




Factors Influencing Physical Activity Levels of Adolescents

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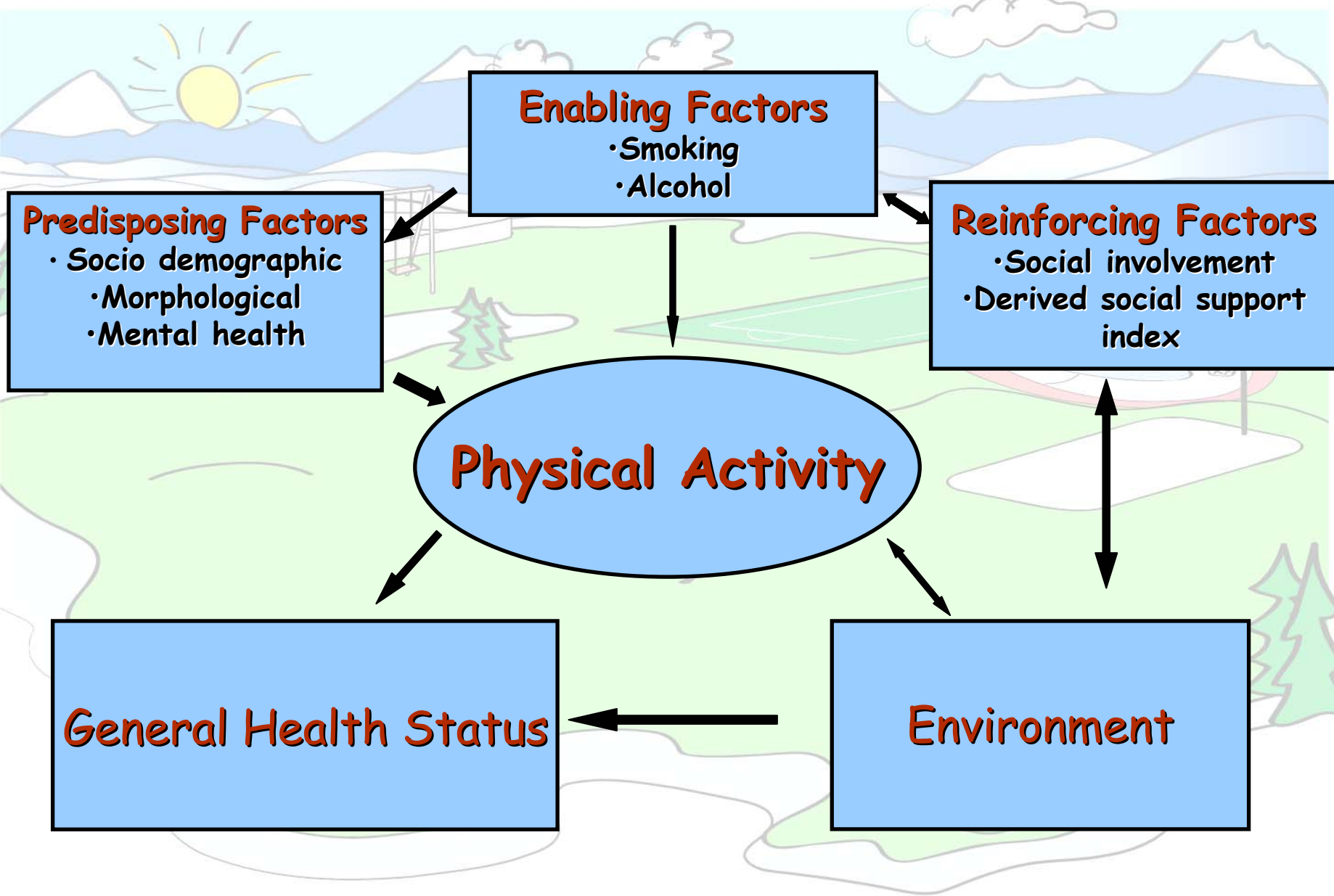


Analysis of NPHS Data

Data collected from female (n=6195) & male (n=5925) Canadians aged 12-24 years

This represents 5.1 million Canadians

The data consisted of cross-sectional information regarding socio-demographic data, health determinants, health status & health behaviors including those related to physical activity



Enabling Factors

- Smoking
- Alcohol

Predisposing Factors

- Socio demographic
- Morphological
- Mental health

Reinforcing Factors

- Social involvement
- Derived social support index

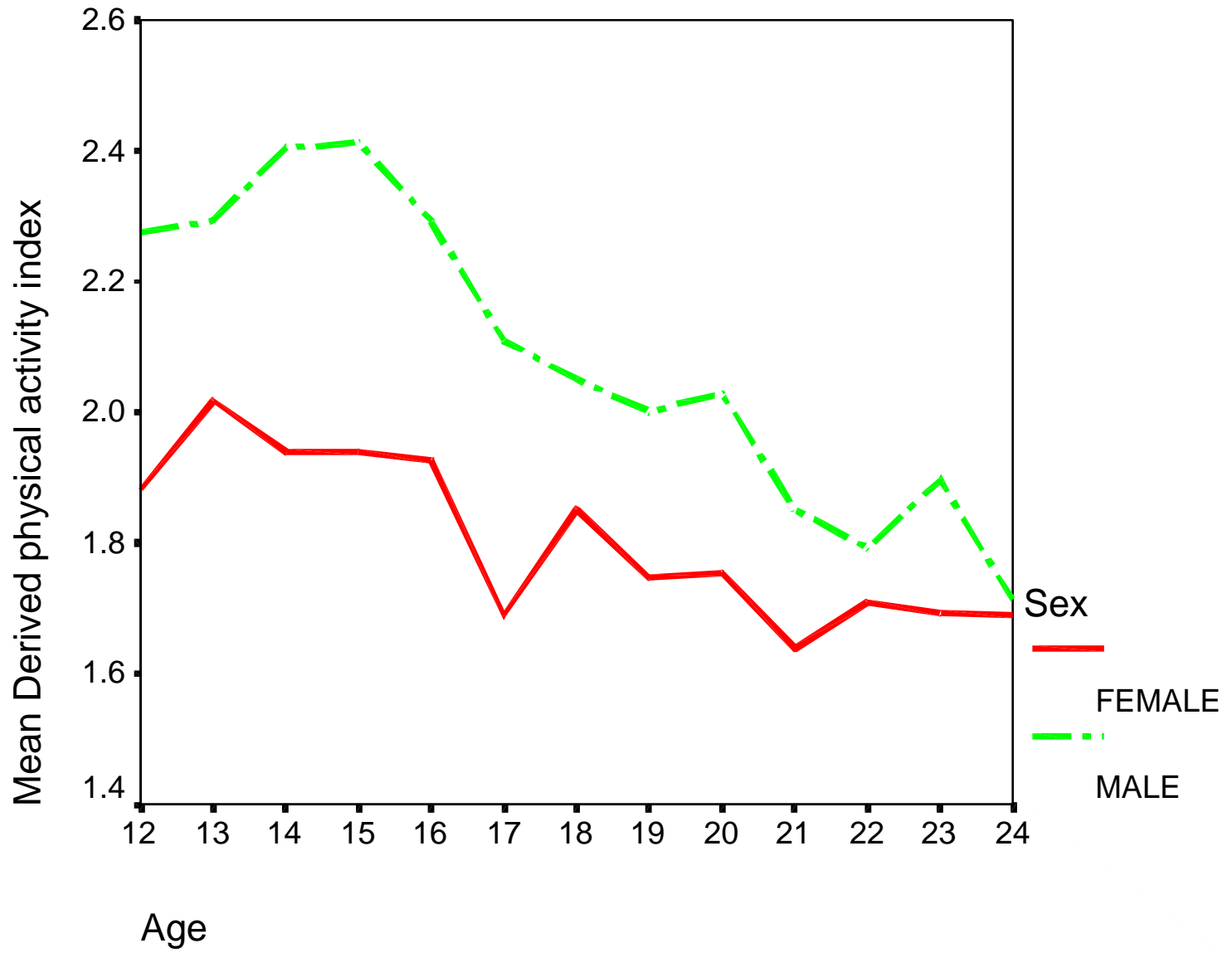
Physical Activity

General Health Status

Environment

Results

- Physical activity increased with household income, school attendance, social involvement/support & alcohol consumption
- Physical activity decreased with concern about weight & with increased smoking
- Males were more physically active than females @ all ages
 - 54% vs. 33% @ ages 12-14
 - 32% vs. 22% @ ages 20-24



Conclusions

- Our analysis support the premise that encouraging Canadian youth to increase their physical activity cannot be accomplished by simply exhorting or educating them to exercise more
- Policy & environmental factors influence individuals' efforts to be active
 - For overweight/obese children, a relatively high number of hours in physical education class was predictive of becoming physically active
 - Overweight/obese children who were frequent TV viewers had low odds of adopting & maintaining an active lifestyle
- The importance of intersectoral & environmental & policy approaches to promoting physical activity has been recently acknowledged & will be an important focus of future research which will broaden our understanding of what motivates, enables & reinforces physical activity

Individual

Knowledge/skills
Experience/SES



Community

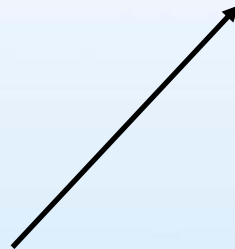
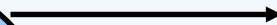
Social support/norms
resources, facilities



Environmental/Structural

Environmental enablers & barriers,
health public policy, diabetes, built
environment

**Increased rate of
Physical Activity
at the population level**



Reduced rates of
obesity, CVD, cancer,
osteoporosis
depression etc.

Analysis of Victoria Area Questionnaire Data

15 to 17 year old students ($N = 327$), asked to respond to the questions in relation to their exercise behavior experience outside of mandatory physical education classes

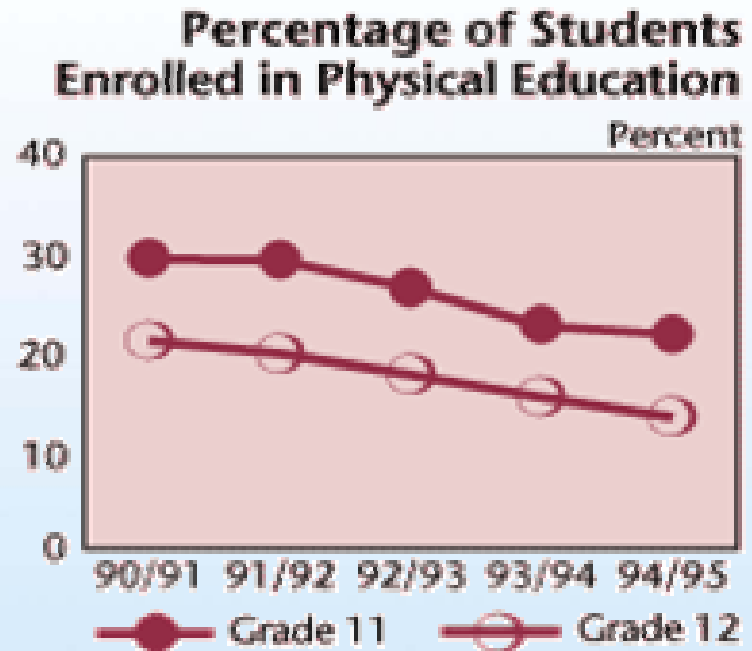
Most (67%) reported engaging in exercise beyond PE

Distinguishing between active & inactive students were perceptions of

- Self-efficacy
- Benefits
- Costs/barriers
 - a lack of time & of available/convenient facilities
 - sport-based orientation of available activities
 - lack of support from parents, peers & teachers whose expectations concerning students' performance in academics exceed those in physical activity

Females & Physical Activity: To PE or not to PE?

- Avg. enrollment in grade 11/12 PE
 - 20-25% males
 - 10% females



Note: Includes public schools only.
Excludes locally developed courses.
Enrollments reported as of September 30th in a given year.

Source: Evaluation and Reporting Branch

- Focus groups with female students representing 10 schools in CRD
 - In grade 10 deciding to take PE or not
 - In grade 11 & not enrolled in PE
 - In grade 11 & enrolled in PE
- Focus groups with teachers

Results - 8 Themes

PE 8-10 needs to change

"Grade 8-10 PE was awful - repetitive, skill-oriented, boring & not much fun, so why would you want to take it as an option?" (grade 11 not in PE)

Choice & Control

"At the beginning of the semester, we do a survey of what we want to do in PE & rate the sports & stuff, so the class is based on what we want to do... it's a wide variety...that's what I like." (grade 11 in PE)

Participation over Skill

"Students should be evaluated on effort & on participation, & teachers should not pay more attention to the skills & popular students." (grade 11 not in PE)

Fun & Enjoyment

"PE brings people together, because you lose everything - your makeup & clothes & it's just you & others (grade 10)

"PE gives us a challenge. The guys in our class think we're weak & can't do anything but we prove them wrong." (grade 11 in PE)

Accessibility

"PE isn't very accessible . . . for our school of 700 people there are 3 PE classes. If there's a conflict in your timetable, you're screwed." (grade 11 not in PE)

PE Values as an Important Pursuit

"More value needs to be given to PE - why take it if everyone thinks it's a joke?" (grade 10)

"PE is not that good for your future unless you plan on being a PE teacher." (grade 11 not in PE)

More Academic Content in PE

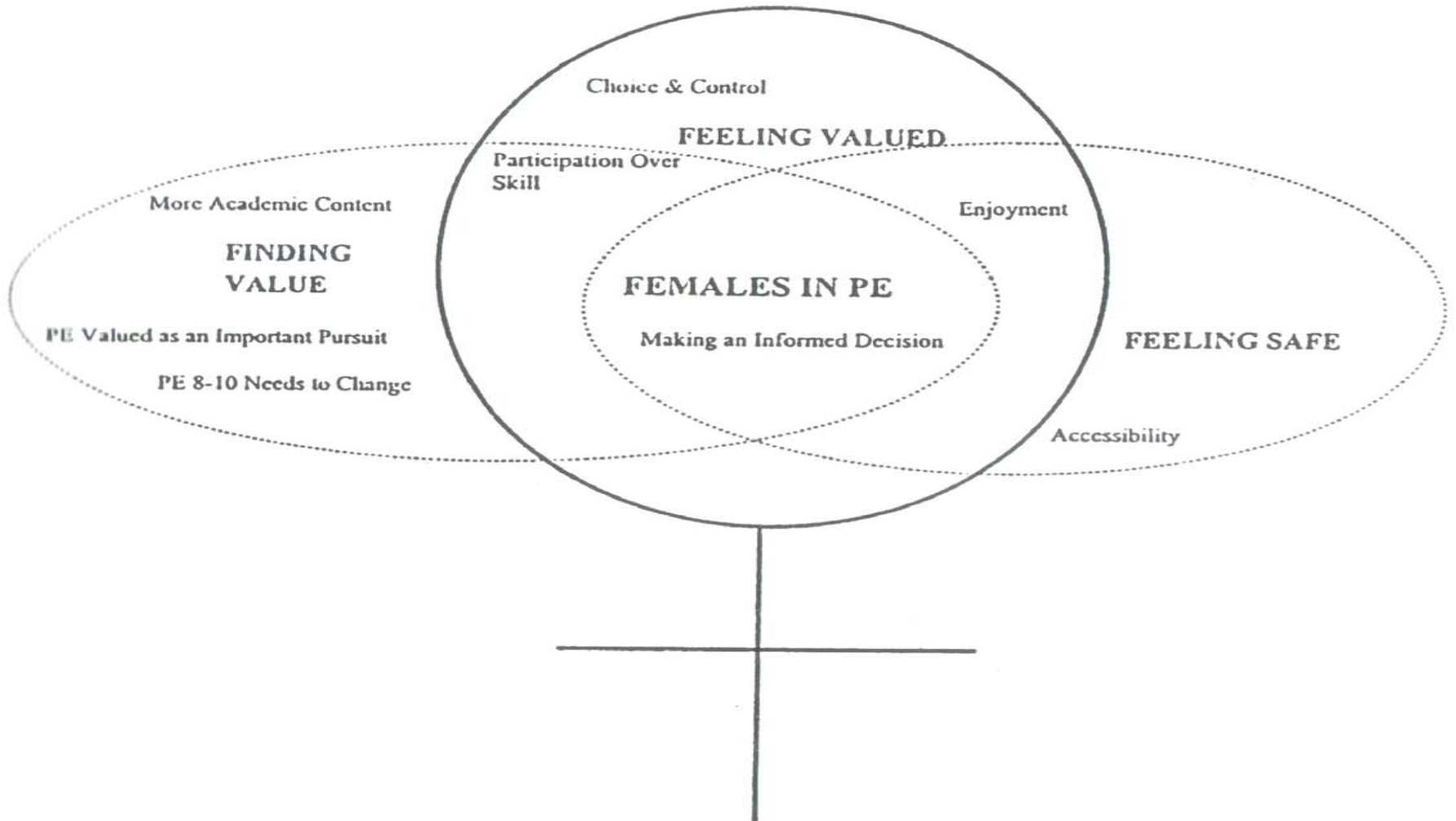
"Where is the health in PE? We need to know more about muscles, bones & things...this is more important than learning how to do a lay-up." (grade 10)

Making an Informed Decision

"I figured that PE 11 was the same as PE 8, 9 & 10 - I don't need that grief." (grade 10)

"I think you need to talk about PE in grades 8-10. They think it's going to be the same- forced to do things done in the earlier grades." (grade 11 in PE)

Figure 2
Female students feeling valued, feeling safe and finding value in physical education enroll in PE 11



Teachers' Perceptions

Positive factors
encouraging females in
PE

- ✓ Girls-only & co-ed classes available
- ✓ Principal & other teaches support/value PE
- ✓ Good connections with community resources
- ✓ PE accessible in timetable

Missing factors
discouraging females
in PE

- ✗ Only co-ed classes offered
- ✗ Resources support sport-oriented curricula
- ✗ No communication with feeder schools
- ✗ Timetabling discourages PE

Pilot Programs in 3 Schools

School A (grades 11 & 12)

Communicate with junior feeder schools

- Presentations made to 4 feeder schools prior to course selection

Create female-only PE 11 course

- 29 students registered, 86% from the feeder schools
- Enrollment in regular co-ed PE increased from 2 to 10

Pilot Programs in 3 Schools

School B (grades 8-12)

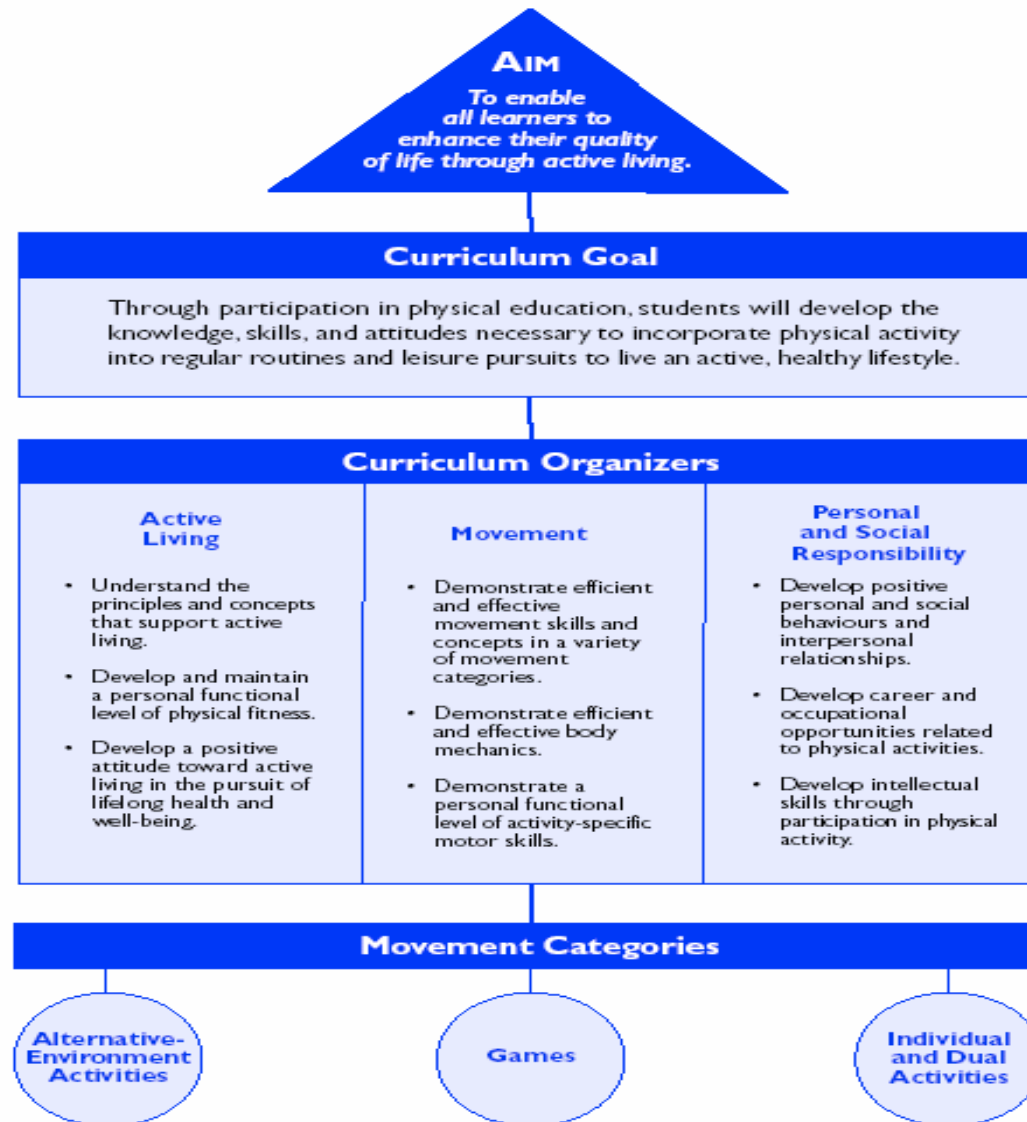
Communicate with students in grade 10

- ✓ Presentations made to all female grade 10 students prior to course selection

Create female-only PE 11 course with health-related focus

- ✓ 16 students enrolled

Framework of the Physical Education Curriculum



Pilot Programs in 3 Schools

School C (grades 9-12)

Increase community physical activity & active health opportunities within grade 10 PE

- ✓ boxercize, tobacco awareness & personal trainer sessions
- ✓ Community trips to "spin" classes, swimming, martial arts, university fitness facilities
- ✓ Active health & fitness goal setting tasks, wellness journal
- ✓ Many grade 9 students asking teachers about the "special grade 10 PE class".
- ✓ Program being refined for all grade 10 students.

Examples of course activities:

Personal & Social Responsibility

Lead a class, post topics on bulletin board, organize a breakfast club session

Active Health

Nutrition, personal fitness evaluation, body image & media, disordered eating

Team Activity

Softball, wallyball, basketball, field hockey

Individual or Dual Activity

Yoga, bowling, weight training, golf, boot camp

Outdoor Recreation

Hike, dragon boat, kayaking, scuba, rowing

Let's Get Physical: Top Recommendations for Nurturing Physical Activity

Engage students, teachers, administrators & community champions (e.g., recreation, sport, fitness) in shaping diverse opportunities for physical activity
One size does not fit all

Create a culture & context supportive of physical activity so that the active choice is the easy, acceptable & meaningful choice
"Just Do It"
doesn't cut it anymore