . . .	5.5	80.0	20.0
Side Horse . . . . .	12.2	72.7	27.7
Horizontal Bar . . . . .	22.2	85.0	15.0
Parallel Bar . . . . .	14.4	92.3	7.7
Trampoline . . . . .	35.5	100.0	-
Rope Climb . . . . .	61.1	94.5	5.9
Vaulting Box . . . . .	3.3	100.0	-
Springboard . . . . .	6.6	83.3	16.6

RESULTS OF ANSWERS IN PER CENT  
(Per cent figured on number  
of answers to each question)

ITEM	number	per cent
5	Could you purchase part or all the pieces of equipment necessary for a gymnastic program?	
	yes . . . . .	27 42
	no . . . . .	51 57.9
6	Do you at present have a person on your staff who could instruct such a program?	
	yes . . . . .	51 57.3
	no . . . . .	38 42.6
7	Could your budget afford to hire another instructor experienced in gymnastics?	
	yes . . . . .	8 9.0
	no . . . . .	80 90.9
8	Do you have adequate space to include such a program?	
	yes . . . . .	47 54.0
	no . . . . .	40 45.9
9	Do you feel that gymnastics would conflict with other sports or your physical education program?	
	yes . . . . .	13 14.7
	no . . . . .	75 85.2

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