The following items will be discussed at the meeting of the Standing Committee on Teaching, Learning and Student Supports to be held on Tuesday, April 26, 2011 at 6:00 p.m. in Room 410 at the Durkin Administration Building:

gb #7-73 - Mr. O'Connell (March 14, 2007)

To coordinate with churches and other agencies which offer after-school or summer educational programs, to assist them in their effort to provide instruction which harmonizes with the curriculum of the Worcester Public Schools.

gb #0-221 - Ms. Novick/Miss Biancheria/Mr. Foley/Mr. Monfredo/Mr. O'Connell (August 4, 2010)

Request that the Administration provide an update on use and implementation of the Gates Foundation grant.

gb #0-308 - Miss Biancheria/Mr. O'Connell/Mr. Monfredo (November 10, 2010)

Request that the Administration consider offering courses in computer game design and computer game development and programming.

gb #0-309 - Administration (November 10, 2010)

To consider discussion regarding foreign field trips.

gb #1-55 - Mr. O'Connell/Miss Biancheria/Mr. Foley/Mr. Monfredo (January 31, 2011)

To consider allowing high school students to fulfill the requirement for physical education, in whole or in part, through participating as team members in their school's interscholastic sports programs.

Committee Members
Brian A. O'Connell, Chairman
Dianna L. Biancheria, Vice-Chairman
John F. Monfredo

Administrative
Representative
Jeffrey J. Mulqueen, Ed.D.

OFFICE OF THE CLERK OF THE SCHOOL COMMITTEE WORCESTER PUBLIC SCHOOLS 20 IRVING STREET WORCESTER, MA 01609

AGENDA #4

The Standing Committee on TEACHING, LEARNING AND STUDENT SUPPORTS will hold a meeting:

on: Tuesday, April 26, 2011

at: 6:00 p.m.

in: Room 410, Durkin Administration Building

ORDER OF BUSINESS

- I. CALL TO ORDER
- II. ROLL CALL
- III. GENERAL BUSINESS

gb #1-194 - Mr. O'Connell (September 10, 2001)

To review the August 28, 2001 study of the University of Minnesota Center for Applied Research and Educational Improvement, regarding improvement in the attendance rates and grades of Minneapolis senior high school students since changing the school starting time from 7:15 a.m. to 8:40 a.m.

gb #4-94 - Mr. O'Connell (May 4, 2004)

To consider implementing "flex time" for teachers, and to look into use of flexible scheduling as a means of extending the instructional day for students.

gb #6-7 - Mr. Monfredo/Mr. O'Connell (December 6, 2005)

Request that the Administration consider developing a long range plan for preventing dropouts in the Worcester Public Schools in conjunction with educators, social agencies, business leaders and minority leaders.

gb #7-8 - Mr. O'Connell/Mr. Foley/Mr. Monfredo/Mayor Lukes (January 8, 2007)

To consider - on a <u>long-range</u> basis (i.e., not for 2007-08) - development of additional options for middle school age education in each quadrant, within limits imposed by space and funding, so that students will possibly have the option of attending a middle school (with grades 7 and 8, or 6, 7 and 8), or, if they so choose individually, one of the following: (1) a PreK-8 elementary school, (2) a grade 7-8, or 6, 7, 8 "satellite" program affiliated with a high school, or (3) a grade 7-12 or 6-12 middle/high school.

gb #7-22 - Mr. O'Brien (January 25, 2007)

Request that the Administration provide an update on the Pilot Program for Special Education students at the Worcester Technical High School and report on plans to expand this program for the 2007-08 academic year.

gb #7-31 - Mr. Monfredo/Mr. O'Connell (February 6, 2007)

To consider requiring that children reach their fifth birthday by August 31 in order to enroll in kindergarten in the Worcester Public Schools, and to review, in discussing this proposal:

- -the number of referrals for special education evaluation of students with late birthdays categorized by gender and by month of birth
- -the data compiled in a previous study of this topic as to children retained in an elementary school grade, categorized by their age on entering kindergarten
- -the budgetary and space impact of such a decision, and
- -any current guidelines or practices as to retention of children in kindergarten for maturity/academic progress reasons.

gb #7-65 - Mr. Monfredo/Mr. O'Connell (March 5, 2007)

To expand the opportunities available to students for experience in public speaking, especially at the secondary level, by means of debating teams, speech competitions such as that sponsored by the American Legion, and Model Congresses in each school and/or citywide.

gb #7-73 - Mr. O'Connell (March 14, 2007)

To coordinate with churches and other agencies which offer after-school or summer educational programs, to assist them in their effort to provide instruction which harmonizes with the curriculum of the Worcester Public Schools.

gb #7-90 - Mrs. Mullaney (April 3, 2007)

Request that the Administration provide a report as to the proposed changes to the middle school curriculum.

gb #7-229 - Mr. Monfredo/Mr. O'Connell (October 24, 2007)

To review the evaluation of the Safe Schools/Healthy Students Grant which was prepared by the Donahue Institute.

gb #8-34 - Mr. Monfredo/Mr. O'Connell/Ms. Hargrove/Mr. Bogigian/Mr. Foley (January 23, 2008)

To approve an amendment to the class rank policy by granting an additional weight of .25 to the following Goddard Scholars courses at South High Community School, as recommended by the administration (through item gb #6-195, Annex A, School Committee meeting of October 19, 2006), now to be effective with the Class of 2012:

Grade 9: English 1 GS, Geometry Honors GS, Biology Honors GS, World History 2 Honors GS.

Grade 10: English 2 GS, Advanced Algebra Honors GS, Chemistry Honors GS, US History 1 GS

gb #8-74 - Mayor Lukes (March13, 2008)

Request that the School Committee consider establishing not more than five goals as priorities for each Standing Committee for the current term.

gb #8-88 - Mr. O'Connell/Mr. Monfredo (March 26, 2008)

To review the Student Aspirations data assembled by Nadia Zahir and Devin Thayer of Worcester Polytechnic Institute, regarding the interest in science and engineering of Worcester public school students in grades 8 and 11, and presented at the April 11, 2008 New England Undergraduate Sociology Research Conference.

gb #8-156 - Mr. Monfredo/Mr. O'Connell (June 24, 2008)

To inquire as to interest of the Worcester Public Schools to participate with the Friends of the Worcester Public Library and the Worcester: the City that Reads Committee, in promoting literacy through a coupon program promoted by the Friends of the Worcester Library.

gb #8-157 - Mr. O'Connell/Mr. Monfredo (June 24, 2008)

To review the draft document: "Partner School Agreement between Clark University and the Worcester Public Schools", "to enhance curriculum, professional learning and student achievement" at the Claremont Academy.

gb #8-180 - Mr. O'Connell (July 28, 2008)

To consider establishing chapters, in interested schools, of the National Elementary Honor Society, a Society established by the National Association of Elementary School Principals and the National Association of Secondary School Principals.

gb #8-184 - Mr. Monfredo/Mr. O'Connell (July 28, 2008)

To consider implementation of voluntary body mass index (BMI) testing of students in the Worcester Pubic Schools.

gb #8-238 - Mr. O'Connell/Mr. Monfredo (October 23, 2008)

To consider the Making Waves Education Program, which provides an eight-year sequence of tutoring and teaching, as well as college support, for participating students.

gb #8-251 - Mr. O'Connell/Mr. Monfredo (November 24, 2008)

To consider reestablishment of a Classical High School, perhaps as a Horace Mann Charter School, as per the recommendations of the Classical High School Class of 1958 detailed in its October 11 letter to the School Committee.

gb #8-255 - Mr. Monfredo/Mr. Bogigian/Ms. Hargrove/Mr. O'Connell (December 4, 2008)

Request that the Administration consider ways of engaging parents of children in grades K-8 with math concepts such as math workshops and home math games.

gb #9-3 - Mr. Bogigian/Ms. Hargrove/Mr. Monfredo/Mr. O'Connell/Mayor Lukes (December 23, 2008)

Request that the Adult Education Night Life Program expand the number and scope of vocational and academic courses currently offered at the Worcester Technical High School.

ros #9-17 - Administration (December 8, 2009)

RACE TO THE TOP

gb #9-31 - Mr. Monfredo/Mr. O'Connell/Mr. Bogigian (February 10, 2009)

Request that the Administration review the testing data from the third grade MCAS test to determine whether any adjustments need to be made in the primary grade reading program.

gb #9-103 - Mrs. Mullaney (April 11, 2009)

To discuss implementation of the BMI (Body Mass Index) requirements imposed upon the schools by the State Department of Public Health.

gb #9-202 - Mr. Monfredo/Mr. O'Connell/Mr. Bogigian/Mr. Foley (September 24, 2009)

Request that the Administration contact schools to see if they are interested in working with the Regional Environmental Council in establishing community gardens.

ros #0-6 - Administration (February 11, 2010)

COORDINATED PROGRAM REVIEW REPORT

<u>ros #0-12 - Administration (May 12, 2010)</u>

SUPERINTENDENT'S STUDENT ADVISORY COUNCIL

gb #0-15 - Mr. O'Connell/Mr. Monfredo (January 5, 2010)

To review the study of Massachusetts middle schools completed by the Thomas B. Fordham Institute, regarding the impact of "detracking" on the academic performance of students.

gb #0-18 - Mr. O'Connell/Mr. Monfredo/Miss Biancheria (January 5, 2010)

To minimize intrusions and interruptions inflicted on classroom teachers and on the instructional time they spend with students, and to review, and address, any policies or practices which interfere with this goal.

gb #0-24 - Miss Biancheria/Mr. Monfredo/Mr. O'Connell (January 14, 2010)

Request that the Administration provide a report on how the increase of community funding for the AVID Program has provided increased services for students in the Worcester Public Schools and include a list of the schools with the number of students participating in the program.

gb #0-28 - Ms. Novick/Mr. Foley/Mr. Monfredo/Mr. O'Connell (January 21, 2010)

Request that the Administration provide the 2009 Advanced Placement Report for all high schools to include:

- the number of students that requested AP classes last year by class
- the number of students who then actually entered the class and
- the criteria for entering each particular AP class by school.

gb #0-31 - Mr. Monfredo/Miss Biancheria/Mr. Foley/Ms. Novick/Mr. O'Connell/Mayor O'Brien (January 22, 2010)

Request that the Administration provide a report regarding the findings from the DESE Program Quality Assurance group to include potential risk factors and legal and staff costs associated with:

- a summary of PQA and due process filings year to date and
- the number of mediation requests, Bureau of Special Education Appeals hearing requests, Office of Civil Rights Justice Department filings, Individual Education Plans accepted, rejected, partially rejected and include those that will be reviewed in the next three months

gb #0-52.1 - Administration/Mr. Monfredo/Mr. O'Connell/Miss Biancheria (February 26, 2010)

Request that the Administration review the policy on anti-bullying and provide a report on any proposed expansion of the program.

gb #0-54.1 - Administration/Mayor O'Brien/Mr. O'Connell (February 26, 2010)

Request that the Administration consider making Civics classes mandatory at the high school level.

gb #0-88 - Mr. Monfredo/Mr. O'Connell (March 18, 2010)

To review prospective FY11 Budget impacts on the small learning communities and related programs of the Worcester Public Schools.

gb #0-96 - Mr. O'Connell/Mr. Monfredo/Ms. Novick (March 25, 2010)

To consider appropriate revisions and updates to the current policy regarding the possession and use of cellular telephones and related communications devices in school or on school grounds.

gb #0-101.5 - Administration/Mr. O'Connell (July 14, 2010)

Response of the Administration to the request to provide a report regarding the cost to preserve the Horticultural Program at Worcester Technical High School.

gb #0-137 - Mr. O'Connell/Miss Biancheria (April 30, 2010)

To consider development of a student satisfaction survey.

gb #0-148 - Mr. O'Connell/Miss Biancheria/Mr. Foley/Mr. Monfredo/Ms. Novick (May 6, 2010)

To review the scope, variety and extent of programs and services available to students who are on the autism spectrum, with a view to formulating any appropriate modifications for the 2011 fiscal year.

gb #0-203 - Mr. Monfredo/Mr. O'Connell (June 30, 2010)

Request that the Administration provide a report highlighting the best teaching practices and wrap around services provided to students in the Worcester Public Schools.

gb #0-212 - Miss Biancheria/Mr. Monfredo/Mr. O'Connell (July 14, 2010)

Request that the Administration study the feasibility of offering student scholarships by selling ads in the 2011 <u>Celebration of Writers Booklet</u>, contingent on receipt of a Massachusetts Humanities Grant or other grants.

gb #0-217 - Mr. O'Connell/Miss Biancheria/Mr. Monfredo/Ms. Novick (July 22, 2010)

To recommend, to the Massachusetts Board of Elementary and Secondary Education, the instructional material in mathematics and in English/Language Arts which should be included in the Massachusetts Supplement to the Common Core State Standards (i.e., "Common Core Plus").

gb #0-218 - Mr. O'Connell/Miss Biancheria/Mr. Monfredo/Ms. Novick (July 22, 2010)

To develop a process for aligning the Worcester curriculum in mathematics and in English/Language Arts with the Common Core State Standards by the start of the 2012-13 academic year, as required by the July 21, 2010 vote of the Massachusetts Board of Elementary and Secondary Education.

gb #0-221 - Ms. Novick/Miss Biancheria/Mr. Foley/Mr. Monfredo/Mr. O'Connell (August 4, 2010)

Request that the Administration provide an update on use and implementation of the Gates Foundation grant.

gb #0-224 - Mr. O'Connell (August 4, 2010)

Request that the Administration formulate a process and timetable for regular review of the curriculum in each discipline and at all grade levels, which review shall include, as to mathematics, the topics raised by the October 15, 2009 and November 9, 2009 prior actions of the School Committee as to item gb #6-13.

gb #0-242 - Mr. Foley (August 25, 2010)

Request that the Administration review the district's ADA self-evaluation and transition plan.

gb #0-245 - Mr. Monfredo/Mr. O'Connell/Miss Biancheria (August 30, 2010)

Request that the Administration update the School Committee on:

- the names of schools that have trained the entire staff in an anti-bullying program
- the names of the programs in place
- plans for expansion of the programs to other schools and
- a description of the process for handling bullying incidents

gb #0-247 - Mr. Monfredo/Mr. O'Connell/Miss Biancheria (August 30, 2010)

Request that the Administration discuss establishing an Innovation School Ad Hoc Committee and emphasize the need for additional teacher input.

gb #0-253 - Miss Biancheria/Mr. Monfredo/Mr. O'Connell (September 8, 2010)

Request that the Administration provide a report indicating the percentage of students who receive free and reduced lunches per school.

gb #0-260 - Mr. Monfredo/Mr. O'Connell/Miss Biancheria/Mr. Foley (September 21, 2010)

Request that the Administration consider establishing a stakeholder committee, in conjunction with the Latino Community, to determine ways to improve the quality of education for Hispanic students.

gb #0-261.1 - Administration/Miss Biancheria/Mr. O'Connell/Mr. Monfredo (November 9, 2010)

Response of the Administration to the request to provide a total student enrollment report for 2010-11 by school, individual classrooms to include the number of staff in each of them.

gb #0-289 - Mr. Monfredo (October 24, 2010)

Request that the Administration update the School Committee on the extent of Service Learning in the Worcester Public Schools.

gb #0-294 - Miss Biancheria/Mr. Monfredo (October 27, 2010)

Request that the Administration develop a program that recognizes each school's accomplishments.

gb #0-308 - Miss Biancheria/Mr. O'Connell/Mr. Monfredo (Annex A (8 pages)) (November 10, 2010)

Request that the Administration consider offering courses in computer game design and computer game development and programming.

gb #0-309 - Administration (November 10, 2010)

Annex A (10 pages)

To consider discussion regarding foreign field trips.

gb #0-322 - Miss Biancheria/Mr. O'Connell (November 24, 2010)

Request that the Administration provide a report regarding the process for placing a student on an IEP at the elementary and secondary levels and the process and timeframe for access and review by all classroom staff associated with the student.

gb #0-323 - Miss Biancheria/Mr. O'Connell (November 24, 2010)

Request that the Administration provide a report using examples to illustrate typical student referral processes for behavioral/disciplinary issues and indicate timelines and actions taken to address one or multiple referrals.

gb #0-324 - Miss Biancheria/Mr. O'Connell (November 24, 2010)

Request that the Administration provide a report to include a brief description of the programs available to students, at the elementary and secondary levels, who have had multiple referrals regarding behavioral/disciplinary issues.

gb #0-332 - Miss Biancheria/Mr. Monfredo/Mr. O'Connell (December 7, 2010)

Request that the Administration update the School Committee on the individual school's accountability plans for the 2010 school year.

c&p #1-3 - Clerk (March 30, 2011)

To consider a communication from a citizen regarding a program entitled, "Challenge Day" which would address issues of bullying.

gb #1-31 - Administration (January 13, 2011)

To consider improvement to the alternative programs which would result in expansion of services to students.

gb #1-37 - Mayor O'Brien (January 19, 2011)

Request that the Administration discuss with local area educational directors the feasibility of regionalization of special education services for Worcester and surrounding communities.

gb #1-40 - Ms. Novick/Mr. Foley/Mr. Monfredo/Miss Biancheria (January 25, 2011)

Request that the Administration provide the 2010 Advanced Placement report for all high schools.

gb #1-55 - Mr. O'Connell/Miss Biancheria/Mr. Foley/Mr. Monfredo (January 31, 2011)

Annex A (1 page)

To consider allowing high school students to fulfill the requirement for physical education, in whole or in part, through participating as team members in their school's interscholastic sports programs.

gb #1-65 - Mr. O'Connell/Miss Biancheria/Mr. Foley/Ms. Novick/Mr. Monfredo/Mayor O'Brien (February 11, 2011)

To review the findings of the parent/guardian survey for children who receive special education services which are currently being compiled as part of the periodic audit of special education programs and services in the Worcester Public Schools.

gb #1-73 - Mr. Monfredo (February 24, 2011)

Request that the Administration review the National P.T.A. Parent Guide entitled "Parent Guide to Student Success" in response to the Common Core State Standards and see if there is merit in sharing the information with our schools and with our parents.

gb #1-76 - Miss Biancheria/Mr. Monfredo/Ms. Novick/Mr. O'Connell (March 4, 2011)

Request that the Administration provide a report on the number of documented homeless students, their assigned school and the current wraparound services offered to them.

gb #1-78 - Ms. Novick/Mr. O'Connell (March 4, 2011)

Request that the Administration provide a report on admissions' policies at vocational technical schools throughout the state.

gb #1-99 - Mr. O'Connell (March 23, 2011)

To review the curriculum entitled "Peacemaking: Building a Culture of Nonviolence," with a view to its possible use in appropriate Worcester public schools.

gb #1-101 - Administration (March 24, 2011)

To consider approval of the following courses:

- Show Choir Burncoat High School
- Advanced Placement Spanish Literature South High Community School
- Spanish II for the Health Professions North High School
- Computer Technology for the Health Professions North High School

motion (gb #2-202.1) - Administration/Mr. O'Connell (September 12, 2008)

Request that the Administration provide a status report regarding the progress of the Five-Year Library Plan September 2008.

motion (gb #0-268) - Ms. Novick (October 7, 2010)

To create requirements in the following area for any Innovation School proposed in Worcester, whether by the Administration or any other group:

Curriculum and student support

IV. ADJOURNMENT

Helen A. Friel, Ed.D. Clerk of the School Committee

ITEM: gb #7-73

STANDING COMMITTEE: **TEACHING, LEARNING AND STUDENT SUPPORTS**

DATE OF MEETING: Tuesday, April 26, 2011

ITEM: Mr. O'Connell (March 14, 2007)

To coordinate with churches and other agencies which offer after-school or summer educational programs, to assist them in their effort to provide instruction which harmonizes with the curriculum of the Worcester Public Schools.

PRIOR ACTION:

4-5-07 - Referred to the Standing Committee on Curriculum Development.

11-7-07 - Mr. O'Connell made the following motions:

Request that the Administration contact the Worcester Community Action Council to request its assistance to reach out to churches and other entities that offer after-school or summer educational programs to indicate the interest of the system in helping them to harmonize their program with the curriculum of the Worcester Public Schools.

Request that the Administration provide a progress report in March 2008 on the system's efforts with the Worcester Community Action Council.

On a voice vote, the motions were approved.

- 5-19-08 STANDING COMMITTEE ON CURRICULUM DEVELOPMENT Mr. O'Connell and Mr. Monfredo made the following motion: Request that the Administration approve the 4R Kids Program and provide a status report on its implementation at the next meeting of the Standing Committee on Curriculum Development. On a voice vote, the motion was approved.
- 6-5-08 SCHOOL COMMITTEE MEETING Held for the School Committee Meeting to be held on Thursday, June 19, 2008.
- 6-19-08 SCHOOL COMMITTEE MEETING The School Committee approved the action of the Standing Committee as stated.
- 3-30-09 It was moved and voice voted to hold the item pending development of plans for summer educational programs.

BACKUP:

The Administration will be prepared to speak to the item.

ITEM: gb #7-73 Page 2

PRIOR ACTION (continued)

- 11-9-09 Mr. O'Connell and Mr. Monfredo made the following motion: Request that the Administration make available to the following outside organizations on or about April 15, 2010 a description of the instructional priorities of the Worcester Public Schools and a list of suggested instructional strategies that are consistent with those priorities:
 - -Massachusetts Council of Churches
 - -Interfaith groups
 - -Diocese of Worcester
 - -Episcopal Diocese of Western Massachusetts
 - -St. John's Church
 - -St. Peter's Church and other appropriate entities

On a voice vote, the motion was approved.

11-30-10 - Mr. Monfredo made the following motion:

Request that the Administration establish an Ad Hoc Committee comprised of interfaith members, social service agencies and the United Way to discuss additional programs that could be sponsored by them to benefit the children in the Worcester Public Schools.

On a voice vote, the motion was approved.

Miss Biancheria made the following motions:

Request that the Administration forward in a Friday Letter a list of current partnerships in the Worcester Public Schools.

Request that the Administration forward a letter to the City Manager requesting that he consider delegating someone to serve on the Community Responsibility Task Group.

On a voice vote, the motions were approved.

Hold for review of the draft proposal from the Community Responsibility Task Group.

ITEM: gb #0-221

STANDING COMMITTEE: **TEACHING, LEARNING AND STUDENT SUPPORTS**

DATE OF MEETING: Tuesday, April 26, 2011

ITEM: Ms. Novick/Miss Biancheria/Mr. Foley/Mr. Monfredo/Mr. O'Connell (August 4, 2010)

Request that the Administration provide an update on use and implementation of the Gates Foundation grant.

PRIOR ACTION:

8-26-10 - Ms. Novick made the following motions:

Request that the report on the use and implementation of the Gates Foundation grant be referred to the Standing Committee on Teaching, Learning and Student Supports.

Request that the Administration provide a Report of the Superintendent on innovation schools.

On a voice vote, the motions were approved.

11-9-10 - Miss Biancheria made the following motion:

Request that the Administration provide an update in January 2011 regarding the involvement of Anna Maria College in the Literacy Design Collaborative, sponsored by the Bill and Melinda Gates Foundation (BMGF).

On a voice vote, the motion was approved.

12-14-10 - Miss Biancheria, Mr. Monfredo and Mr. O'Connell made the following motions:

Request that the Administration provide an assessment regarding vertical alignment across grade levels in March 2011 at the Standing Committee level with the Project Manager and members of the Cohort in attendance.

On a voice vote, the motion was approved.

BACKUP:

The Administration will be prepared to speak to the item.

ITEM: gb #0-308

STANDING COMMITTEE: TEACHING, LEARNING AND STUDENT SUPPORTS

DATE OF MEETING: Tuesday, April 26, 2011

ITEM: Miss Biancheria/Mr. O'Connell/Mr. Monfredo (November 10, 2010)

Request that the Administration consider offering courses in computer game design and computer game development and programming.

PRIOR ACTION:

11-18-10 - Referred to the Standing Committee on Teaching, Learning and Student Supports.

Miss Biancheria made the following motion:

Request that the Administration invite representatives from Becker College to the Standing Committee meeting when the item is discussed.

On a voice vote, the motion was approved.

4-4-11 - Miss Biancheria and Mr. Monfredo made the following motions: Request that the Administration consider offering dual enrollment courses at either Becker College or Worcester Polytechnic Institute for students in the Worcester Public Schools interested in computer game design and computer game development and programming. Request that the Administration continue to pursue opportunities in the video design industry and incorporate them in more than one site as possible early college high school options.

On a voice vote, the motions were approved.

HOLD.

BACKUP:

Virtual High School offers a Video Game Design and Development course for students in grades 8-12. The District is seeking to expand Virtual High School offerings to students across the system. This course may have potential for inclusion in a future district program.

Annex A (8 pages) contains a copy of the Administration's response to the item.

VHS Catalog 11-12



Course Title: Video Game Design and Development Using Game

Maker Section SI

Course Code: invgddsi
MA NCES Code: 10199

Discipline: Technology/Tech Ed. **Grade Level:** 08, 09, 10, 11, 12

Level: Standard

Offering: Repeated Semester (Fall: 25 Seats; Spring: 25 Seats;)

Prerequisites: This course is an introductory-level game design / development class that

does not require a background in computer programming. Students with an advanced level of **game** development or programming should understand

this prior to enrolling in the course.

Technical requirements:

· Windows PC (Windows 98 or later)

• Game Maker 8 software (lite (free) version)

· Paint software (non-specific – recommended: Microsoft Paint, GIMP (free)

· Audacity Sound Software (free)

Accredited by: Middle States Commission on Secondary Schools; Northwest Accreditation

Commission

Description:

Do you like to play **video game**s? How would you like to create your very own computer **game**s? Here's your chance! The **video game** creation process has something for everyone. Students will have the opportunity to work independently and in development teams where everyone will contribute based on their interest and expertise.

This course will provide an opportunity for students to immerse themselves in the world of **video game design** and development. Participants will learn key programming constructs using **Game** Maker software (a robust, yet easy to use **game** creation tool). In addition, students will learn to use graphic software to create original graphics and sound engineering software to create and edit sounds for your **game**s. By the end of the course, you will create a wide variety of **video game**s and celebrate the accomplishments by sharing your **game**s with your peers (and potentially the world).

MediaKit Contents:

^{*}This course may be appropriate for Gifted and Talented 8th grade students that meet all course prerequisites.*

Syllabus:

Week 1: Introduction to course and Exploration of Games by Genre

- Course Introduction
- LMS Orientation
- Icebreaker: Create an Animoto video with images and music to give the class a sense of 'Who you are'. You may include an image of yourself, but feel free to incorporate pictures that show your hobbies, interests, etc. Choose a song for the background music that helps further showcase your personality.
- Explore links to games by genre (Text based Adventure, Arcade Classics, Puzzle game, etc.)
- Weekly discussion: Share your thoughts about each game type that you explored and reflect upon the game type as a gamer and a potential game designer / developer. Comment on the posts of your peers.
- Search for and play game(s) covering a variety of genres.
- Share the games that you especially like through the class sharing depository.

Week 2: Introduction to GameMaker

- Download and Install GameMaker
- Explore GameMaker community website (http://www.yoyogames.com)
- Introduction to Game Maker Environment / GameMaker Basics
 - o Adding sprites
 - o Adding objects
 - o Naming convention
 - o Assign actions to objects
 - Keyboard movement
 - Automatic movement
 - Wrapping screen
 - O Create a room (level) and add objects to room
 - o Adding Sounds
 - o Adding a background image
 - o Mouse input
 - o Collision events
 - o Scoring
 - o Multiple levels
 - o Timers
 - o Step Events
- Programming concepts
 - o Conditional (If / Then) statements

- o Loops
- Weekly Reading / Discussion: What Makes a Good Game?
- Complete basic version of sample game (based on step by step tutorials)

Week 3: Creating a Game Design Document

- Weekly Reading / Discussion:
 - o Read and take notes on the article: Game Design: Secrets of the Sages
 - Creating Characters, Storyboarding, and Design Documents by Marc
 Saltzman or Creating a Great Design Document by Tzvi Freeman
 - O Discussion: Write 2 3 paragraphs (or an extensive bulletted list) describing the key elements of good **game design** based on the article you chose. Comment on the post of at least 2 of your peers. Engage in a worthwhile discussion by relating to the post and asking questions to further the discussion.
- Your first original Game and Design Document
 - O Create and submit **Design** Document based on original **game** idea that incorporates skills taught (Adventure **game** with multiple rooms).
 - O Begin development of game:
 - Sprites
 - Objects
 - Levels / Rooms
 - Background
 - Sound
 - Actions

Week 4: Adventure Game

- Complete first game (draft)
- Submit game to game submission blog for peer evaluation
- Weekly Discussion: Careers in Game Design and Development: Creating a game requires the collaboration of many people from many different disciplines (i.e. Graphic Artist, Sound Engineer, Programmer, Writer, Producer, Publisher, Marketing / Advertising, etc.). Research careers in the game development field and focus on the area that would appeal most to you. Provide insight regarding what the job would entail, the schooling involved, salary range, etc. Engage in discussion with your peers based on the different types of jobs in the field.

Week 5: Complete Adventure Game

• Weekly Discussion: Upcoming Game you are excited about: What game is coming

gb #0-308 Page 4

out that you are most excited to play? What is especially exciting about this game? Is there anything particularly innovative about this game? When is it due to be released?

- Complete final version based on peer evaluation
- Post final version of game for showcase in class blog / wiki
- Vote on Best Games

Week 6: Creating original graphics

- Introduction to the sprite editor
 - o Painting tools
 - O Working with image size
 - o Animating sprites
 - O Create original images including at least one animated image
- Introduction to other graphic tools
 - o MS Paint
 - o Gimp
- Weekly Discussion:
 - O Thoughts (including successes and frustrations) on the built in sprite editor as well as other graphic editors / software
 - O What are your feelings on the importance of graphics in video games? Provide an example of a game where you believe the graphics really enhance the game. What is it about the graphics that really stand out to you? Provide an example where the graphics detract from the game experience or were disappointing based on your expectation? What was it about the graphics that didn't quite cut it?

Week 7: Knowledge Quest: Platform Games (group or individual) OR Scrolling Shooter (Student Choice)

and governous and set of

Choice 1: Platform Game

- GameMaker skills:
 - o Gravity
 - o Vertical Speed
 - o Collision checking
- Weekly discussion Write and submit a design document for a platform game based on design document template. Comment on the design documents of your peers.
- Begin creating original graphics for game
- Begin game development

Choice 2: Scrolling Shooter

- GameMaker skills:
 - o Scrolling background
 - o Automatic spawning of characters
 - o Room / level size
 - o Instance Count
- Weekly Activity / Discussion Write and submit a design document for the scrolling shooter game comment on design documents of peers
- Begin work on Scrolling Shooter

Week 8: Creating Sound / Knowledge Quest continued

- Audacity creating and editing sound
- Create original (or modified) sounds for game
- Continue work on Platform or Scrolling Shooter Game
- Post a draft of your platform or scrolling shooter to the class **game** blog for peer feedback. Post feedback for at least one of your peers.
- Weekly Discussion: Do a little research on sound in video games and share what you find regarding what is involved in creating sound for blockbuster game titles. How important do you believe sound is in a video game? Do you have a sounds system (i.e. surround sound) specifically for your gaming console or computer? If not, do you feel it would be worth investing in?

Week 9: Complete platform or Scrolling Shooter game

- Complete platform game
- Share platform and Shooter games / Vote on best games of each genre
- Weekly Discussion: Violence in Video Games Read the provided articles and reflect on the idea of how violence in video games affects kids. Post your thoughts and engage in a debate with your peers over whether or not you believe that violence in video games leads to violence? Your opinion is worthwhile and can be presented without insulting the opinions of others. Use ideas from these articles (or other articles) to support your side in the debate.

Week 10: Classic Arcade Games

- Review Classic Arcade genre play sample games of Arcade Classics
- Discussion: Choose a game and reflect on what would be required to 'reverse engineer' the game (i.e. deconstruct and recreate the game). Include potential challenges, general framework of game design, etc.

• Begin work on recreation of an Arcade Classic

Week 11: Classic Arcade Games continued

- Students may (optional) submit a draft of the game early in the week (for peer or teacher feedback and support)
- Complete and submit game
- Vote on best arcade classics
- Class Discussion: What does it take to get a game from concept to production? Research the steps involved and share them (with a description) in the class wiki. This will be completed as a group project. Each group will develop their ideas in the forum and create a group posting to a wiki to share your results.

Week 12: Final Project Preparation

- Discussion: Submit the idea (design document) for your final game. Pose the concept as a proposal to a Game Publishing company. Consider that you are pitching your idea to them. Include a rationale for the game (why you believe it will be a hit), idea of what will be involved in developing the game, how many levels it will have, etc.
- Begin work on Final Project

Week 13: Final Project

- Work on development of final project
 - o Original graphics (including animation)
 - o Original sound
 - o Multiple levels
- Class discussion: Search for additional resources to learn required skills in **Game**Maker (or other tools). Rather than sharing them in the forum, please add them to the **Game Design** diigo (social bookmarking) group. Make sure to include a description and why you see this as useful.
- Post first draft of final game to class blog for peer evaluation / feedback

Week 14: Final Project

- Revise game based on feedback
- Post second draft of game for additional feedback
- Class Discussion: Research other Game Design Tools and share the tools that you found. What types of game(s) do you think you would be able to create with this

particular tool? Does the tool seem too simplistic? Overly sophisticated? What level of developer / programmer is it **designed** for? Share your thoughts and engage in discussion with your peers.

Week 15: Complete Final Project / Course Wrapup

- Post final version of game early in week
- Complete and post final game / vote on best games

Course Wrapup

- Celebrate accomplishments play peer final games and vote on best games
- Discussion:
 - O Reflect on class experience and personal future in game design
 - o Final Thoughts and Good Bye Forum
- Course Survey
- VHS Survey

Learning Objectives:

By the conclusion of this course, students will be able to:

- 1. Create a variety of games based on samples provided
- 2. Demonstrate an understanding of GameMaker terms
- · Sprite
- · Object
- · Event
- · Action
- · Path
- . Alarm
- 3. Demonstrate an understanding of general programming constructs
- · Conditional Statements
- · Loops
- Variables
- 4. Incorporate existing resources
- · Graphics (sprites)
- · Sound
- Backgrounds
- 5. Create original resources
- Graphics
- · Sound
- 6. Create animated sprites
- 7. Incorporate user interaction:
- · Keyboard
- · Mouse input
- 8. Incorporate automated movement of computer objects:
- · Movement
- · Paths

- 9. Incorporate objects in your **game**s and define a wide range of behaviors (events and actions)
- 10. Develop multiple levels for games
- 11. Explore a choice of intermediate concepts including:
- Gravity
- Scrolling scenarios
- Projectiles
- 12. Incorporate scoring and winning / losing scenarios
- 13. Create original games including story line, characters, rules, levels, scoring

Academic Content:

Kinds of Assignments:

- · Video instruction (screencasts), text based tutorials
- · Web based readings
- · Weekly discussions
- · Game Design (design document creation)
- · Game Development
- · Original graphic and animation creation
- · Sound creation and engineering (effects)
- · Peer evaluation and feedback
- · Individual and Group Project work
- · Tech Talk Discussion Area by topic / tool

Projects Required:

* Weekly assignments as well as development of a final project web page centered on an Essential Question selected by the student and a final partner project.

This catalog description was last modified on 04/19/2011

<u>Virtual High School</u>

4 Clock Tower Place, Suite 510 Maynard, MA 01754

Copyright © 1996-2011. All rights reserved.

ph: 978-897-1900 fax: 978-897-9839

ITEM: gb #0-309

STANDING COMMITTEE: TEACHING, LEARNING AND STUDENT SUPPORTS

DATE OF MEETING: Tuesday, April 26, 2011

ITEM: Administration (November 10, 2010)

To consider discussion regarding foreign field trips.

PRIOR ACTION:

11-18-10 - Mayor O'Brien made the following motion:

Request that the Administration provide the backup from the previous item on foreign field trips.

Request that the Administration provide a copy of the criteria for domestic travel.

On a voice vote, the motions were approved.

Mr. Monfredo made the following motion:

Request that the item be referred to the Standing Committee on Teaching, Learning and Student Supports.

On a voice vote, the motion was approved.

Ms. Novick made the following motion:

Request that the Administration provide the field trip criteria as backup when the item is discussed.

On a voice vote, the motion was approved.

It was moved and voice voted to forward in a Friday Letter the legal opinion, the current criteria and status of field trips.

BACKUP:

Annex A (10 pages) contains a copy of information relative to a draft Foreign Field Trip Policy, which is subject to approval by the Law Department.

PRIOR ACTION (continued)

11-30-10 - STANDING COMMITTEE ON TEACHING, LEARNING AND STUDENT SUPPORTS

Mr. O'Connell, Miss Biancheria and Mr. Monfredo made the following motion:

Request that the Administration develop a draft Foreign and Domestic Field Trip Policy. This policy shall permit both foreign and domestic travel subject to approval by the Administration and subject to reasonable guidelines which are protective of students and which minimize liability concerns to the degree feasible.

On a voice vote, the motion was approved.

It was moved and voice voted to hold the item.

12-2-10 - SCHOOL COMMITTEE MEEETING - The School Committee approved the action of the Standing Committee as amended.

Mr. O'Connell, Miss Biancheria and Mr. Monfredo made the following motion:

Request that the Administration develop a draft Foreign and Domestic Field Trip Policy. This policy shall permit both foreign and domestic travel subject to approval by the Administration and subject to reasonable guidelines which are protective of students and which minimize liability concerns to the degree feasible.

On a voice vote, the motion was approved.

Mrs. Mullaney made the following motion:

Request that this item not be discussed at the Standing Committee level unless a member of the City Law Department is present.

On a voice vote, the motion was approved.

Worcester Public Schools POLICY - FOREIGN TRAVEL - DRAFT

I. Policy Statement

The School Committee of Worcester recognizes that foreign travel trips provide unique opportunities for students to broaden their knowledge of other cultures through a firsthand experience. To the extent that they support the mission and goals of the school system and provide for the safety and welfare of participants, the School Committee supports school system sponsorship of and student participation in foreign travel trips.

II. Purpose

The purpose of this policy is to establish criteria for school system sponsorship of and student participation in foreign travel trips.

III. Definitions

- A. Approved trips Those trips reviewed and recommended by the School Principal and approved by the Superintendent.
- B. Foreign travel A trip which includes any travel outside the United States.
- C. Parent Any one of the following, recognized as the adult(s) legally responsible for the student:
 - 1. Biological parent A natural parent whose parental rights have not been terminated.
 - 2. Adoptive parent A person who has legally adopted the student and whose parental rights have not been terminated.
 - 3. Custodian A person or an agency appointed by the court as the legal custodian of the student and granted parental rights and privileges.
 - Guardian A person who has been placed by the court in charge of the affairs of the student and granted parental rights and privileges.
 - 5. Caregiver An adult resident of Howard County who exercises care, custody or control over the student, but who is neither the biological parent nor legal guardian.
 - 6. Foster parent An adult approved to care for a child who has been placed in their home by a State agency or a licensed child placement.
- E. Trip leader A Worcester Public Schools (WPS) tenured teacher who has been approved to lead a proposed foreign travel trip and has previously traveled with students on a foreign travel trip.

IV. Standards

- A. A foreign travel trip must be a natural outgrowth of the curriculum or cocurriculum. Foreign travel trips may be used to serve as introductory devices to stimulate or motivate interest, provide direct sources of information and opportunities to broaden understanding through firsthand experiences, extend and enrich programs, and/or serve as culminating activities.
- B. Participation in foreign travel trips is limited to WPS students in grades 9-12.
- C. All foreign travel trips in which high school students enrolled in the WPS will participate must be recommended for approval by the School Principal and approved by the Superintendent. The recommendation and approval

- process must include review by School Principal for consideration of the curriculum / co-curriculum contracting, safety, insurance, and security.
- D. Foreign travel trips shall be scheduled so that students and teachers do not miss days in the approved school calendar.
- F. A student may not participate in a foreign travel trip unless all required forms have been submitted.
- G. Foreign travel trips are to be conducted in accordance with rules, regulations, and policies related to health, safety, and conduct of students and employees, including a Criminal Offender Record Check (CORI).
- H. Students and employees involved in foreign travel trips must have signed approval from their School Principal.
- I. There must be at least one leader for every 12 students.
- J. Foreign travel trips are voluntary and grades will not be assigned.
- K. All conditions of travel, including the following, will be communicated in writing to parents and participants:
 - 1. Expectations for conduct consistent with all WPS policies, local, state and federal laws
 - 2. Safety and security provisions
 - 3. Logistics and specific itineraries
 - 4. Health and medical provisions
 - 5. Worcester Public Schools reserves the right to cancel a trip at any time in order to ensure the safety of both students and staff members and that if such a cancellation occurs, the school system is not responsible for any financial loss incurred by the parent.

V. Compliance

- A. The Chief Academic Officer is responsible for reviewing applications for foreign travel trips and ensuring that those approved comply with the provisions of this policy.
- B. The School Principal is responsible for reviewing all proposed foreign travel trips and recommends approval to the Superintendent of only those foreign travel trips which comply with WPS policies and procedures.
- C. Trip leaders are responsible for fulfilling all duties before, during, and following trips as defined by the School Principal.
- D. Employees are responsible for ensuring that foreign travel trips are conducted in accordance with the provisions of this and all WPS policies.
- E. Approval for Foreign Travel by the Superintendent must be secured prior to any fundraising.

VI. Procedures

- A. The Superintendent is authorized to develop procedures for the implementation of this policy
- B. A description of the proposed foreign travel must be provided for evaluation by the School Principal and will address the following criteria. The School Principal shall ensure the proposed travel trips are evaluated according to the district's Foreign Travel Trip Evaluation, which includes:
 - 1. Relationship to approved WPS curriculum
 - 2. Trip leader
 - 3. Itinerary
 - 4. Sponsoring organization

- 5. Cost and additional fees
- 6. Bonding, insurance and escrow accountability
- 7. Transportation both in air and on ground
- 8. Student/trip leader ratio
- 9. Lodging
- 10. Student Experience
- C. In addition, trip descriptions / packages should clearly state to what extent the following are included:
 - 1. Meals
 - 2. Inter-country travel
 - 3. Airport taxes
 - 4. Customs
 - 5. Passports and visas
 - 6. Optional excursions
 - 7. Admissions
 - 8. Incidentals
 - 9. Contact information and communication plan. Group leaders shall maintain access to all essential documents to implement the communication plan, including copies of passports, U.S. Embassy contact information, and relevant parental permissions.
- D. Trip leaders will ensure plans are in place to address emergencies, illnesses and/or accidents. Trip leaders will:
 - 1. Inform school-based health services employees of dates of trip and students attending as soon as known and at least two weeks prior to scheduled trip.
 - 2. Ensure that students with specific health needs or physical limitations have equipment/medicine they may need and that those requiring medication have written medication orders. Arrange for storage and administration of medication during the trip unless a student's written medication order specifies that he or she may self-administer. A parent of these students may be invited to accompany them on the field trip.
- E. Conduct orientation meetings for chaperones and participants to ensure awareness of responsibilities, liabilities, and intended outcomes.
- E. Trip leaders shall return all completed forms (Foreign Travel Proposal Form, Health Notification Form, and Orientation Form) to the School Principal at least two (2) months prior to departure.

FOREIGN TRAVEL PERMISSION

Participation in the following school activity is optional. The Worcester Public Schools cannot assume responsibility or liability for travel.

Being aware of the above condition, I grant permission for my

(son) (daughter)	
Last Name	First Name
To attend (include a brief description and pu	rpose)
Departure	Return
Date:	
Additional Information: (relevant website or o	contact information)
Date	Signature of Parent/Guardian

Cancellation Policy: The Superintendent reserves the right to cancel an approved field trip up until the time of departure. In the event of a cancellation, the school system is not responsible for any expenses incurred.

Adapted from Worcester Public Schools Travel Permission Form - Revised 9/30/04

FOREIGN TRAVEL PROPOSAL

A. General description of destination for foreign travel.

- B. Attach a description of the proposed foreign travel to include the following criteria.
- 1. Relationship to approved WPS curriculum
- 2. Trip leader
- 3. Itinerary
- 4. Sponsoring organization
- 5. Cost and additional fees
- 6. Bonding, insurance and escrow accountability
- 7. Transportation both in air and on ground
- 8. Student/trip leader ratio (not to exceed 1:12)
- 9. Lodging
- 10. Student Experience

C. Clearly state to what extent the following are included in the travel package / plan:
1. Meals
2. Inter-country travel
3. Airport taxes
4. Customs
5. Passports and visas
6. Optional excursions
7. Admissions
8. Incidentals
9. Contact information
D. Develop and attach a communication plan. Group leaders shall maintain access to all essential documents to implement the communication plan, including copies of passports, U.S. Embassy contact information, an relevant parental permissions.
I certify that the information presented in this proposal is accurate and addresses all criteria listed above.
Date:

Submit this information to the School Principal for evaluation.

FOREIGN TRAVEL PROPOSAL

PRINCIPAL EVALUATION FORM

The School Principal is responsible for evaluating the Foreign Travel Proposal for each of the following criteria.

- 1. Relationship to approved WPS curriculum
- 2. Trip leader
- 3. Itinerary
- 4. Sponsoring organization
- 5. Cost and additional fees
- 6. Bonding, insurance and escrow accountability
- 7. Transportation both in air and on ground
- 8. Student/trip leader ratio (not to exceed 1:12)
- 9. Lodging
- 10. Student Experience
- C. In addition, trip descriptions / packages should clearly state to what extent the following are included:
 - 1. Meals
 - 2. Inter-country travel
 - 3. Airport taxes
 - 4. Customs
 - 5. Passports and visas
 - 6. Optional excursions
 - 7. Admissions
 - 8. Incidentals
 - 9. Contact information and communication plan. Group leaders shall maintain access to all essential documents to implement the communication plan, including copies of passports, U.S. Embassy contact information, an relevant parental permissions.

I certify that the Foreign Field Trip Proposal	for (Trip Title)
as submitted by (Trip Leader)	on (date)
meets all criteria listed above.	
	Date:
School Principal	

Forward a copy of this form, the signed Health Notification, and the Orientation Form to the Chief Academic Officer

FOREIGN TRAVEL

School Health Notification

After the Trip Lea Principal, the Trip	ader receives approval of the Foreign Travel Proposal by the School Leader must submit to the school nurse:
Foreign Travel D	estination:
1.	Dates of trip
Departure Date:_	Return Date:
2.	Names and identification numbers of students attending as soon as known and at least two weeks prior to scheduled trip.
The Trip Leader i	s responsible for working with the School Nurse to ensure that:
equipmen written me 2) storage a written me parent of trip.	with specific health needs or physical limitations have t/medicine they may need and that those requiring medication have edication orders. and administration of medication during the trip unless a student's edication order specifies that he or she may self-administer. A these students may be invited to accompany them on the field soft the School Health Center Notification have been fulfilled to support
the health needs	of students participating in the Foreign Travel listed above.
So	hool Nurse
Tri	p Leader
90	hool Principal
00	neer - morpul

Attach all relevant information to this form.

FOREIGN TRAVEL ORIENTATION FORM

Foreign Travel Destination:

partio			tings from chaperones and lities, liabilities, processes and
Agen			ies of all Orientation Meeting aducted for chaperones and
	Foreign Travel Orient Idas and Meeting Mir		e used as a cover for attached
_		nutes must address re utcomes relevant to t	esponsibilities, liabilities, he Foreign Travel.
	Meeting Date	Agenda Attached Yes / No	Meeting Minutes Attached Yes / No
the re		, processes, and intend	Form have been fulfilled to address ded outcomes of chaperones and
	Trip Leader		Date:
School Principal		pal	Date:

FOREIGN TRAVEL PROPOSAL

CHIEF ACADEMIC OFFICER EVALUATION FORM

School Name:	
Foreign Travel Destination:	
Trip Leader:	
Date of Departure:	Date of Return:
Items received for evaluation from School Principa	ıl
 [] Foreign Travel Proposal [] Principal Evaluation Form [] School Health Notification Form [] Foreign Travel Orientation Form 	
I certify that the documentation listed above meets Schools Foreign Travel Policy.	the standard for the Worcester Public
[] Recommend for Approval	[] Do Not Recommend for Approval
Comments:	
Chief Academic Officer	Date:
Attach all information to this cover sheet and forw	vard to the Superintendent of Schools
[] Foreign Travel Approved	[] Foreign Travel Not Approved
Superintendent of Schools	Date:

ITEM: gb #1-55

STANDING COMMITTEE: TEACHING, LEARNING AND STUDENT SUPPORTS

DATE OF MEETING: Tuesday, April 26, 2011

ITEM: Mr. O'Connell/Miss Biancheria/Mr. Foley/Mr. Monfredo (January 31, 2011)

To consider allowing high school students to fulfill the requirement for physical education, in whole or in part, through participating as team members in their school's interscholastic sports programs.

PRIOR ACTION:

2-17-11 - Referred to the Standing Committee on Teaching, Learning and Student Supports.

Mr. O'Connell made the following motion:

Request that the Administration notify all School Committee members when the item is discussed at the Standing Committee on Teaching, Learning and Student Supports.

On a voice vote, the motion was approved.

BACKUP:

Annex A (1 page) contains a copy of the Administration's response to the item.

Colleen O'Brien, Director of Health, Physical Education and Athletics, posed questions to the State Department of Elementary and Secondary Education regarding local authority to determine how a student may meet the physical education requirement. She received a response earlier this month.

- The Department of Elementary and Secondary Education requires physical education to be taught in the public school as a required subject in all grades for all students.
- Local school officials have authority to determine the hours of instruction for physical education at each grade level, as they do for all other subjects of instruction.
- Local school officials also have authority to determine whether and how a student, particularly at the high school level, may meet the physical education requirement through organized program of instructional physical activity such as participation in interscholastic athletics or in private skating lessons. This is similar to the authority of school officials to permit a student to fulfill the requirements of an academic course by taking a course elsewhere that they deem to be equivalent.
- Public secondary schools must provide 990 hors of structured learning time for students.
 Both physical education and health education classes are considered to be part of the 990 hours, whereas students' practice time in a sport, whether it is school sponsored, intramural, extracurricular or in private lessons, is not considered structured learning time under the Student Learning Time regulations.

1 Marshart - - 1