Tom Corbett, Governor • Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

us

#### **ACCELERATION**

November 8, 2014

Dr. Shirley Curl, Gifted Education Adviser

Based on a presentation developed by Cheryl Everett and Tanya Morret

#### **Acceleration**



Tom Corbett, Governor • Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

us



Tom Corbett
Governor

Dr. Carolyn Dumaresq
Acting Secretary of
Education

Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

#### What is acceleration?

- The practice of presenting curriculum content earlier or at a faster pace.
  - Individualized change of pace, content, or environment that is out of grade level
  - Advanced course material

Acceleration gives precocious students a chance to proceed through curriculum at a more rapid pace than age level peers with more average aptitude.

Van Tassel-Baska, 2005



Tom Corbett, Governor • Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

#### Effect Size

The number of grade equivalent months of additional achievement one group makes beyond the expected one year's gain designed into an achievement test.

- An effect size of .30 = 3 grade equivalent months of achievement a treatment group made that their equivalent control group did not.
- Effect sizes of .30 or higher are considered a "substantial" gain.
  - Approximately 15 months progress in 12 months' time.

Tom Corbett, Governor • Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

U:

## Types and Impacts of Gifted Service Options

Early entrance to Kindergarten or 1st grade (ES= .50)

Compacted Curriculum (ES= .83)

Single subject (ES=0.6)

Dual enrollment on college campus/college credit in high school

Talent search programs

Correspondence courses, independent study, distance learning (ES=0)

AP Courses (ES= .27)

**IB** Program

Mentorships (ES= 0.57 in specific subject area)

Post-secondary option

ES= Effect sizes- Rogers (2002)



Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

## Social/Emotional Effects

#### Mentorships

- Socialization (ES= .47)
- Self-esteem (ES= .42)





Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

U:

## Additional Acceleration Options & Effects

Early admission to college (ES= .30)

Grade skipping (ES= .49)

Non-grade classes (ES= .38)

Multi-grade classes (ES= .45)

Grade telescoping (ES=.40)

Testing out (ES=.60)



http://www.google.com/imgres?num=1o&hl=en&tbo=d&biw=1703&bih=go8&tbm=isch&tbnid=laZXgKM\_niRKS
M:&imgrefurl=http://mindblogs.smartandstrong.com/davide/assets\_c/2010/04/college-graduation-541.html&docid=YJDLBtDklVjvKM&imgurl=http://mindblogs.smartandstrong.com/davide/college-graduation.jpg&w=424&h=281&ei=EdyrUMjWNeWAoAGtvIHABQ&zoom=1&iact=hc&vpx=156&vpy=192&dur=1012&hovh=183&hovw=276&tx=115&ty=99&sig=115713752639426866643&page=1&tbnh=136&tbnw=206&start=0&ndsp=45&ved=1t.429,r:1,5:0,i:157

pennsylvania
DEPARTMENT OF EDUCATION

Tom Corbett, Governor •

Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

u

### What the research says:

Research shows that acceleration benefits many highly capable individuals by better motivating them toward schooling, enhancing their involvement in activities, preparing them to begin contributing to society at an earlier age.



http://www.google.com/imgres?num=10&hl=en&tbo=d&biw=1703&bih=908&tbm=isch&tb nid=SoMCcStM6iWJWM:&imgrefurl=http://www.fanpop.com/clubs/warner-brothersanimation/images/30976150/title/road-runner-

photo&docid=MDLh2gBrqPB4cM&imgurl=http://images5.fanpop.com/image/photos/30900 000/Road-Runner-warner-brothers-animation-30976150-800-

60o.jpg&w=80o&h=60o&ei=BtmrULqpFc6LoQGEg4CYDA&zoom=1&iact=hc&vpx=421&vp y=29&dur=752&hovh=194&hovw=259&tx=150&ty=96&sig=115713752639426860643&page =1&tbnh=147&tbnw=205&start=0&ndsp=44&ved=1t:429,f:11,5:0,i:200



Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

# Characteristics of Gifted Accelerants

- Able to manipulate abstract symbol systems better than average age mates
- Able to learn complex new skills and process large amounts of information at faster rates
- Many are early readers; 2-6 years above age level peers
- Upper 2% of general population of measured intelligence
  - 2 years of acceleration- IQ of 130/135 or above

#### **Acceleration**



Dr. Carolyn Dumaresq, Secretary of Education Tom Corbett, Governor •

www.education.state.pa.



## Biggest Obstacle = Inflexibility

- Younger students placed in advanced level courses
- Credit, placement and/or both for courses completed outside of school program
- Ability to substitute courses for required courses
- College credit and high school credits earned simultaneously
- Flexible time for demonstrating proficiency
- Opportunities to explore specific topics of interest





Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

u

### **Acceleration Myths**

Misfits

Controlled learning

Enrichment is better

Early exposure

Age mates



http://www.google.com/imgres?num=10&hl=en&tbo=d&biw=1703&bih=908&tbm=isch&tbnid=WRh6T2JPrxfvDM:&imgrefurl=http://karakush.com.au/Exports/Afghans/BeepBeepChKarakushTheRoadRunner/tabid/286/Default.aspx&docid=F01qiGEPnCvtM&imgurl=http://karakush.com.au/Portals/o/Beep%252520Beep/roadrunner.gif&w=400&h=300&ei=BtmrULqpFc6LoGGEg4CVDA&200m=18iact=ht&vpx=1401&vpy=189&dur=627&hovh=194&hovw=259&tx=162&ty=132&sig=115713752639426806643&page=1&tbnh=141&tbnw=183&start=0&ndsp=44&ved=1t:429,r:8,5:0,i:191&theroadcollege=0.

Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

#### When to consider acceleration...

- Dearth of new skills and knowledge being presented
- Incremental progression through repetitive series of developmental skills exercises
- Gifted student rapidly gains given objectives and then has to wait for rest of class to catch up

Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.



Office of Elementary and Secondary Education

Dr. Rita Perez, Acting Deputy Secretary

Bureau of Special Education Patricia Hozella, Director

Division of Improvement and Technical Assistance - Central Richard Moss, Chief

#### **Acceleration**



Tom Corbett, Governor •

Dr. Carolyn Dumaresq, Secretary of Education

www.education.state.pa.

us



The mission of the Pennsylvania Department of Education is to lead and serve the educational community, to enable each individual to grow into an inspired, productive, fulfilled lifelong learner.