



THE ULTIMATE GUIDE TO HIGH SCHOOL STRENGTH & CONDITIONING





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Introduction to the Guide

Welcome to the Ultimate Guide to High School Strength and Conditioning. This guide aims to provide coaches, trainers, athletic directors, and P.E. teachers with a comprehensive resource for designing and implementing effective strength and conditioning programs at the high school level.

While it may be tempting to skip the logistics section and jump right into the science of strength and conditioning, this would be a mistake. Why? Training athletes at the high school level involves a dizzying array of variables and challenges that strength coaches at the collegiate and professional level do not face. It is for this reason that training high school athletes is far and away the **hardest level to plan and execute effective training programs.**

Think about it. At the collegiate and professional level, athletes play one sport, providing clear start and end dates for in-season and off-season training. They also have time dedicated to training. And, largely speaking, they have a strong foundation of movement and technique already in place.

However, at the high school level, you have multi-sport athletes with a wide range of schedules. Additionally, many coaches don't prioritize the weight room during their season, making consistency a serious challenge. Finally, it is common to have athletes new to the weight room training alongside experienced kids, creating yet another logistical challenge.

Given these unique scenarios, you must first figure out the logistical challenges of training at the high school level. If you don't, it doesn't matter if you have the best designed program in the country. It will fall short.

Ok, enough from the soapbox. Let's dive in!



BUILDING A FOUNDATION

When to Start

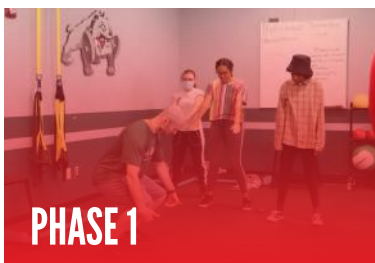
Determining when and how athletes will start your strength and conditioning program is critical. Early initiation allows athletes to establish fundamental movement patterns and build a solid foundation of strength and athleticism. The earlier we can start the process, the more time they will have to train at an advanced level.

So while the title of this E-Book focuses on the high school athlete, the ideal time to start building your foundation is actually middle school. Be it 6th, 7th, or 8th grade, if we can begin to work with athletes prior to them getting to high school, it will not only benefit them, but it will also help reduce one of the many variables you have to deal with - mixed ability levels.

If starting athletes on your foundational training program is not possible at the middle school level, then all incoming 9th graders should go through your foundational program at the earliest possible time: Summer before 9th grade, or Fall of 9th grade.

How to Start

At PLT4M, we use a four part on-boarding approach to develop new athletes, gradually building their form, technique, readiness, and confidence. Let's take a look!



SEE PHASE BREAKDOWN ON THE NEXT PAGE >



Phase 1

Phase 1 is focused on teaching foundational human movements: Squat, Hinge, Lunge, Press, Pull, Walking/Running. The aim of this phase is to provide every athlete a foundation upon which they can develop and intensify their performance training.

In Phase 1, no external loading is used, meaning it is purely a body weight based program. This makes it adaptable to any space, and less intimidating for a younger athlete.

In addition to cementing proper mechanics through the fundamental human movements, we begin to develop relative strength & mobility, while also introducing the concept of capacity (also known as conditioning - but more on this later).



Phase 2

Phase 2 is an introduction to resistance and capacity training. We expound upon our mastery of human movement by adding weighted instruments and intensity. Here, athletes will learn various compound movements and loaded versions of our fundamental movement patterns.

Our weighted instruments for Phase 2 consist of PVC pipes and Medicine Balls. This means it can be executed outside of the weight room, and carries much less risk than working with a barbell.



Phase 3 + Phase 4

Once our athletes show competency in each foundational movement using a loaded object, we are ready to transition to the weight room. In Phase 3, we begin our weight room journey with a focus on the Powerlifts: Bench Press, Back Squat, and Deadlift. In Phase 4, we move to what we consider the deconstructed Olympic Lifts (as true Olympic lifts can be too advanced at this stage): Overhead Press, Front Squat, Clean.

Within each phase we begin with an empty barbell, or a training bar if the athlete is not able to perform the movements with a regular barbell. Each week, athletes add weight, at their discretion, growing more comfortable with each movement. Ultimately, the goal at the end of phase 3 and 4 is to establish a baseline max in each of the lifts we have taught. These maxes will be used as baseline assessments, and leveraged in our In-Season and Off-Season programs to individualize programming.

AT A GLANCE: ONBOARDING FOR NEW ATHLETES

PHASE 1	PHASE 2	PHASE 3	PHASE 4
15 WORKOUTS	15 WORKOUTS	15 WORKOUTS	15 WORKOUTS
BODY WEIGHT	PVC + Med Ball	BARBELLS + DUMBBELLS	BARBELLS + DUMBBELLS

TRAINING FOR COMPETITIONS



Once we have established a foundation of movement, and perfected our form, athletes are ready for more advanced training. This advanced training will be a variation of In-Season or Off-Season.

In-Season, Forever?

Playing multiple sports in high school is common, and should be encouraged. However, when it comes to strength & conditioning, it can create a lot of challenges. Chief among them is a concern amongst coaches that athletes will forever be stuck doing in-season training, limiting progress.

And this is a fair concern. Consider an athlete playing 3 sports for all four years of high school. If we followed a rigid approach to their training, always doing in-season when in a sport, this athlete would only participate in 8-12 months of off-season training over the course of four years.

Luckily, program selection does not need to be so black-and-white. Let's explore further with some important considerations for choosing In-Season or Off-Season training.

Level of Competition

Factor in what level the athlete is competing at (Freshman, JV, Varsity) and what the priority is at that level. Do you want Freshman championships, or kids developing in the weight room for eventual varsity success? If the latter, these younger athletes don't necessarily have to be on a traditional in-season program simply because they are in-season.

Athletes' Priorities

Athletes will often have a sport or two that is their primary focus, while playing others to help the team or stay engaged with friends. In these cases, we should consider the athletes' priorities, the demands of the sport, the competitive schedule, and the coaches' input to determine if off-season workouts are acceptable.

Athletes' Role

The athlete's role on the team also matters. A key player in multiple varsity sports may require in-season training throughout all seasons to maintain peak performance for competition. Conversely, an athlete who doesn't play much during a given season could consider continuing their off-season programming to better prepare them for a sport in which they do play a significant role.



Sport-Specific Training

The question that will inevitably come up during athletic department meetings is the concept of sport-specific training vs non-sport specific training. While there are ways to do both effectively, at PLT4M, we embrace the non-sport specific approach for a few reasons.

Physiological Benefits

Every sports coach will have specific ideas about the demands of their sport and what their athletes need. However, the vast majority of athletes in high school play at least two sports.

If we choose to focus on only the demands of one particular sport, we are by definition not focusing on other areas. Therefore, a sport-specific approach ping-pongs an athlete from one type of program philosophy to another. This creates inconsistencies that can limit progress, under prepare an athlete for their next season, and increase chances of injury.

So while this approach may work at the college and pro level where athletes ARE sport-specific, it isn't ideal for high schools. At PLT4M, we prefer to train holistically, with consistency of training as our primary goal. To do this, we focus on building the complete athlete, always prepared for any sport, at any time.

Administrative Benefits

Consider that an athlete can be Fall, Winter, or Spring, or Fall-Winter, Fall-Spring, Winter-Spring, or Fall-Winter-Spring. If your school offers only 12 sports, that creates close to 500 combinations that you need to plan for.

Far easier is to develop a universal Off-Season Program and a universal In-Season Program, leaving your staff with only one administrative question to answer: Is this athlete in-season or off-season (keeping in mind the prior sections' considerations)?

Not only will this radically simplify your planning, scheduling, and data tracking, but it also creates a more efficient weight room. Rather than 30 kids doing a variety of different programs, you can bifurcate the weight room into two groups: In-Season and Off-Season. Just as important is that a non-sport specific approach removes any potential issues between coaches. No longer is there a need to argue over whose program an athlete should do in the off-season. This creates a healthier culture for coaches and athletes alike.

High School Athletes are Developmental Athletes

Athletes at the high school level, even if they began their on-boarding training in middle school, are still developmental. They can, and will, make immense gains just by participating in year round training. This means the specificity of a program matters far less than year round participation.

Might college and pro athletes, who are more physically mature, with years and years of training under their belt, need more specialized training? Sure. But such is not the case in high school, so don't make your life more complicated than it needs to be.

CREATING YEAR ROUND CONSISTENCY

A structured, year-round approach is essential for maximizing athletes' potential. This requires effective communication among coaches and clear expectations set by the Athletic Director. Additionally, if schools can integrate strength and conditioning programs into the PE curriculum, schools can provide consistent access for athletes without requiring coaches to relinquish practice time.

Collaboration & Communication

If a particular sports coach doesn't value the weight room, those athletes will miss out on three months of training. This will have a significant impact on their developmental progress, preparedness for competition, and injury resistance.

So how can you create a consistent, year-round approach, for all athletes?

First and foremost, coaches need to communicate and collaborate. The role of the Athletic Director in this process is critical. Setting expectations from the top that all athletes will be given the opportunity to, at minimum, participate in a 2-day in-season program is imperative.

Here again, a non-sport specific approach will make collaboration far easier, as coaches will be less worried about kids overtraining for a different sport during their season. Instead, the only consideration is when each team will carve out 30-minutes to get into the weight room.

Better still is to work with your Physical Education department to incorporate Weight Training electives into the school day.



**SEE HOW THIS ILLINOIS STATE CHAMPION
HAS CREATED A COORDINATED APPROACH
TO STRENGTH & CONDITIONING**

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Physical Education Is Your Secret Weapon

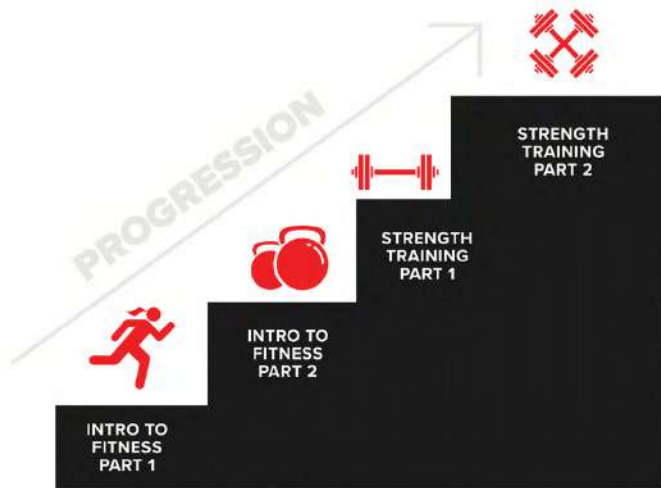
We have established the importance of foundational training for young athletes, as well as the need for consistent training throughout the year. But even if your athletic department has come to agree on a collaborative approach to training (by no means a given), two challenges still remain.

First, getting middle school athletes into the weight room before or after school may not be feasible given the requirement for rides from parents. Secondly, coaches, even if they believe in the power of the weight room, will always have a hard time giving up practice time for it.

So what is the answer? *Physical Education.*

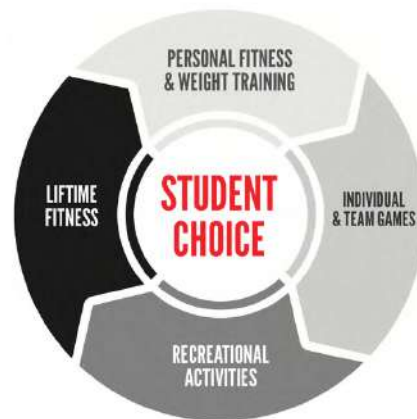
By working with your schools' PE staff at the middle and high school level, you can create a structured approach to strength and conditioning (and this will also benefit the non-athlete student body). By working your foundational program into the middle school curriculum, athletes and students will gain valuable experience in both fitness and weight training.

At the high school level, offering Advanced Weight Training as an elective will not only benefit the athletic department, but also PE. The new SHAPE Standards, released in March 2024, advocate for a more student-centered experience in Physical Education. This means more student choice and autonomy. By teaching fitness and weight training in the middle school and offering similar electives in high schools, students and athletes will have the opportunity to participate in a Physical Education experience more personalized and rewarding.



Create a Common Foundation of Motor Skills in Middle School

THE 10,000 FOOT VIEW



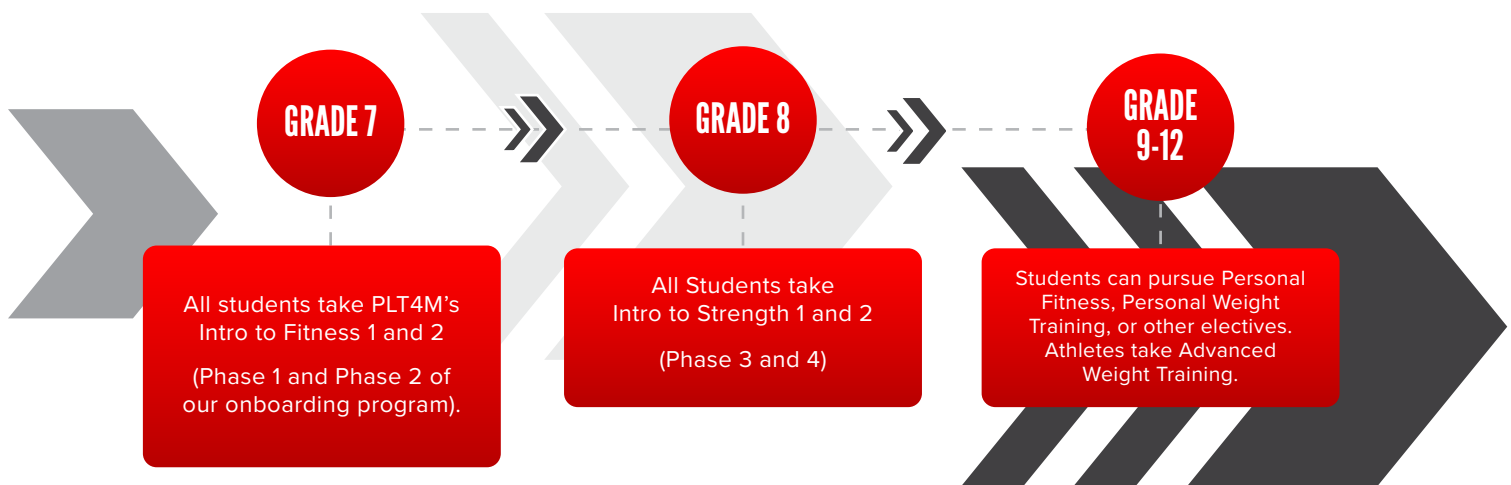
Create a Student-Centered Learning Environment at the High School with engaging Electives

Concept in Practice

Southeast Polk is a large school outside of Des Moines, Iowa. Prior to 2016, they had one state championship to their name - in ALL sports. In 2017, PE Chair and Wrestling Coach, Jason Christenson, set out to chart a new course.

Using Physical Education as the conduit, Southeast Polk built an Athletics Powerhouse, winning more than a dozen state championships since their new PE based approach was enacted. So what does this look like?

PROGRESSION



Rather than juggling 30+ sport based programs in a class with kids of all different needs, Jason and the staff have agreed to use the PLT4M In-Season and Off-Season program. This simplifies the administrative part of training, while also providing athletes with year round consistency and a balanced program.

With numerous state championships and athletes now playing at the highest rungs of collegiate athletics, Southeast Polk is proof that creating an effective strength program for all athletes doesn't have to be complicated.



PHYSICAL EDUCATION FUELS ATHLETICS SUCCESS AT SOUTHEAST POLK

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USING TECHNOLOGY TO YOUR ADVANTAGE

Managing Workouts

When managing the training of numerous athletes with diverse schedules and skill levels, it's essential to establish a streamlined system for creating workouts and disseminating them to the athletes.

While Excel surpasses traditional methods like paper and pen or whiteboards, Google Sheets offers even greater advantages. Its cloud-based nature enables seamless document sharing among all involved parties, with any modifications instantly accessible. However, Google Sheets can present challenges on mobile devices, necessitating either printing or the use of laptops.

Moreover, Google Sheets may pose difficulties in data collection and analysis. Extracting assessment data from various sheets and generating reports demands proficiency, and accurately tracking participation metrics remains elusive.

In contrast, app-based solutions like PLT4M offer compelling benefits. By leveraging athletes' smartphones or school-issued devices, software can facilitate real-time access to workout updates while enhancing the athlete experience. Furthermore, such apps streamline participation data tracking and workout insights that can enhance training and accountability.

Managing the Weight Room

As discussed, it is not uncommon to have in-season athletes, off-season athletes, and potentially developmental athletes all working out at the same time. Having a system in place to manage your weight room is critical.

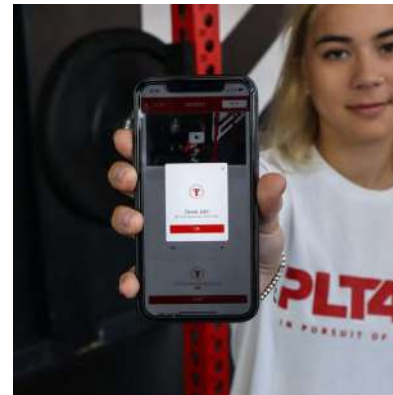
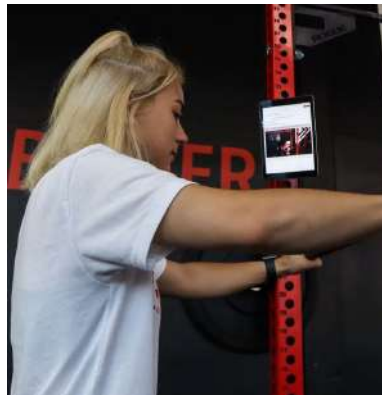
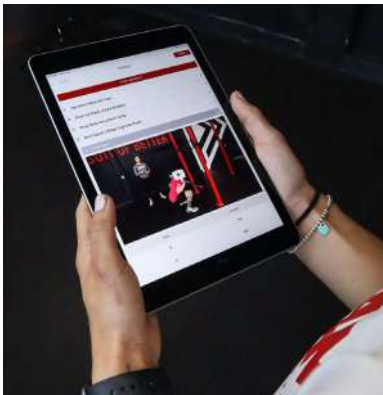
Technology can play a pivotal role in allowing you to manage your weight room efficiently and effectively. With software based training programs like PLT4M, you have real time data on what workout athletes are doing, and where in the workout they are at.

Leveraging display technology, or your own device, you can tap into this real-time data to keep kids on task, check weight prescriptions, and incentivize athletes to move at an appropriate pace.



WEIGHT TRAINING CLASSES GO FROM PRINT OUTS TO PLT4M

READ FULL STORY



Improving How You Assess Athletes

Assessments and data tracking serve as foundational pillars for any successful strength and conditioning program. From the outset, assessments provide a critical baseline measurement of an athlete's capabilities, offering insight into their current strength, endurance, flexibility, speed and other important areas of performance.

As athletes embark on their training journeys, regular assessments play a pivotal role in monitoring progress over time. By tracking improvements or areas requiring additional attention, coaches can make informed adjustments to training programs, ensuring continuous advancement and guarding against performance plateaus.

CREATING ASSESSMENTS

When creating assessments, we like to use the **SMART** framework:

S

SPECIFIC

Assessments should be designed to test specific areas that your program aims to improve. Understand first what it is your programs' goals are, and then create the assessments to measure your success.

M

MEASURABLE

For an assessment to be an effective tool, you must know how you will evaluate it, track it, report on it, and share it. Otherwise, assessments risk becoming another tedious task we do without any real value to show for it.

A

ACCESSIBLE

Staff and athletes should always be able to view the data for themselves and their teams. If results are not readily available, we lose out on the motivating power of data for athletes, and the chance to keep coaches informed and involved.

R

RELEVANT

Assessments must be relevant and appropriate to an athlete's experience level. If a 9th grader has never gone through foundational training, they should never be asked to max out on a power or olympic lift.

T

TIME-BOUND

Assessments should occur at regular intervals. This creates consistency in the data and enhances the reliability of your insights.

Sharing Assessments

There are many ways to track data. Excel has long been the most popular tool to track and report on assessments. However, excel can create barriers to accessibility, as only one coach will generally have access to the data. Additionally, if your computer crashes, you risk losing years of data.

If using the spreadsheet model, cloud-based options like Google Drive are preferable. This allows you to share the data with all parties, and using “View Only” settings, ensure that no one modifies the data.

Better yet is to use software that can automate the reporting for you. With software like PLT4M, all coaches and athletes have access to a shared school account. The data is housed within the account and secured on the cloud. Via the convenience of an app and website, athletes and staff can view past results, progress, and even leaderboards.



DATA-DRIVEN PHYSICAL EDUCATION AT BARABOO HIGH SCHOOL

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Growing Accountability

Accountability is a cornerstone of successful teams. Your strength program is no different. It is imperative that you have a system in place to track athlete participation over the course of the year, and share that information with coaches.

Here again, traditional methods of excel, or even sign-in sheets, can work. The downside is that the data is hard to aggregate and harder yet to report on.

Similar to your assessment tracking, using cloud-based tools like Google Drive can help. To go one step further, using software like PLT4M enables you to automatically track attendance, workouts logged, and time spent actively training. These additional data points can be a huge advantage when trying to create a culture of accountability.



THE SCIENCE

MAXIMIZE YOUR ATHLETES' EFFORT

When it comes to crafting a training program for high school athletes, coaches and athletic directors often encounter a plethora of training methodologies from which to choose. Be it Wendler's 5-3-1, Dietz' Triphasic, or the classic BFS, there is no limit to the number of popular methodologies out there you can theoretically use to enhance athletic performance in the gym.

However, the question arises: does it truly matter which one you choose?

While the methods for application of training may vary greatly, the underlying principles of effective performance training remain consistent. Ultimately, the "right" training method is one that allows athletes to achieve the intended training stimuli consistently, safely, and with maximum intent.

Success, then, lies in PLANNING.

Herein lies the introduction of a concept known as periodization.

PERIODIZATION

A fancy term, periodization really just refers to having a big-picture strategy. There are quite a few philosophies out there as it pertains to the concept of periodization: Linear, Non-Linear/Conjugate, Undulating...the list goes on. Often, these ideologies confine a program to sets, reps, percentages within rigid long-term schedules.

Anyone who has ever worked in high school athletics knows that this is a non-starter, that flexibility reigns supreme.

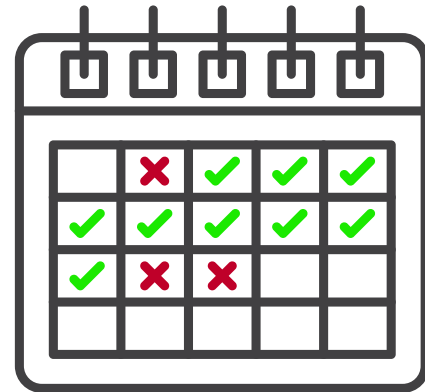
So, here at PLT4M we think about it in a slightly different way.

We've already discussed the ways in which we should develop athletes from the ground up, from the day they first walk through the doors as novice trainees through to the end of their high school careers. First we spend time developing movement competency, then we build basic work capacity, then finally we introduce intensity.

This would be our Macro-Level periodization plan (think months and years) - turning novices into developmental athletes into experienced trainees.

Once we begin dealing with experienced trainees, our consideration becomes scheduling. Is the athlete in-season or out of season? How many training sessions per week are we performing? How long is each session? What space and/or equipment is available to us?

Answering these questions allows us to craft our meso-level periodization plan (think weeks and months) - meeting our athletes (and their many schedules) where they are with different programming options.



You may, for example, offer a program for full off-season athletes which occurs 4x/week, includes “field” speed & conditioning work, and takes an hour. Or, perhaps you offer a developmental program 2x/week for 60-75 minutes, removing any field work, for athletes engaged in a club sport that practices and plays a few times a week. Or, a true in-season program for athletes involved in a highly competitive athletic schedule that requires just 2x/week for 30 minutes.

Having these templates will then allow us to dial in our micro-level plan - the movements, sets and reps prescribed each and every week.

Generally speaking our aim is to in some form or fashion attack the following qualities every single day and/or week: velocity, strength, durability, and capacity.

Let's take a look at these physical qualities we can chase, and what tools we can use in that pursuit.



POWER DEVELOPMENT

Every athlete wants to run faster, stop quicker, jump higher, throw farther - in essence, they want to be more “explosive”.

Power is the resulting combination of an athlete's ability to create force (Strength) and their maximum rate of force production (Velocity). To achieve that elusive result of athletic explosiveness, we must consistently attack both Strength and Velocity in our training.

Velocity

Velocity training can best be described as moving lighter loads with greater speed.

To improve velocity, coaches should integrate a number of complementary elements into their training programs.



Speed Training: Sprinting at maximum velocity is a one-of-kind stimulus. The combination of force, ground contact time, and coordination cannot be replicated. It is simultaneously the best possible mechanism for preventing (particularly hamstring) injury and the best possible mechanism for increasing movement speed in any activity. From acceleration/deceleration work, to top-speed sprints, to change of direction drills - athletes should move their own bodies at top speed 2/3x per week.

Plyometrics: In many ways related to speed training (and often overlapping), plyometrics involve quick, powerful movements that utilize the stretch-shortening cycle. Exercises like box jumps, depth jumps, and bounding drills improve reactive strength and enhance the athlete's ability to generate force rapidly. Athletes should jump at maximal intensity, and after complete rest, roughly 20-25x per week in total - in multiple varieties and planes of movement.





Ballistics: Ballistic exercises involve throwing or propelling objects explosively away from the body. Movements like medicine ball slams engage fast-twitch muscle fibers up and down the kinetic chain, expressing maximum power through the acceleration phase of the movement. Ballistics, like plyometrics, should be performed for minimal reps, at high intensity and complete rest if power development is the goal.

Olympic Lifts/Tempo Training/Loaded Plyos: It's imperative we train the entirety of the Force-Velocity curve. So, moving moderate loads at moderately high speeds is a must. For such, incorporate classic Olympic Weightlifting movements such as the clean, employ Tempo prescriptions within classic strength movements (like the Speed Bench) or use simple loaded plyometrics like the DB or TB jump. These complex, full-body exercises not only enhance power but also improve coordination, balance, and kinesthetic awareness, making them invaluable for high school athletes.



Coaches should aim to integrate these power-focused training methods into their programs, at the beginning - after warm up, but prior to any strength or capacity work. If performed consistently, with intent, and in conjunction with strength training, they effectively enhance the athlete's explosiveness, agility, and overall athletic performance.

THE #1 TRAINING PLATFORM FOR HIGH SCHOOLS

Ready to take your athletic program to the next level?

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Strength

Building foundational strength forms the cornerstone of athletic development for high school athletes. Strength training not only enhances muscle mass and power, but also contributes to injury prevention and overall durability on the field or court.

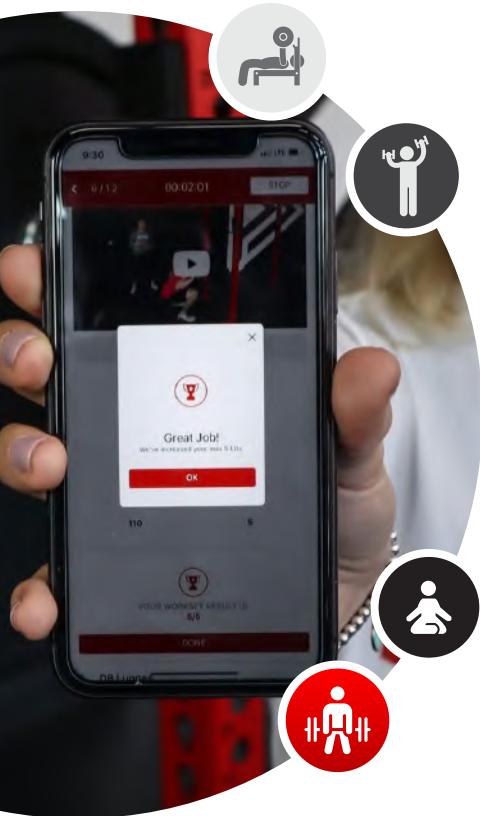
To optimize strength development, coaches should consider the following strategies:

1. Moving Heavy Loads Slowly

- a. The ability to generate (or resist) force is improved by challenging the body to move through complete ranges of motion against maximal loads - thus, at lower velocities (but as fast as possible).
 - I. Prioritize barbell compound exercises that target multiple muscle groups simultaneously. The “Power Lifts” for example, allow for the greatest possible loading across the largest possible compound movements.
 - II. Supplement primary strength work with the incorporation of accessory strength movements that target more specific muscle groups, limbs, or movements. Exercises like half-kneeling single arm dumbbell strict presses, or rear foot elevated split squats complement primary movements, promoting balanced muscle development and functional strength (as well as body armor, discussed below)

2. Volume & Intensity: When it comes to strength training, the first key to positive results lies in the appropriate prescription of volume and intensity, aka: “How heavy?” and “How many times?” within any given movement, or session. If the weight is too light (relative to an individual's ability), then no amount of reps performed will drive the adaptation we are looking for (and too many can actually be a detriment). Too heavy, and not enough volume can be accumulated for real progress. Finding that sweet spot relies on an understanding of relative intensity and tonnage.

3. Progressive Overload: When it comes to strength training, the first key to positive results lies in the appropriate prescription of volume and intensity, aka: “How heavy?” and “How many times?” within any given movement, or session. If the weight is too light (relative to an individual's ability), then no amount of reps performed will drive the adaptation we are looking for (and too many can actually be a detriment). Too heavy, and not enough volume can be accumulated for real progress. Finding that sweet spot relies on an understanding of relative intensity and tonnage.



BUILDING RESILIENCE

Arguably the most important ability for any athlete is AVAILABILITY.

To ensure athletes are on the field and operating at their highest potential in the 4th quarter, or in the final weeks of a long season, we must employ strategies that improve their longevity - aka their resistance to both fatigue and injury, in both the acute and chronic sense.

Capacity

Think: “conditioning.”

High school athletes must possess significant aerobic and anaerobic capacities to meet the demands of their sport effectively.

Aerobic capacity refers to the body's ability to sustain prolonged, low-to-moderate intensity exercise, while anaerobic capacity pertains to repeated short bursts of high-intensity activity.

While playing the sport itself may be the best conditioning of all, when it comes to off-season training and the preparation of an athlete, it's imperative we cover the entire range of capacity training.

There are numerous cross-over benefits to training both aerobic and anaerobic concurrently for every athlete. For example, an Offensive Lineman, despite never moving far on any given play, will over the course of the game travel upwards of 4 miles. Without Aerobic Training, their strength, stamina, and explosiveness will be reduced as the game goes on. What's more, proper aerobic capacity better supports strength and power training through more efficient recovery mechanisms.

To develop a comprehensive capacity base, coaches can implement the following strategies:



Aerobic Training:

Integrate training methods such as tempo runs, steady state cardio sessions, or low intensity circuit work. Hitting some version of aerobic work at least 2x/week will enhance cardiovascular health, improve oxygen utilization, speed up recovery times, and increase the athlete's capacity to perform prolonged physical activity.



Anaerobic Training:

Simulate the intense, high-intensity bursts characteristic of many sports with tools such as intervals and high-intensity circuit training. Aim to affix work-to-rest ratios that challenge the anaerobic energy systems, improving sustained power output, and recovery between explosive efforts.

By implementing a well-rounded approach to capacity development, coaches can enhance the athlete's overall endurance, speed, and performance longevity, enabling them to excel in high-intensity sports environments.

Durability

While improving performance is a worthy pursuit, the number one goal of any training program is to keep your athletes on the field and out of the training room. High school athletes must approach training with longevity in mind, and constantly work to promote long-term health and performance.

To cultivate durability, coaches should emphasize the following strategies:

BODY ARMOR

Hypertrophy training isn't just for bodybuilders. Greater lean muscle mass and strengthened connective tissues act as a protective barrier against injury, providing stability to joints and reducing the risk of sprains, strains, and tears. Moderate load, higher volume accessory work and true isolation exercises.

CORE & PRE-HAB EXERCISES

Take care of the little things! We must not ignore the smaller muscle groups in charge of keeping it all together. Core work, targeted shoulder/hip/ankle pre-hab and corrective exercises can shore up muscular imbalances, postural issues, and movement dysfunction, risk factors for future problems.

MOBILITY & FLEXIBILITY

Integrate mobility work, static & dynamic stretching, and specific movement drills into the training regimen. Enhancing joint mobility, flexibility, and range of motion can improve athletic performance and possibly reduce the likelihood of injury.

CONDITIONING

Being as fatigue is the number one predictor of injury, athletes who are well-trained in a capacity sense (explained above) will be better able to stave off problems that arise from acute or chronic overuse.

By prioritizing health via training this way, coaches can foster a culture of both performance and injury prevention, enabling high school athletes to thrive both on and off the field.

REST & RECOVERY

With health and performance in mind, we must now talk about the counterpart to active training. Rest and recovery are integral components of any effective training program. Adequate rest allows the body to repair damaged tissues, replenish energy stores, and adapt to the stressors imposed during training, facilitating optimal performance and long-term progress.

To optimize rest and recovery, coaches should emphasize the following strategies:

Sleep Hygiene:

Educate athletes on the importance of quality sleep for physical recovery and performance optimization. Encourage consistent sleep schedules, create a conducive sleep environment, and emphasize the value of restorative sleep habits for overall health and well-being.



**CHECK OUT OUR
SAMPLE OF SLEEP
LESSON PLANS**



Nutrition & Hydration:

Emphasize the role of proper nutrition and hydration in supporting recovery and performance. Encourage athletes to consume nutrient-dense meals rich in lean proteins, complex carbohydrates, and essential vitamins and minerals. Hydration is equally important; athletes should maintain adequate fluid intake to support cellular function, electrolyte balance, and optimal hydration status.

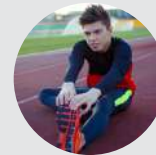


**GET 6 LESSONS
OF OUR NUTRITION
PROGRAM**



Active Recovery:

Incorporate cool-down protocols and full active recovery sessions into the training schedule. Light, low-impact movement like time on a stationary bike or in the pool, coupled with mobility & flexibility work can facilitate muscle repair, reduce inflammation, and enhance recovery between training sessions, optimizing performance and minimizing the risk of overtraining.



**TRY A SAMPLE
MOBILITY
WORKOUT!**



Periodic Deloading:

Listen to your athletes! There will be times when the rigors of an athletic season, or the challenge of off-season training results in a cumulative fatigue that is actually detrimental to progress. We can then implement targeted deloading phases into the training schedule to allow for systemic recovery and adaptation. Deloading involves reducing training volume or intensity, a general scaling back of activity and effort so as to focus on recovery. By strategically incorporating deload days, weeks, or cycles, coaches can ensure athletes remain fresh, minimize the risk of injury, and sustain long-term progress in their strength and conditioning endeavors.



Building an effective strength and conditioning program that works for all teams and athletes will take time.

It will not be easy, but it will absolutely be worthwhile.

Start first by crafting a big-picture PLAN, one that addresses the logistical challenges unique to high school strength training. By advocating for a developmental, holistic, non-sport specific approach, you can build more widespread support from all coaches. Working with Physical Education you can expand access to the weight room for athletes, as well as establish an early developmental program for kids in middle school. With this, you can lay the groundwork from which you can build your strength program.

The science behind designing training regiments is complex. It requires a nuanced understanding of various training methodologies and their specific applications. From power development to durability, each aspect plays a crucial role in optimizing athletic performance and minimizing the risk of injury.

Prioritizing rest, recovery, and proper nutrition further enhances the efficacy of the program, ensuring long-term success both on and off the field. Ultimately, a holistic approach that addresses all facets of athlete development is essential for maximizing potential and fostering a culture of excellence in high school athletics.

PLT4M was created specifically to help schools develop a holistic approach to strength and conditioning that services all athletes as well as students. If you are looking for help building, running, or enhancing your strength program, we'd love to talk!



THANK YOU FOR READING!

Want to learn more about PLT4M?

SCAN HERE!
↓



get.plt4m.com/demo

QUESTIONS?

Reach out to PLT4M!

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