

DEVELOPING A HIGH SCHOOL CROSS COUNTRY TEAM

by 6281

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## INTRODUCTION

In the 1969-70 school year in Kansas 196 schools participated in cross country with a total of 3,100 boys running.<sup>[1]</sup> During the 1970-71 school year, of the 428 high schools in Kansas, 201 offered cross country and 4,020 boys participated in these programs.<sup>[2]</sup> Kansas high schools' increase in the popularity of cross country is typical of the interest and growth of cross country programs throughout the United States.

One of the reasons for this growth and popularity is that the boy who has little or no interest in the fall contact sport of football finds the opportunity to participate in a program that offers him the same recognition as football and, in some cases, even more personal fulfillment. Cross country programs became popular because they require little ability other than the natural response of running.

Cross country has great value in all high school athletic programs because it affords everyone the opportunity to participate no matter what the individual's size or speed may be.

This report was written after two years of studying methods of motivating high school cross country runners. The research, as well as the practical application of methods learned, took place at Smith Center High School, Smith Center, Kansas (Unified

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[1] Kansas High School Activities Journal, "1969-70 Activity Survey", Topeka, Kansas: Official Publication of the Kansas High School Activities Association, Vol. 32, Number 6, Feb. 1970.

[2] Kansas High School Activities Journal, "1970-71 Activity Survey", Topeka, Kansas: Official Publication of the Kansas High School Activities Association, Vol. 33, Number 6, Feb. 1971.

School District No. 237]. Smith Center was an ideal place to inaugurate a study because the school had never had any type of cross country program.

#### PURPOSE OF PAPER

This paper was written to find methods of recruiting, motivating, rewarding, and training that can be used to develop a high school cross country program at Smith Center Kansas High School.

#### METHODS OF STUDY

Most of the information included in the study was obtained through practical application of methods used by leading coaches throughout the world. Suggestions, techniques, incentives, and ideas, published in books and articles, were experimented with to see which ones applied more specifically to the particular situation at Smith Center High School, Smith Center, Kansas.

Many of the training methods and procedures found in the books written by some of the great cross country coaches in the world, which are listed in the Bibliography, were rejected because of either a lack of time or facilities.

A few of the methods used were suggested through conversations with L. Alex Francis, Track and Cross Country Coach, Fort Hays Kansas State College, Hays, Kansas; and DeLoss Dodds, Track and Cross Country Coach, Kansas State University, Manhattan, Kansas.

## DISCUSSION

### Discovering Talent

In cross country, more than any other sport, champions are made, not born.

Sometimes, when coaching a sport believed to be as physically punishing as cross country, it may be difficult to get boys to participate in the sport. Parents may be worried by preconceived notions derived from having heard of or seen distance runners in high school track meets collapsing at the finish line. This is especially a problem when inaugurating a program.

The following methods of locating possible talent are guidelines that should be used by a coach:

A. Aerobics Fitness Test For Physical Endurance. This test is used to categorize individuals into five physical fitness groups. The test consists of running for a certain period of time and measuring the amount of distance traveled. The run is made for twelve minutes. The distance traveled places the person running into one of these groupings: I, Very Poor, less than 1.0 miles; II, Poor, 1.0-1.24 miles; III, Fair, 1.25-1.49 miles; IV, Good, 1.5-1.74 miles; V, Excellent, 1.75 miles or more. [3]

B. California Fitness Test For Cardio-Vascular Endurance. The group being tested runs 600 yards as fast as they can and at the finish they rest for one and one-half minutes. At the end of the rest period each boy's pulse rate is checked and usually the boys with the slowest rates after running the 600 yards will make the best prospects for cross country runners. Anyone in the third of the class who recovered the fastest will do well in cross country.

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[3] Aerobics, Dr. Kenneth H. Cooper, New York, N.Y.: Bantam Book/M. Evans and Co., 1968.

The best possible place to administer these tests is in the freshman and sophomore physical education classes. If the coach expects to develop talent, it must be discovered at the 14 to 15 year age bracket. It is much easier for runners to develop pace and the intense desire to run at a fast, steady pace for two miles. If a coach expects to have fast times (9:30 to 10 minute level) he must begin by developing his runners at a young age and bring them along slowly.

Physically, a good cross country runner should be one that is long muscled, strong, and taller than the average. Most of the time probable prospects will be comparable to an end on the football team. All the cross country coach needs to do is cast a short glance in their direction and select his prospects on the basis of the available material at hand. Individuals, who are not capable of excelling in football because of lack of weight or body build, often have the desire to prove to their parents and friends that they are just as capable of performing athletically as any member of any other athletic team. Sometimes it is necessary to disregard the coach's own ideal as far as athletic build is concerned and spend his time developing smaller boys with a tremendous amount of desire. However, champion distance running stars eventually are often developed from the less athletically inclined type of boy.

#### Recruiting New Runners

Usually a coach will discover that most often, all of the available natural athletic talent interested in athletic

competition is out for football. To keep from being a thorn in his fellow coach's side, he must look in other directions for students to develop into runners.

Additional interest and prestige for cross country as a sport can come from making available to the entire student body as many publications featuring articles on distance running as the coach's budget will allow.

Within the past few years, several monthly publications with heavy emphasis devoted to running have begun publication. These include Runner's World, published in Mountain View, California; Track Times, published in Upson, Wisconsin; Long Distance Log, the official publication of the United States Track and Field Federation, printed in Tuscon, Arizona; NAIA Coach, the official publication of the National Association of Inter-collegiate Athletics, printed in Kansas City, Missouri; and the United States Olympic Committee Newsletter, published in New York, New York. These are available in addition to other older magazines, which continue to expand their attention to distance running. These are the United States Track Coaches Association's Track and Field Quarterly Review, published in Ann Arbor, Michigan; the Amateur Athlete, published in Indianapolis, Indiana; Track Technique, published in Los Altos, California; the Kansas High School Activities Journal, published in Topeka, Kansas; the Scholastic Coach, published in New York, New York; the Journal of Health, Physical Education, Recreation, published in Washington, D.C.; and the recently expanded so called "Bible"



of track and field, the Track and Field News, published in Los Altos, California.

A friendly school librarian might also invest some of the library budget in cross country oriented biographies and other track books.

Before the season starts, a bulletin board can be prepared and hung on the wall in one of the main halls in the school building. It should feature the pictures of the returning lettermen, implying a challenge for others to run cross country and to become a member of the group. The bulletin board should be kept up to date, colorful, and lively so it will attract attention and maintain interest.

A mobile, suspended from the ceiling in the lunch room, catches attention of the entire student body. It can feature a well worded specific challenge to run for the team, the school, and the community.

These visual aids should be simple and interesting so they will convey a message to the reader quickly and help sell the program.

Several possibilities are open to a coach in recruiting prospects for his squad. An enthusiastic talk at a school assembly during the opening week of school could issue a challenge to a few students who are short of self confidence. The meeting of the school lettermen's club, since it includes awards winners in all sports, is a good place for a coach to present his case. There is always a chance that the coach may interest

upper classmen who have had injuries and can no longer participate in contact sports. A coach should plant in their minds the idea that there is pride in building a winning athletic tradition, no matter what the sport.

Newspapers, both school and community, are important in interesting athletes in cross country. Furnishing information to reporters for stories, which gives the date of the opening practice and uses as many students' names as possible, is crucial to the success of the program. Building good will among the sports staff of the local newspapers is important and can be done if the coach's own enthusiasm is apparent when he talks with them.

A single printed sheet with a well worded message about cross country, will help get more students thinking about participating in the sport.

After this preliminary work has been done, it is time to call a meeting of students interested in participating.

In the first meeting, the prospects should not be told in detail what the workouts will be. It is wise to inform them that the workouts will build up gradually. It should be made known that distance running is one of the few sports in which one can set his own pace. This is one sport where one regulates his own pressure as far as running is concerned. However, if one wishes to be a great runner, he must learn to run when fatigued, and under physical stress. Experience has shown that only happy runner's make progress and the coach's responsibility is to get the first meeting off to a happy beginning, emphasizing the joy of running and of competing.

### Types of Training Used

Almost every successful coach has written at one time or another how his team trains and the workout schedules for championship distance runners. All reveal a general schedule, but many leave out small details--some psychological and some physical--which may be the true secret of a coach's winning record.

Many aspects of these programs are incorporated into this paper to create a varied program of training for distance runners. No matter what workout schedule is used, the following types of training must be included.<sup>[4]</sup>

- A. Over-distance running at a slower pace than racing speeds. This means the boy runs further than the length of his normal race, but at a slower pace.
- B. Under-distance running at a faster pace than racing speeds. This means he runs a shorter distance than his race but at a faster pace.
- C. Repeat speed work. This is done faster than his racing pace, using almost any distance less than his race.
- D. Pace work at racing speeds. This is running the pace and speed he will be using in competition, but it can be done for any distance under the length of his race.

There are many different ways to accomplish these types of training basics. Some of them can be found in the more famous types of training. These include the Fartlek system, Interval system, and the Lydiard system.

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[4]Franz Stampfl on Running, Franz Stampfl, London: Herbert Jenkins Ltd., 1955. [page 23]

The Fartlek system was originated many years ago by a Swedish Olympic coach named Gasta Homer. [5]

It involves the following:

- A. Warm up with 5 to 10 minutes of easy running.
- B. Run at a steady pace for 1 to 1½ miles.
- C. Slow down to a fast walk for about five minutes.
- D. Then run at a easy pace, bursting into sprints occasionally for distances of 50 to 60 yards. Repeat to the point of mild fatigue.
- E. Sprint uphill for 200 yards (this is recommended for two days per week, perhaps twice on Monday and once on Thursday).
- F. Continue easy running with the distance strides broken now and then by 3 or 4 sprinting strides. The trunk is tilted forward to balance the body while accelerating, as though to stave off a challenger or to make a final effort.
- G. Run fast for one minute.
- H. Finish with a number of laps on a track, the number depending on the distance for which the athlete is training. The objective of the track running is to gain knowledge of pace.

Interval running consists of running repeatedly various distances, intersperced with jogging. [6]

The Lydiard system was developed by Arthur Lydiard, world renowned coach from New Zealand. It involves a marathon type

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[5] Track and Field Athletics, George Bresnahan, Dr. W. W. Tuttle, and Francis X. Cretzemeyer, St. Louis, Mo., C. V. Mosby Co., 1964, p. 20.

[6] Ibid., p. 20.

training program which consists of many more miles of running than the participant will be running in his special race.<sup>[7]</sup>

All of these systems have some advantages, but every coach must keep in mind that he must fit the training program to each runner. Some stronger types of runners may thrive on Interval training but other runners would quit if Interval training was required every day. The runner who might quit when training on the Interval system may run faster times and enjoy running if training by the Fartlek system.

Many coaches prefer to use the Fartlek system during the off-season and the four practice basics [described in earlier pages] during the season. Most coaches are convinced that the Fartlek affords the individual more leeway in creating what is necessary and still includes a sprinkling of all other types of training without the coach being present. However, many coaches have abandoned Fartlek methods entirely because it is felt that the athlete will not do the necessary work unless he is closely supervised.

A very important factor in the training of a distance runner is the period of rest he receives after heavy workouts.<sup>[8]</sup> Most coaches agree that a tough physical workout must be followed

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<sup>[7]</sup> Track and Field Quarterly Review, "Marathon Training" by Arthur Lydiard, Ann Arbor, Michigan: Official Publication of the United States Track Coaches Association, Vol. 70, Number 4, 1971, p. 9.

<sup>[8]</sup> Olympia Cross Country Clinic Notes, Editor - Thomas P. Rosandich, Upson, Wisconsin: Olympia Sport Publication, 1967, p. 74.

by a day of comparatively easy work. It requires great psychological restraint for a coach, experienced or inexperienced, to refrain from working his runners excessively as the day of the meet approaches. One is tempted to get them into shape too quickly, realizing that if they reach the peak of condition too soon there will be a letdown before the end of the season. It is more important to work carefully toward what the coach and team considers the "big meet" than to try to win every meet throughout the season.

Another significant factor in training is enjoyment by the athlete of the procedures involved. The only way to make workouts pleasant is to vary them. Varying the workout means that the location and procedure varies. Many coaches try to schedule as little running as possible on the track because most runners agree that nothing is more boring than running in circles around an oval track all the time.

Different types of roads or courses should be provided for the workouts. A good coach is constantly driving around the countryside looking for places which will break the monotony of the training sessions. A golf course is a good place to run for variety. This gives the boys something to look at and think about, to take their minds off the pain of running tough workouts.

The coach must vary the manner in which the workouts are run. The amount of work to be done is always the same but the way the work is accomplished can be changed. The following list of variations can be used:

1. Run up - 110, 220, 330, 440, 660 and 880.
2. Run down - 880, 660, 440, 330, 220, and 110.
3. Two Mile Continuing Relay (Run on Track) - Five on each relay team and each boy runs 110 yards. The race does not stop but each boy who runs can rest until the baton gets around to him again. The boys run harder doing this than they do if they run 110 yard repeat work.
4. Hill Climbs - Run up a steep hill and exaggerate the knee lift and forward step.
5. Two Mile Run - Try to find different areas for them to run their two miles in. Sometimes it might be a road but always make it a race against each other and the clock. Each boy has a goal time to break for the two mile run. If they beat their goal, give them an extra ration of orange flavored vitamin C tablets or some other small reward.
6. 4 to 6 Mile Run - Never set a time for any distance longer than two miles. Have them use the Fartlek method of training.
7. Morning Runs - Most of the time, use over distance training for early workouts. This helps break the monotony of afternoon workouts.<sup>[9]</sup>

The workouts listed before are carefully planned to accomplish a given physical expenditure and make it as enjoyable as possible for the runners. This is an important factor in developing a "Happy" team, which will, in turn, eventually help sell the program to their parents and the parents of other boys not on the squad.

No matter what a high school coach does during the season, his win-loss record will only be as good as his off-season program.

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<sup>[9]</sup> Ibid., p. 79.

### In-Season Training

Every coach in the profession uses his own particular type of training program during the season of competition. He may use the Interval system or the Over-distance system exclusively. However, no matter what the system is called, it must include over-distance, under-distance, repeat speed work, and pace work.<sup>[10]</sup> The coach may add other variations which his experience has taught him are important to the total program. Running up hills and weight training are examples of this.

Specific weight programs are generally believed to be valuable in developing arms, which are important to a runner. Also various other parts of the body will benefit. Boys usually enjoy working with weights and it is an important addition to the total cross country program in a state like Kansas where boys are often confined to gymnasiums by cold and snow. Participants are able to obtain considerable satisfaction from feeling that at least a small amount of progress is being made. Military curls are especially effective for runners.

It has always been a mystery to coaches and distance runners as to what causes "stitches" [continuous pain in the side], a common affliction to many long distance runners which often make it impossible for them to continue running.

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<sup>[10]</sup>The Science of Swimming, James E. Counsilman, Englewood Cliffs, N.J.: Prentice Hall Inc., 1968, p. 205.



The latest theory for prevention of stitches has been given by Arthur Lydiard, the New Zealand coach, in the recent issue of the United States Track Coaches Associations, Track and Field Quarterly. He recommends the old "football rocker" exercise. In this, an individual lies on his stomach with his hands behind his back, raises his shoulders and head, raises his knees and feet, rocking forward and backward with his stomach the only part of his body touching the surface. He says this will strengthen and stretch the diaphragm and his theory points out that this is the cause of the pain. He also doubts the advantages of "sit-ups" and exercises of that nature for a runner. It is quite likely that this theory will be questioned by physiologists and medical doctors, but is certainly worthy of a trial as everyone associated with cross country running is desperate to solve this problem.[11]

In the first year of cross country, the coach should introduce the program slowly. The first workouts are comparatively easy and light. After this cautious beginning, the miles run and the amount of work is slowly increased until one reaches a point that is considered to be a moderate program. The following year, after the addition of an off-season program, the schedule of in-season training begins where last year's program left off, with a moderate program.

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[11] Lydiard, op cit., p. 21.

During the year, the coach works toward a program of heavy work loads. To work up gradually, some weeks the coach uses the heavy drill and the next week drops back to the moderate program. The third year, after a second off-season training program, a heavy work load can be used throughout the entire season. Once strenuous practice sessions have been established in a program, if the new boys are properly introduced a workable cross country program has finally been established. The participants' time will then show the fruits of a well planned program.

Except for one phase, the in-season training program used at Smith Center follows many rules set by almost all well known coaches and athletes. This consists of 50 per cent distance running, 25 per cent under-distance running, and 25 per cent pace work. The only phase not used during the season of competition is repeat speed work. This is omitted because too many injuries occur during speed running.<sup>[12]</sup> These include leg muscle problems and even shin splints, which are suspected of being the result of too much speed work too soon. Speed work can ruin a distance runner faster than any other phase of any program and the risks are too great to take with young runners.

Some of the techniques the team works on regularly are running on hills, passing opponents with the least expenditure

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[12] Motivation and Racing Tactics In Track and Field, W. Harold O'Connor, West Nyack, N.Y.: Parker Publishing Co., 1970, p. 60.

of energy, running form, running in the wind, pace work, and watching the opponent for signs of weakness.[13]

Because cross country competition involves uneven terrain, runners spend a regular amount of time working on hills. This not only gives them more leg strength but also provides a very important psychological advantage. It builds them up physically so they have the stamina to pass other runners, going up hill, which is when it is least expected. The runners also try to pass just before a curve and at a narrow spot in the running path. Passing an opponent where he has little hope of passing right back aids in demoralizing him.

A coach should give some attention to running form, but most boys run best with their own individual style. The coach changes major running faults such as body lean, leg stride and arm carry if it is too exaggerated. He looks for ways of conserving every ounce of energy by eliminating improper balance or body sway. This is important in preventing body muscles from becoming fatigued too soon.[14]

When an opponent, who is leading the race, carries his arms too high or his upper body muscles appear to tighten, this is the time to exert every effort to pass, calling on all of his reserve

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[13] The Long Green Line, Joe Newton and Karl Schimdl, Oak Brook, Illinois: All American Publishing Co., 1969, p. 112.

[14] Rosandich, op. cit., p. 68.

energy. After passing, the runner should not assume his normal stride until a five or ten yard lead has been reached.

Twenty-five per cent of a team's training should be pace work. This consumes many hours of work but a high school coach can achieve some success if he combines this with a good endurance program. The standard theory by which races are run says: "The beginning and finish sprints will decrease the total time."

The increase in speed going down a hill will make up time for the decrease in speed going up a hill. Based on this fact, a runner wishing to achieve his personal time goal at the end of a race must pace himself in the field of runners when the terrain is relatively flat to compensate for the finish kick that is needed to win a race at the end. Whenever the runner works out on a flat surface, it is usually to accomplish pace speeds. He works at pace speeds for one mile or one and one-half miles, concentrating on running each quarter of a mile at a certain speed.

Pacing, the key to a successful individual effort and team effort, appears to be a simple matter. However, hours of running experience are required to perfect pace.

Most coaches decide the preferred time required for each team member to run the two miles in, and divide it by eight. The time per quarter is then recorded on a tape. The tape is then played over the loud speaker system at the track. Each runner then knows the pace he must set at each 110 yards and he must attain to run at his set speed. Using this system, one learns what it feels like to run at his pace speed. In a meet

he is then familiar with the pace he should be running while on the various flat parts of the course. Research at Smith Center indicated that the team had greater success using this system for pace work, and that each of the runners ran at or better than his pace time twice or more during the season.

An important problem that many coaches overlook is the scheduling of meets. Most teams plan to run in a meet once a week. These can be dual meets or invitational meets, in addition to league, district, and state competition. Many schools scheduling meets are increasing the number of invitation meets every year with from 20 to 50 teams being entered.

Often, with a big meet coming up, a coach does not want his boys to over exert themselves by trying for a school record or to defeat an opponent who has been clocked on several occasions at a faster time. The coach carefully plots victory for his entire team by studying his competition carefully. Prior to a meet the coach should try to match the abilities of each of his team members with their opponents, then urge each one to at least win so that team points, however few, will equal enough to win the meet. Runners should know enough not to strain themselves but be aware of their running position in the race. Sometimes the coach recommends restraint if the next meet happens to be one of the more important meets of the year, where full effort will be needed for the team to accomplish its goal.

### Off-Season Training

The most difficult problem a coach faces is motivating runners to work during the off-season. In order to run well, they need considerable encouragement and motivation during the season as well as during the off-season. This involves a great deal of planning for the coach, but it must be done if a winning team is desired.

The best way to sell the off-season program is to be able to offer an example to the squad.<sup>[15]</sup> Any boy who has successfully lowered his times can be used as a means of encouraging other members of the squad. His improved record can be used as a means of appraisal in front of the squad. It is comparatively easy for a high school runner to think that if his team mate, who perhaps lives in the same neighborhood, and has no more time or ability than he, is able to improve himself so markedly, he might do the same.

The training programs of championship runners can be cited with emphasis on how times have been improved. A coach can contact one of these great runners and ask him for an explanation concerning the training procedures and methods used for improvement of his times during off-season training. Most of the champion cross country runners will be glad to encourage young runners by writing such a letter.

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[15] Newton, op. cit., p. 100.

Efforts should be made to take pride in their improvement and in the increasing number of miles run each week. One can check improvement by participating in summer Amateur Athletic Union and Junior Olympic track meets. In many cases boys can persuade their parents to time them in a meet of their own. This is another involvement of parents which is important since distance running is such a personal matter and parents will become proud of their son's dedication toward improvement in any sport.

An idea originated by Joe Newton, Cross Country Coach at York High School, in Elmhurst, Illinois, calls for an organization of boys who run many miles each summer. As a reward he presents them with tee shirts which indicate how far they have run, such as 250 miles, 500 miles, and 1,000 miles. An organization set up such as this is a good motivational device. It is good to have prospective cross country runners run between 150 and 250 miles per summer. They should not spend all of their time during the summer running because there are other activities which can aid in the promotion of a program.

Mailing instructional materials to team members during the off-season is another way to keep interest high. This indicates to the squad members that the coach is interested in them and their performances. Sometimes results of summer Amateur Athletic Union meets, or a schedule of possible training workouts could be mailed to the boys as an incentive for maintaining interest. Also cartoon drawings picturing a boy from the local school running, contrasted to a boy from another school in the league,

eating popcorn and watching television, could spark the team members' desire for off-season work. These tactics may sound ridiculous but they often get results. The best way to keep team interest high is to show that the coach has an individual interest in them.

There is one training plan which seems to work well for runners during the off-season. This is the Fartlek system, previously described. This system, which many coaches and runners believe takes advantage of the inherent quality of self reliance on the part of the squad member in that this type of planned program can be carried out without a coach's direct and immediate supervision. The system can and should be adapted to the individual runner, not the runner to the system.

The terrain should be as varied, as physically challenging and mentally invigorating, as can be found or devised. The most boring of all terrains is a flat 440-yard track. If this is all that is available, coaches should use another name other than Fartlek to describe the system.

Mileage and basic stamina prepare men for all endurance events on the track program from the 220-yard dash to the marathon run. While doing speed play, runners cover long distances and undergo repeated stresses. These are essential to all sound systems. The amount of steady running as compared with fast-and-slow running depends upon the coach, the runner's maturity, the time of the year, etc. There is no fixed schedule for Fartlek training.



Any terrain will suffice so long as it is interesting and safe enough to avoid injury. Pine-needled wooded paths are not essential. Runners can make use of a golf course, a cemetery, a sand dune, a meadow, a winding dirt road, a paved road (if none other is available), or a large play ground. All these will be satisfactory, whether dry or wet or white with snow.

If a coach can encourage his runners to follow the Fartlek training system in the off-season, he can be sure that they will be receiving enjoyment and all the essentials of a good training program.

### Staying Healthy

Sufficient amounts of rest during the season is one of the key problems in developing a winning team and also one of the most difficult to overcome. High school students in the 1970's are accustomed to a lot of freedom so far as going to and from home is concerned. The coach needs to emphasize over and over again the importance of regular sleep. Keeping late hours at night is one of the quickest ways for a runner to counteract all the strenuous hours of work he has spent running in order to condition himself to become a good distance runner.

On days of light workouts, a longer than usual team meeting should be held in order to inform them as to the amount of needed rest. Attention also should be given in these sessions to a cross country runner's diet that should be followed during the week and before meets. The principle theory followed by most

coaches is to point out the importance of eating three meals per day, making sure that each one consists of a balanced diet, and to cut down on candy and pop between meals.

About halfway through the season a coach should start distributing vitamin "C" pills. If the weather changes, colds begin to show up. Most health authorities believe that vitamin "C" helps prevent colds.<sup>[16]</sup>

Pulse rates and their relation to cardio-vascular endurance has been established as a reliable technique for planning physical work loads.<sup>[17]</sup> Many coaches plan their workouts according to how soon an individual's pulse rate reaches a certain rate. Then time is allowed for the pulse rate to fall back to near normal. This procedure is then followed in this order until it is evident that fatigue has resulted.

Many coaches use pulse rates to show their runners the effectiveness of the training program. As an individual approaches running condition, his resting pulse rate will drop slowly. If the boys record their rates on the training chart each morning, they will be able to visualize the decline in the pulse rate as training progresses. Also from this chart, any variance from the normal can be seen. If, over a three or four day period, there is a slight increase in their average pulse rate, it is likely the boy will soon be coming down with a cold. He can be advised

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[16] Counsilman, op. cit., p. 372.

[17] Counsilman, op. cit., p. 215.

to get added rest and take a vitamin "C" supplement before the cold gets so bad which could result in missing several vital days of practice.

### Awards and Recognition

For best team and individual results, every boy should receive some type of recognition, whether it is for the best time or simply being an outstanding team member. Giving each boy recognition may result in some rewarding psychological benefits and can aid a runner as well as the team in later performances. Many times a boy will strive for an extensive amount of improvement because he would like to have his name placed on the list for some outstanding accomplishment rather than simply being a team member. Occasionally, a boy who has not been out for cross country will decide to go out and run because he is convinced he can out run some friend who is already out. This may be due to the fact that he craves a little of the recognition that is being given to the other team members.

Town and school newspapers can be a big asset to a coach's cause throughout the entire year. This is done by having a sports writer include the results of meets, records set, and the lists of names of the participants in the sports sections. A cross country program should have an "A" team, "B" team, and Freshman team. Effort should be made to have each boy's name listed in the paper at least once during the season.

After each meet, a coach can place on a bulletin board the pictures of each boy who ran, along with his time for this meet

as well as previous meets. He can also include other information such as when and where the next meet will be held, the team record, and the rankings of the other teams in the league. During the week, he can also post pictures of the "B" team and the Freshman team, and their results. It is important to have the bulletin board brightly colored, attractive and as interesting as possible. A coach sometimes will use pictures of the meets so that students, teachers, and townspeople will be more informed about the inner workings of a cross country meet.

At the end of the season, newspaper and the yearbook should include pictures of the team's returning lettermen, as well as all the awards and trophies that were won throughout the year. If at all possible, and money is available, an especially good action photograph of some type should be enlarged to about two by three feet and placed on the cross country bulletin board. The caption should say, "These returning lettermen challenge you to participate in cross country next year and help them continue their winning tradition."

Often a downtown store can be persuaded to use part of its window for a week to display photographs of the cross country squad, along with trophies and medals that have been won.

Mailing each boy's parents a mimeographed copy of the results of every cross country meet takes little time or money, but can be an important factor in developing interest in the family circle. The fact that every runner [except, of course, the one in last place] has finished ahead of somebody from

another high school, or from his own, indicates to the family one of the most important principles of cross country competition, and that is that even the lower ranking runners have contributed something toward a team victory by finishing ahead of a member of the opposing team.

Each year a coach can give several awards in addition to official athletic letters to the varsity runners. The "[nickname of the school] award" goes to the boy who shows the most desire and competitive attitude. There is a "Goldbrick Award" to the boy who could have ranked higher if he had exerted more effort. Another award is called the "Looking Good Award." This is a mirror given to the boy who always has an abundance of energy left at the end of the race and finishes too fresh to suit the wishes of the coach.

In the gymnasium at the high school, a bulletin board with the five fastest times ever run at the school should be installed. This creates considerable attention from the public when they attend basketball games and other events in the gymnasium. It calls attention to the ultimate goal of cross country running. The desire to have his name listed on that board seems to instill in a few of the top runners the desire to put forth a little more of the added effort that is necessary to gain this recognition. Whenever a new name is added to replace an old one, interest is built if a team meeting is held and it is decided to send the old card to the boy who formerly held the record. This could be accomplished by a letter from the team and coach informing the

former athlete of the name of the holder and the record breaking time. They could also indicate to the former runner that an effort is being made to carry on the example and the goal that he set in accordance to his winning tradition at the school.

At the end of each school year, a handout sheet should be mimeographed and given to every eighth grade boy.<sup>[18]</sup> The sheet should include a picture of the best five runners on the varsity squad and the best five from the freshman squad. This is issuing explicit challenge to the eighth grade graduates to become interested in participating in cross country next year. It also gives information on the current team record and suggests that they contact the coach for information on what should be done during the summer if he has any entertaining thoughts concerning trying out for cross country when the fall semester begins. The freshmen will be pleased to see their names on that handout sheet, along with the varsity runners.

#### Audio Visual Aids

Of the teaching aids available to a coach, visual aids are most commonly used. A Kodak Instamatic camera with an automatic light meter is good for most of the still pictures that one wishes to take. It is relatively inexpensive and easy to operate, thus leaving more time at the meets or practice sessions for the coach

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[18] Newton, op. cit., p. 11.

to work with the boys in preparing for competition.<sup>[19]</sup> The pictures taken may be used as a record for the athletes on running form--up hill, around curves, or in the sprint at the end of the race. Some prints should be used on the bulletin board to inform others about the action involved in a meet. For the pictures taken during competition, color film is advised because of the appeal of the colored uniforms and the effectiveness of contrast between the runners and the landscape. In addition, color pictures are more pleasing to look at on the bulletin board.

Most communities have "Quarterback Clubs", comprised of local men who meet frequently and support all of the athletic programs at the school. This group is a likely source of money to purchase some Super 8 film for the cross country team to use. Parts of each meet should be photographed with special attention given to the league and state meets. These films can be shown to student and civic organizations who enjoy seeing the runners in action and listening to the coach's enthusiastic comments and appraisal of the benefits of cross country. They can also be saved and used as a teaching aid to show to next year's squad.

The tape recorder is another teaching aid which can be of tremendous help because it assists in teaching the runners pace and pace times. A coach can tape his own voice counting off each second per quarter of a mile for an 880-yard run or a mile run.

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[19] Media Methods, J. Brown, R. Lewis, F. Hareleran, New York, N.Y.: McGraw Hill, 3rd edition, 1969.

Each boy is aware of what his time should be at each 110-yard mark and can pace himself by hearing the seconds counted off. Ideally, he reaches each mark exactly at his pre-determined time. By doing this repeatedly, he learns the rhythm of his running stride. He eventually discovers how fast he should be running to cover two miles in a prescribed time. This method seems to be extremely successful for high school runners.

The portable Video Tape Recorder is also beneficial. However, since it is not easily moved, the use is limited in cross country. When used effectively, it can be helpful in perfecting running form. Each boy can see and analyze his stride, arm carry, and sprinting form almost immediately. If he has any faults, he can attempt to correct them immediately, and again try, using the changes in front of the camera.

#### SUMMARY

This study showed that the most important factor in producing a successful high school cross country team was motivation. The results were the same whether the individual was motivated by personal recognition, accomplishment of a goal, team success, or family appreciation. The individual's motivation to succeed, not the workouts, were the difference between success and failure for him. The more the person was motivated, the more miles he ran and the better times he developed.

As heavy workouts were introduced slowly, the runners adapted to them. Introducing the program gradually appeared to be another



key to success. Some boys who entered the program late in the season could not perform the necessary work loads. A few of the boys who could not stand the load quit the team. Others were placed in a beginning situation and progressed similar to the original runners, and competed accordingly.

Convincing the runners of the benefits and importance of the off-season training program so persuasively that they could be relied on to follow the workout schedules on their own was the most important factor in producing a successful cross country season. Many contributing factors in selling a cross country program to the athletes have been found and considered in reading published materials and in experimenting with various methods. However, the most important factor was having the coach show personal and individualized interest in the boys during the off-season.

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DEVELOPING A HIGH SCHOOL CROSS COUNTRY TEAM

by

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B.A., Fort Hays Kansas State College, 1966

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Physical Education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1971

The purpose of this report was to find methods of recruiting, motivating, rewarding, and training that can be used to develop a high school cross country program at Smith Center Kansas High School.

The information included in the study was obtained through practical application of methods used by leading coaches throughout the world. Suggestions, techniques, incentives, and ideas, published in books and articles, were experimented with to see which ones applied more specifically to the particular situation at Smith Center High School, Smith Center, Kansas.

The first part of the discussion topics includes the ways of locating talent for a cross country team through the use of cardio vascular testing.

Section two is concerned with methods of recruiting runners through the use of visual aids and other methods of informing students and the public about the challenges of running cross country.

Area three discusses the many types of training available to the coaches of distance runners and the different ways of varying the workouts and making them more enjoyable to the participants.

Discussion areas four and five are concerned with specific individual training for cross country runners such as racing tactics, weight training, development of the running program, developing pace, and off-season training.

The staying healthy section was written to show how the runner can keep himself from missing training time due to illness and also how the individual can maintain a high degree of endurance through the wise use of training rules.

Area seven of the discussion is concerned with the psychological benefits of giving awards and recognition to the participants of the cross country program.

The last part in the discussion tells how audio visual aids can be used to help "sell" the cross country program to the participants and the public.

This study showed that an important factor in producing a successful high school cross country program was motivation. The results were the same whether the individual was motivated by personal recognition, accomplishment of goal, team success, or family appreciation.

Persuading the runners of the benefits and importance of the off-season training was a very important factor in the cross country program. This taught the runners self-reliance in following the workouts on their own. However, the most important factor was having the coach show personal and individualized interest in the boys during the off-season.