

5th Annual Family Impact Seminar December 2009



Briefing Report

The New Mexico Dropout Rate:

Contributing Factors and Implications for Policy

The New Mexico Family Impact Seminar is a service project for the New Mexico Legislature provided by:

The Department of Extension Home Economics
The Department of Family and Consumer Sciences
in the College of Agricultural, Consumer and
Environmental Sciences
at New Mexico State University

NMSU Albuquerque Center 4501 Indian School Road NE Albuquerque, NM 87110

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Purpose and Presenters

The New Mexico Dropout Rate: Contributing Factors and Implications for Policy is New Mexico State University's fifth annual Family Impact Seminar. Family Impact Seminars – which do not lobby for particular policies – provide up-to-date, objective and nonpartisan, solution-oriented research information on current issues that affect families. The Family Impact Seminars are intended for state legislators and their aides, Governor and Lieutenant Governor's Office staff, legislative service agency personnel, and state agency representatives. Briefing Reports supplement the seminars.

One of the ultimate goals of New Mexico State University's Departments of Extension Home Economics and Family and Consumer Sciences in the College of Agricultural, Consumer, and Environmental Sciences is to enhance the quality of life for families in New Mexico. To this end, we bring the Family Impact Seminar to New Mexico.

Featured seminar speakers:

Dr. Luis Vázquez, Associate Dean Graduate School New Mexico State University

<u>Dropping Out of Education in the Land of Enchantment: The Complexity of New Mexico</u>

Dr. Luis A. Vázquez is the Associate Dean of the Graduate School and is a Regents Professor/Full Professor at New Mexico State University. Dr. Vázquez earned his Doctorate degree in Counseling Psychology from the University of Iowa in 1990, researching the effects of acculturation, acculturative stress and coping on the academic achievement of "successful" Mexican American university students. Before coming to New Mexico in 1995, Dr. Vázquez had been a senior staff psychologist for the University Counseling Center and assistant professor in Rehabilitation Psychology and Substance Abuse at The University of Iowa.

Dr. Ronald J. Werner-Wilson, Chair Family Studies, School of Human Ecology University of Kentucky

Families Matter: the Impact of Families on Academic Achievement

Ronald Werner-Wilson graduated from The University of Georgia with a Ph.D. in Child and Family Development (specialization in Marriage and Family Therapy) in 1993 and has been a faculty member at Western Michigan University, Colorado State University, Iowa State University, and the University of Kentucky. His research has focused in two areas: (1) adolescence and (2) marriage and family therapy process research. Dr. Werner-Wilson has investigated gender influences within each of these research streams. The research on adolescence represents a multidisciplinary approach to understanding this part of the lifespan and most of his articles have implications for social policy.

Dr. Florence Neymotin, Assistant Professor Department of Economics, College of Arts and Sciences Kansas State University

The Economic Impact of the Dropout: Now and Then

Dr. Florence Neymotin's fields of specialization are Labor Economics, the Economics of Education, Applied Microeconomics, and Applied Econometrics. Dr. Neymotin completed her doctoral work in Economics at the University of California at Berkeley in 2006 and moved on to a tenure-track Assistant Professorship position in the Economics Department at Kansas State University. At Kansas State, she is responsible for teaching an assortment of graduate courses in Ph.D. level Labor Economics, M.A. level Microeconomic Theory as well as undergraduate courses in Labor Economics and Intermediate Microeconomics. Dr. Neymotin currently has an assortment of additional papers under review at noted journals dealing with issues concerning the economics of education and individual level decision making.

For further information on the New Mexico Family Impact Seminar, contact:

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Visit our website at: http://cahe.nmsu.edu/familyimpactseminar. For further information on bringing a family perspective to policymaking, see the Policy Institute for Family Impact Seminars website at: www.uwex.edu/ces/familyimpact/wisconsin.htm.

Acknowledgements

Ann Vail, former Department Head of Extension Home Economics and Family and Consumer Sciences/New Mexico State University, for identifying the need for the Family Impact Seminar and providing staff and initial financial resources for its implementation.

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Paul Gutierrez, former Associate Dean and Associate Director, Cooperative Extension Service/College of Agricultural, Consumer and Environmental Sciences/New Mexico State University, for supporting and encouraging the Departments of Extension Home Economics and Family and Consumer Sciences during our first Family Impact Seminar.

Dr. Florence Neymotion, Dr. Ronald J. Werner-Wilson and Dr. Luis Vazquez for sharing their expertise via their seminar presentations and briefing report articles, so that we might improve the quality of life for persons living in New Mexico.

Sonja Serna, Specialist Information Technology, Extension Computer Support Services, and other department members for their assistance with presentation transmission via CENTRA, videoconferencing, and audio recording.

NMSU Albuquerque Center staff for assistance with location preparation.

The Family Impact Seminar Advisory Committee for providing guidance regarding the establishment of the Family Impact Seminar:

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New Mexico State University

Esther Devall Professor, Family and Child Science

Department of Family and Consumer Sciences

College of Agricultural, Consumer and Environmental Sciences

New Mexico State University

The Policy Institute for Family Impact Seminars at the University of Wisconsin-Madison. Karen Bogenschneider, Ph.D. and Jennifer Seubert of the Institute for providing training and technical support for development and delivery of the Family Impact Seminar.

EXECUTIVE SUMMARY

5th Annual FAMILY IMPACT SEMINAR, December, 2009

THE NEW MEXICO DROPOUT RATE: Contributing Factors and Implications for Policy

The high school dropout rate is becoming an issue of great national concern. The dropout rate in New Mexico is not very different than it has been historically. However, the world has changed considerably in recent years. We now live in a global economy-technology is available even to the very young; not only health conditions but auto repairs are also diagnosed by computer; flu and other infections are rapidly spread around the world; the average family no longer produces any of its food. What seems to be most significant factor in the New Mexico dropout picture is the widening achievement gap.

Historically, in many countries, education was for the wealthy or the exceptionally intelligent. Some governments have decided who received an education and to what level individuals were told to advance. They decided who was to work as a laborer and not allowed an education. However, the United States is the only country that provides the opportunity for an education for all. It is the only country that attempts to provide an education where every student, regardless of individual ability, succeeds. The United States provides the opportunity for an education for students with both physical and mental special needs.

New Mexico values education. Research tells us there are some specific developments and requirements that give us a better educational outcome. In recent years, a number of legislative policies have been passed in New Mexico that help to improve the public school system structure and process. Some examples include: 1) stricter accountability for teachers and their training requirements, 2) higher teacher's salaries, 3) smaller schools will be built in the future, and 4) Pre-K has been introduced in some school districts.

All families want the best for their children. New Mexico families, regardless of their ethnicity and culture, want the best for their children. For children to complete their high school education, they must understand that it is valued. The value of education must be exhibited by the family, by the school system, and by the community. This is accomplished through expectations. Children must know they are expected to graduate---that it is not acceptable to dropout. If families truly want what is best for their children, they must learn to value education.

There are many circumstances in New Mexico that contribute to being 48th in the nation for the high school dropout rate. There is an overarching culture of poverty.

About 63% of school children receive free or reduced lunches, 50% are below the poverty level, 10% of the student population is homeless, and as many as one in four children experience food insecurity. When families do not have enough to eat or wear and struggle to simply survive, it is difficult to place education on top of the priority list. However, we also know that without an education, changing those circumstances is very difficult. The discussion of poverty and dropout rate is akin to the chicken and egg question--which came first and how do we change it?

When reviewing statistics from around the country, it becomes apparent that the dropout rate for Hispanic and Native American students is higher than Anglo students wherever they happen to live. Approximately 53% of the students in New Mexico are Hispanic and 12% are Native American. Therefore, when calculating the overall dropout rate, these two populations have a profound effect on the outcome. The dropout rate for Anglos in New Mexico is also higher than the national figure. Along with the high school dropout rate, New Mexico is 45th for 25-34 yr olds with degrees, and 49% requiring remedial classes in college. Across the board the educational accomplishments in New Mexico are lower than they are nationally. Do we truly understand the value of education?

In a survey of 2,012 Latinos ages 16 and older by the Pew Hispanic Center during August and September, 2009, more respondents blamed inadequate school performance and dropout issues on poor parenting and poor English skills than poor teachers and schools.² Perception is reality, especially to the immature. If parents did not complete high school and did not understand the importance and the difference in future economic circumstances, they may not have realized the need to communicate this expectation to their children. Economics also played an important role. Many also reported that they dropped out to help with family finances.

Research tells us that the family, whether parents or extended family, has a great impact on a child's success. A significant adult in a child's life may change the course of his or her life. Perhaps the most basic educational need is for *adults* to understand the great importance of a child completing high school as well as parental responsibilities in the areas of truancy, engagement in the school community, and positive parenting skills.

New Mexico has many small isolated communities. The economy still relies heavily on agriculture. As with basic survival, people in the West have always been very resourceful in many areas. In the 1980s, a number of small, isolated school systems were tapping in to the large schools in Albuquerque by satellite in order to offer their high school students classes like psychology and physics when there was not a qualified

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¹ New Mexico Department of Public Education website

² Lopez, Mark Hugo, Associate Director, *Latinos and Education: Explaining the Attainment Gap*, Pew Hispanic Center, Washington, D.C.

teacher in the area. What a concept! Distance education is discussed today as if it was a newly discovered method of delivery.

The basic rung of economic development is high school completion. One of the glaring examples is the lack of employable individuals for the call centers that have settled in New Mexico. Many settled in New Mexico because it appeared that there was a large workforce for entry level positions. Even with in-house training, they are only able to hire a small percentage of applicants because they do not come with basic education. In order for young people to be gainfully employed, they must have basic educational skills on which to build.

The poverty and dropout issues are compounding issues. Many aspects of poverty must be addressed in order to address the dropout issue, and vice versa. The access to technology is one of the significant reasons for the widening achievement gap, and it may be one of the significant answers to the dropout issue. Support for and encouragement of stable family situations will improve both poverty and dropout circumstances.

The day a young person drops out of school, they place their own family at risk for poverty as well as contributing to the state's poverty. Not only the loss of income, but the loss of taxes paid, the use of public assistance, the likelihood of incarceration or health issues all compound themselves into a staggering financial sum. The area that is difficult to calculate is the emotional loss.

The Western way of "making do" or "making it work with what is at hand" needs to transfer to education. How do we establish a sense of pride for completing a task, for staying until the end, for developing the initiative to develop knowledge and skills to make life better for our families? How do we insure that our youth stay in school and graduate? It will take the family, the school system, the community, and society demonstrating the value of education. It will take the support of policy makers at every level.

Dropping Out of Education in the Land of Enchantment: The Complexity of New Mexico

Luis A. Vazquez, Ph.D.
Associate Dean and Regents
Professor
Graduate School
New Mexico State University

Drop-Out Rates in New Mexico

- 54% of our students that enter the 9th grade make to their senior year
- 2/3 of New Mexico students are in schools larger than 1,000 students
- 1/3 are in schools larger than 2,000
- 77 students drop out each day in New Mexico
- Met AYP: 260/820

(WorldNow, 2009: http://www.newswest9.com/global/story.asp?s =9223561)

The Graduation Problem

- New Mexico ranks 48th in the nation
- 3rd worst for drop outs in the nation
 - Georgia and Nevada are worst
- 56% graduation rate for class 2006
- 54.1% graduation rate for class 2005
- Most pronounced in Urban areas: 44% in Albuquerque
- 68% Anglo students, 51% Hispanic students, and 49% American Indian students graduated in 2006
- 61% girls versus 53% boys graduate
- Nation's graduation rate is 70%

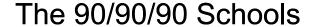
(The New Mexico Independent, 6/26/09)

Who are we in New Mexico? Statistics on Poverty (US Department of Commerce, 2008)

- Overall New Mexico poverty rates for children: 25.4% to 40.39%
- New Mexico per capita personal income: \$33,340
- In some counties it is as low as \$18,000 per capita income
- Schools throughout New Mexico: Over 80% qualify for free lunch program
- School populations range from 72% to 98% minority students throughout the state

Assumptions about High Poverty/High Ethnic Minority Schools

- High poverty/high ethnic minority students translates to lower levels of student achievement
- Language issues impede academic progress
- 74% of these students will part of the prison system
- Come from parents who do not value education



- 90% or more students eligible for free lunch program
- 90% were members of ethnic minority groups
- 90% students meet the state standards in reading

(Reeves, D. B. (2002). High Performance in High Poverty Schools: 90/90/90 and Beyond, Center for Performance Assessment, Harvard)

Common Characteristics of Successful 90/90/90 Schools

- A focus on academic achievement
- Clear curriculum choices
- Frequent assessment of student progress and multiple opportunities for improvement
- · An emphasis on nonfiction writing
- Collaborative scoring of student work



Characteristics Described

- Focus on Academic Achievement: student achievement posted all over the school, academic performance was highly prized, strong focus on improvement, charts showing weekly progress
- <u>Curriculum Choices:</u> spent more time on core subjects of reading, writing, and mathematics
 - Elementary: 3 hrs. literacy (2 hrs reading and 1 hour writing)
 - Secondary: double periods of English and Math

Characteristics Described

- Frequent Assessment and Improvement:
 student performance that is less proficient is
 followed by many opportunities to improve, "You
 can do better," "active coaching" immediate
 feedback to students
- Written Responses in Performance
 Assessments: common scoring rubric, written responses from students for evaluation



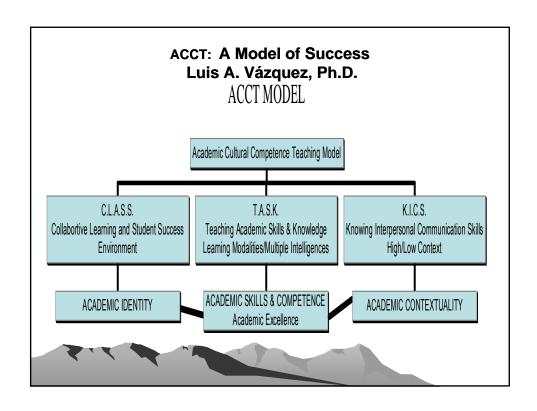
- <u>External Scoring</u>: inter-rater reliability, teacher disagreement on proficiency must be addressed
- <u>Instructional Practices</u>: must include the collective work of teachers, students, parents, leaders, business, churches, universities
 - Teachers can't do it all

Effective Leadership and Teaching: Huge Difference

- The key to improved academic achievement are the expertise of the teachers and leaders, not the economic, ethnic, or linguistic characteristics of the students
- Must have COLLABORATION MEETINGS to define proficiency for evaluation as a regular routine
- Strong value on feedback: timely, accurate and specific for the students

Every Adult in the System Counts from the Beginning of the Day to the End of the Day

- · Leaders, Principals, Assistant Principals
- Teachers
- School psychologists
- Social workers
- Nurses
- Janitors
- Bus drivers
- Cafeteria workers



Conduct Shared Educational/Community Research: University Commitment

- Evaluate and re-evaluate effectiveness of leadership and teaching
- Right teachers for the right subjects for students
- Constructive data analysis
- Testing: end of year evaluation
- Assessment: constant feedback

Holistic Accountability

- Specific Teaching, Leadership, and Curriculum strategies will mitigate the impact of poverty.
- Teaching, Curriculum, and Leadership are variables that we can control
- Poverty, Culture, and Language are variables we cannot control, but we do impact them through education

QUESTIONS??

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Families Matter: The Impact of Families on Academic Achievement

Ronald Jay Werner-Wilson, Ph.D. Chair, Family Studies Department Kathryn Louise Chellgren Endowed Professor for Research University of Kentucky

Interest in Academic Achievement

- I have a personal and professional interest in understanding academic achievement because
 - · I am the parent of three children,
 - I have served as the President of a School Board,
 - and I have spent my professional career trying to understand adolescents, including their academic achievement.
- As a parent, I want my children to succeed but as a community member, I need all of our children to succeed in school because we must have a well-educated work force if we are going to compete in the global economy.

Relevance to Policy Makers

- By now we know that we are falling behind many nations when it comes to educating our children.
- In his book, *The World is, Flat* Thomas Friedman warns us that other countries are eager to take business away from our country so we need our children to do well in school so that we can remain competitive.

Family Influences on Academic Achievement

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Family Influences on Educational Attainment

- Michelle Naylor from the U.S. Department of Education Educational Resource Information Center identified seven family influences on educational attainment:
 - 1) geographic location,
 - 2) genetic inheritance,
 - 3) family background,
 - 4) socioeconomic status,
 - 5) family composition,
 - 6) parenting style, and
 - 7) parent work-related attitudes
 - --based on Splete and Freeman-George (1985)

Families Matter

- We know that academic achievement is influenced by facilities, curriculum, class size, school size, peer influences, media messages, and other factors.
- Families have a fundamental influence on the academic achievement of children.

Influence of Family Socioeconomic Status

- We know that the socioeconomic status of families has a small influence on academic performance, but other family factors seem to have a greater influence.
- For example, Scott Hunsaker and his colleagues from the National Research Center (NRC) on the Gifted and Talented and his colleagues conclude that academic achievement is influenced by families
 - that support education and
 - promote academic achievement.

Influence of Single Family Households

- Scott Hunsaker and his colleagues from the National Research Center (NRC) on the Gifted and Talented investigated academic achievement associated with children raised in single parent households.
- Although children from single parent families struggle academically, those who have support from extended family members do well.

Conclusions from the National Research Center (NRC)

- Academically competent students exist in all ethnic and socioeconomic groups.
- The existence of poverty or single parent family situations does not coincide with a lack of interest in academic achievement.
 - Families of economically disadvantaged students need to be dealt with individually and not within the context of social stereotypes.
- ► The school needs to be aware that the culture of the family may not match that of the school.
 - Identification of strengths and interpretations of behaviors need to be sensitive to these cultural differences.

Policy Implications of NRC Research on Gifted & Talented

- ▶ Don't give up on students from single parent families or those who live in poverty.
- Cultivate an attitude in schools of cooperation with parents.
 - As a former school board member, it has been my experience that parents may be blamed if there are problems but rarely invited to be <u>partners</u> in education.
 - Invite extended family members to parent-teacher conferences and school related activities.
- Encourage educators to be sensitive to cultural differences.

Home Environment

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Family Characteristics

- There seem to be lasting academic benefits for preschool children who come from homes with the following characteristics:
 - · parenting style that is structured but flexible
 - parents hold positive attitudes toward school and learning.
- ▶ Benefits seem to include the following (from Ziegler, 1987):
 - higher school achievement rates
 - higher attendance rates
 - lower delinquency and dropout rates
 - increased high school completion and college university admission rates

Home Environment Influences on Preschool Children

- For preschoolers, academic achievement seems to be influenced by a home environment that includes
 - stimulation to learn,
 - enriching social/cultural experiences,
 - exposure to problem-solving skills, and
 - parents who read to their children.

Family Characteristics: Policy Implications

- ▶ Invest in preschool education.
 - Provide opportunities for all children to participate in a stimulating environment.
 - Provide opportunities to all children to participate in enriching social/cultural experiences.
- Work with at risk families to cultivate positive attitudes about education.
- Invest in parenting programs such as Bavolek's Nurturing Parenting Program.
 - · Teach positive parenting.
 - Teach parents how to teach problem-solving skills.

Family Attitudes about School and Learning

- Research consistently suggests that family attitudes about school and learning have a significant impact on academic achievement. Children seem motivated when
 - · their parents show an interest in their schooling,
 - set high expectations, and
 - offer support (Stevenson & Newman, 1986).
- Academic Attitudes and Expectations: Parent's attitudes and expectations influence children's attitudes about achievement. This has been found to be especially true for girls (Henderson, 1987; Bloom, 1981).

Policy Implications Associated with Learning Attitudes

- Schools can help promote positive attitudes about school, recognizing that
 - Parents trapped in a cycle of poverty may have had negative experiences of school that are communicated to their children.
 - Parents with limited education may not feel comfortable in schools.
- Schools need to be flexible in scheduling conferences and activities that are sensitive to those who have limited education and work in service jobs where there is limited job flexibility.

Summary

- Families matter.
- Home environment and family attitudes about learning fundamentally influences academic achievement.
- Policy implications:
 - Investment in preschool education that includes parent education, stimulating environments, and enriching experiences
 - Encourage schools to reach out to parents as partners to cultivate investment in education.

New Mexico Family Impact Seminar Briefing Report Families Matter: The Impact of Families on Academic Achievement

Ronald Jay Werner-Wilson, Ph.D.
Chair, Family Studies Department
Kathryn Louise Chellgren Endowed Professor for Research
University of Kentucky

I have a personal and professional interest in understanding academic achievement because I am the parent of three children, I have served as the President of a School Board, and I have spent my professional career trying to understand adolescents, including their academic achievement. As a parent, I want my children to succeed but as a community member, I need all of our children to succeed in school because we must have a well-educated work force if we are going to compete in the global economy. By now we know that we are falling behind many nations when it comes to educating our children. In his book, *The World is Flat* Thomas Friedman¹ warns us that other countries are eager to take business away from our country so we need our children to do well in school so that we can remain competitive.

Family Influences on Academic Achievement

Any discussion about academic achievement must consider family influence. Period. We know this. Families have a fundamental influence on the academic achievement of children. We also know that academic achievement is influenced by facilities, curriculum, class size, school size, peer influences, media messages, and other factors. I repeat, though: **families matter**.

We know that the socioeconomic status of families has a small influence on academic performance, but other family factors seem to have a greater influence. For example, Scott Hunsaker and his colleagues² from the National Research Center on the Gifted and Talented discuss academic achievement associated with children raised in single parent households. Although research suggests that children from single parent families struggle academically, those from single parent families who have support from extended family members do well. Hunsaker and his colleagues also note that academic achievement is influenced by families (1) who support education and (2) promote academic achievement. They conclude:

¹ Friedman, T. (2007). *The World is Flat.* Farrar, Straus, and Giroux. ISBN 0-374-29288-4.

² Hunsaker, S. L., Frasier, M. M., King, L. L., Watts-Warren, B., Cramond, B. & Krisel, S. (1995). Family influences on the achievement of economically disadvantaged students: Implications for gifted identification and programming (RM95206). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.

- 1. Academically competent students exist in all ethnic and socioeconomic groups.
- 2. The existence of poverty or single parent family situations does not coincide with a lack of interest in academic achievement. Families of economically disadvantaged students need to be dealt with individually and not within the context of social stereotypes.
- 3. The school needs to be aware that the culture of the family may not match that of the school. Identification of strengths and interpretations of behaviors need to be sensitive to these cultural differences.

Michelle Naylor from the U.S. Department of Education Educational Resource Information Center also identified family influences on educational attainment: (1) geographic location, (2) genetic inheritance, (3) family background, (4) socioeconomic status, (5) family composition, (6) parenting style, and (7) parent work-related attitudes (based on Splete and Freeman-George³).

Home Environment

There seem to be lasting academic benefits for preschool children who come from homes with the following characteristics: parenting style that is structured but flexible and parents hold positive attitudes toward school and learning. Benefits seem to include the following (from Ziegler⁴):

- higher school achievement rates
- higher attendance rates
- lower delinquency and dropout rates
- increased high school completion and college university admission rates

For preschoolers, academic achievement seems to be influenced by a home environment that includes (1) stimulation to learn, (2) enriching social/cultural experiences, (3) exposure to problem-solving skills, and (4) parents who read to their children.

A *stimulating learning environment* includes availability of appropriate play materials⁵ that promote sensory experience and to develop their motor skills.

Enriching cultural experiences include regular visits to libraries, museums, historical sites, or similar places of interest; children from these homes are

³ Splete, H. and A. Freeman-George. "Family Influences on the Career Development of Young Adults." *Journal of Career Development* 12(1) (September 1985): 55-64.

⁴ Ziegler, S. (1987, October). The effects of parent involvement on children's achievement: The significance of home/school links. Toronto Board of Education, Ontario.

⁵ Bradley, R H., Caldwell, B. M., & Rock, S. L. (1988). Home environment and school performance: A ten year follow-up and examination of three models of environmental action. *Child Development, 59,* 852-867.

rated by their teachers as more task oriented and seem to perform better on achievement tests⁶

Problem-solving strategies include providing children with open-ended questions about tasks; when they are older preschool children who have learned problem solving skills demonstrate greater ability to demonstrate critical thinking skills.

Parents who read to their children provide them with opportunities to learn vocabulary, become familiar with story structures, develop better comprehension, and practice language skills⁷.

Family Attitudes about School and Learning

Research consistently suggests that family attitudes about school and learning have a significant impact on academic achievement⁸. Children seem motivated when their parents show an interest in their schooling, set high expectations, and offer support (Stevenson & Newman, 1986).

Academic Attitudes and Expectations: Parent's attitudes and expectations influence children's attitudes about achievement. This has been found to be especially true for girls (Henderson, 1987; Bloom, 1981).

Summary

Families matter. Family attitudes about learning and home environment fundamentally influences academic achievement.

⁶ Bloom, B. S. (1981). *All our children learning: A primer for parents, teachers, and other educators.* New York: McGraw-Hill, pp.92-101.

⁷ Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Educational Psychology, 4,* 437447.

⁸ Stevenson, D. L., & Baker, D. P. (1987). The family-school relation and the child's school performance. Child Development, 58, 1348-1357.

"The Economic Impact of the Dropout: Now and Then"

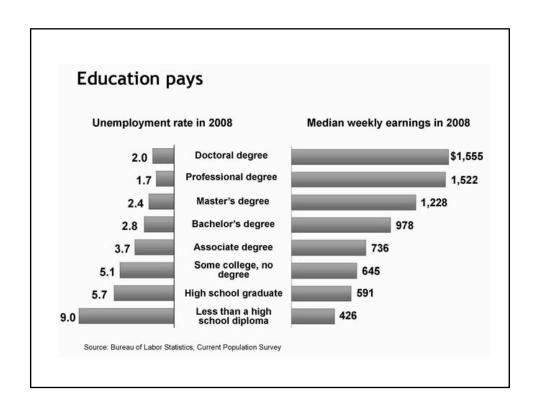
Presented for the Family Impact Seminar 12/3/09-12/4/09

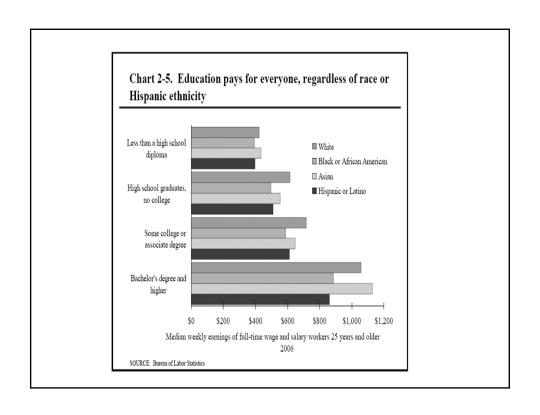
Florence Neymotin, Ph.D. Kansas State University Department of Economics



- · Average Trends
 - Earnings by Race/Ethnicity and Education
 - Dropouts By State, Income and Race/Ethnicity
- Economic Reasoning (Summary)
 - Selection vs. Causation
 - Policy and other variation
 - Economic Externalities
- · Three Illustrative Cases
 - Sibling Comparisons
 - Desegregation ("Then")
 - Compulsory Schooling a la Oreopolous ("Now")
- Other Types of Effects
- · Policy Recommendations
- Additional Tables
 - Immigrant educational attainment
 - Teenage births and dropout
 - Severity of Compulsory Schooling laws and dropout

Trends





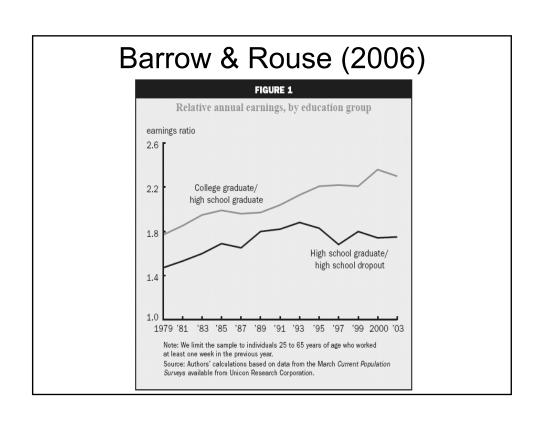


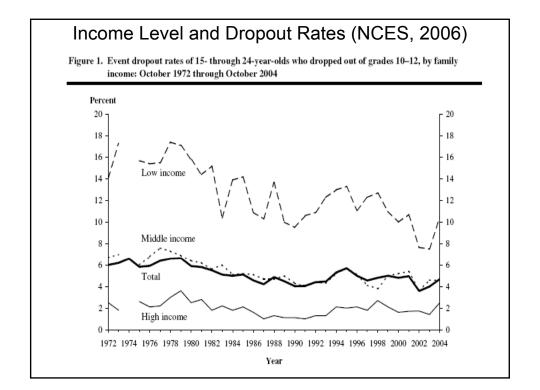
Table 16. Median usual weekly earnings of full-time wage and salary workers in current dollars by race, Hispani	.c or Latino
ethnicity, and sex. 1979-2005 annual averages	

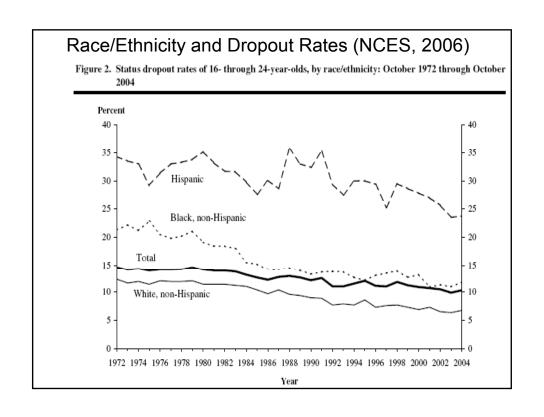
Total White	_		1	Total, both sexe	5				Women		
1990 262 268 212 - 239 201 203 165 - 172 1981 284 291 235 - 223 219 221 206 - 150 1982 302 310 245 - 240 239 247 217 - 231 1983 313 320 261 - 220 252 254 232 - 215 1984 326 336 269 - 239 265 268 241 - 233 1985 344 366 277 - 270 270 277 281 252 - 240 1986 399 371 291 - 277 291 294 264 - 241 1987 374 384 301 - 225 303 307 276 - 251 1988 385 386 314 - 230 315 316 288 - 260 1989 399 408 319 - 236 336 336 337 276 26 1989 399 408 319 - 236 336 338 307 276 26 1980 412 424 329 - 334 346 353 308 - 269 1980 4412 424 329 - 334 346 353 308 - 269 1980 4412 424 329 - 334 346 353 308 - 278 1981 426 442 348 - 312 366 373 333 - 222 1981 426 442 348 - 312 366 373 355 - 342 1982 440 450 357 - 331 360 367 335 - 322 1983 459 475 389 - 331 393 401 348 - 311 1984 467 484 371 - 334 389 408 346 363 362 - 316 1987 503 518 494 383 - 339 406 415 355 - 365 1986 490 494 383 - 339 406 415 355 - 365 1987 503 518 400 - 331 431 441 428 362 - 316 1987 503 518 400 - 331 431 441 428 362 - 316 1987 503 518 400 - 331 431 441 428 362 - 316 1989 503 545 425 - 330 456 447 555 - 365 2000 576 580 474 5815 - 335 473 483 400 - 337 2001 576 580 474 5815 - 339 493 502 429 \$547 366 2002 608 623 486 656 444 529 547 473 566 377 2003 600 667 555 700 445 552 567 491 588 470 2004 600 667 555 700 445 573 504 505 613 449	Year	Total	White	Afrean	Asian	Latino	Total	White	African	Asian	Latino
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1982. 302 310 245 - 240 239 242 217 - 263 1983 313 320 261 - 220 252 254 232 - 213 1895 344 356 277 - 270 277 281 252 - 220 1986 399 371 291 - 277 291 294 264 - 241 1986 399 384 301 - 225 303 307 276 251 1989 385 385 314 - 236 328 334 301 - 229 1980 412 424 329 - 304 346 353 308 - 278 1980 412 424 329 - 304 346 353 308 - 278 1980 459 <t< td=""><td>1980</td><td>262</td><td>269</td><td>212</td><td>-</td><td>209</td><td>201</td><td>203</td><td>185</td><td>-</td><td>172</td></t<>	1980	262	269	212	-	209	201	203	185	-	172
1883 313 320 281 - 230 252 254 232 - 215 1984 356 336 269 - 239 265 268 241 - 223 1986 359 371 291 - 277 291 294 264 - 241 1987 374 394 301 - 225 303 307 276 - 251 1989 399 409 319 - 228 328 334 301 - 269 1980 412 424 329 - 334 346 353 308 - 278 1990 412 424 329 - 334 346 353 308 - 278 1991 426 442 329 - 334 346 353 308 - 278 1992 <t< td=""><td>1981</td><td>284</td><td>291</td><td>235</td><td></td><td>223</td><td>219</td><td>221</td><td>206</td><td></td><td>190</td></t<>	1981	284	291	235		223	219	221	206		190
1884 336 336 269 - 239 265 288 241 - 223 1895 344 356 277 - 270 277 291 292 - 220 1896 359 371 291 - 227 291 294 284 - 241 1898 374 384 301 - 228 303 307 276 - 251 1898 385 395 314 - 220 315 318 288 - 260 1890 412 424 3239 - 304 346 353 308 - 278 1991 426 442 348 - 312 366 373 332 - 222 1933 459 475 369 - 321 360 367 335 - 322 198 1	1982	302	310	245	-	240	239	242	217		203
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1991 426 442 348 - 312 366 373 323 - 252 1993 459 475 369 - 321 360 367 335 - 322 1993 459 475 369 - 331 393 401 348 - 313 1984 487 494 383 - 329 406 415 355 - 305 1996 490 508 387 - 339 418 428 362 - 315 1987 503 519 400 - 351 431 444 375 - 318 1988 523 545 426 - 370 4456 488 400 - 348 2000* 573 445 - 335 473 483 409 - 348 2000* 576	1990	412	424	329		304	346	353	308		278
1992 440 458 357 - 321 360 367 335 - 302 1993 459 475 369 - 331 393 401 348 - 313 1986 467 484 371 - 323 406 408 346 - 325 1986 479 494 383 - 329 406 415 355 - 305 1986 490 506 387 - 339 448 428 362 - 316 1986 533 545 400 - 351 431 444 375 - 318 1989 549 573 445 - 335 473 483 400 - 347 20001 576 590 474 5815 339 443 502 429 3547 368 2001	1991	426	442	348		312	366	373	323		292
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1897 503 519 400 - 351 431 444 375 - 318 1998 523 545 425 - 370 456 448 400 - 327 1999 549 573 445 - 335 473 483 409 - 348 20001 576 580 474 9615 399 493 502 429 \$547 366 2001 596 610 491 639 417 512 522 454 563 388 2002 608 623 488 658 424 529 547 473 566 367 2003 620 636 514 693 440 552 367 491 598 410 2004 600 677 525 700 456 573 304 505 613 419	1995	479		383	-	329	406	415			305
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1999 549 573 445 - 335 473 483 409 - 348 20001 576 590 474 5815 339 483 502 429 5547 366 2001 596 610 491 639 417 512 522 454 563 368 2002 608 623 488 658 424 529 547 473 566 327 2003 620 636 514 693 440 552 567 491 598 410 2004 600 667 525 700 406 573 504 505 615 419	1997	503	519	400	-	351	431	444	375		318
2000' 576 550 474 5515 339 483 502 429 \$547 368 2002' 566 610 481 639 417 512 522 454 563 368 2002' 608 623 488 658 424 529 547 473 566 397 2003' 600 636 514 693 440 552 567 491 598 410 2004' 600 657 525 700 456 573 504 505 613 419	1998	523	545	426	-	370	456	468	400	-	337
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2004 630 657 525 700 456 573 584 505 613 419									I	I	
2005 651 672 520 753 471 585 596 499 665 429	2005	651	672		753	471	585	596	499	665	429

Dropouts by State: NCES data

Table 5. Event dropout rates for public school students in grades 9–12, by state: School years 1993–94 through 2001–02

					,	1				
					ropout rat					
tate										AVERAG
ouisiana	4.7		11.6	11.6						
Vevada	9.8		9.6			7.9				
eorgia	8.7			8.2						
New Mexico	8.1	8.5		7.5						
llinois	6.8									
Vyoming	6.5			6.2						
Aississippi	6.1	6.4		6.0						
Aissouri	7.0			5.8						
Oklahoma	4.6			5.9						
Arkansas	5.3			5.0						
Mabama	5.8			5.3	4.8	4.4	4.5			4.5
/ermont	4.8	4.7	5.3	5.0	5.2	4.6	4.7	4.7	4.0	4.8
/Innesota	5.1	5.2	5.2	5.5	4.9	4.5	4.3	4.0	3.8	4.7
thode Island	4.9	4.6	4.6	4.7	4.9	4.5	4.8	5.0	4.3	4.7
ennessee	4.8	5.0	4.9	5.1	5.0	4.6	4.2	4.3	3.8	4.6
Delaware	4.6	4.6	4.5	4.5	4.7	4.1	4.1	4.2	6.2	4.6
Maryland	5.2	5.2	4.8	4.9	4.3	4.4	4.1	4.1	3.9	4.5
/irginia	4.8	5.2	4.7	4.6	4.8	4.5	3.9	3.5	2.9	4.3
Vebraska	4.6	4.5	4.5	4.3	4.4	4.2	4.0	4.0	4.2	4.3
outh Dakota	5.3	5.3	5.7	4.5	3.1	4.5	3.5	3.9	2.8	4.3
Vest Virginia	3.8	4.2	3.8	4.1	4.1	4.9	4.2	4.2	3.7	4.1
Jtah	3.1	3.5	4.4	4.5	5.2	4.7	4.1	3.7	3.7	4.1
ennsylvania	3.8	4.1	4.0	3.9	3.9	3.7	4.0	3.6	3.3	3.8
Connecticut	4.8	4.9	4.8	3.9	3.5	3.3	3.1	3.0	2.6	3.5
New Jersey	4.3	4.0	4.1	3.7	3.5	3.1	3.1	2.8	2.5	3.5
Jaine .	3.1	3.4		3.2						
owa	3.2			2.9						
North Dakota	2.7			2.7						
Visconsin	3.1	2.7								





Economic Reasoning

Disentangling Cause and Effect

- · Two possibilities:
 - Dropout causes inferior outcomes
 - Dropout is a signal that individuals were already likely to have poor outcomes but it is not the actual cause.
- To Clarify:
 - Possibility 1: "I drop out, and as a result I can't find a high paying job."
 - Possibility 2: "I have poor skills and wouldn't have found a good job anyway. Dropping out is a signal of my skills rather than the ultimate cause."

What Would an Economist Answer?

- Find a mechanism disentangling dropout variation from underlying skills.
 - <u>Classic Example</u>: Mandatory Schooling and Child Labor Laws
 - Desegregation Policies
 - Other policies where groups do not vary in level of affectedness solely by skill
- Econometric (economic statistical) methods to account for this selection by skill into dropping out

Why Education Matters in a "Societal" Sense

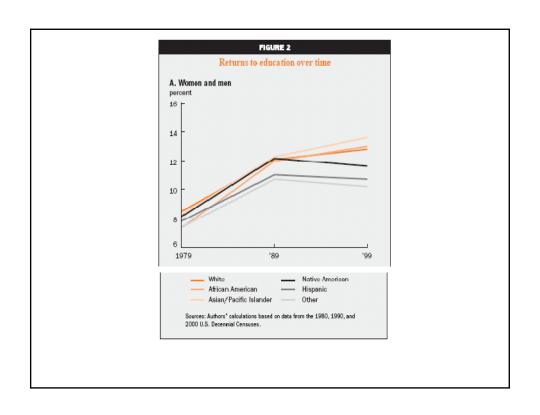
- Clear relationship between human capital and country measures of output per worker → Acemoglou & Angrist (2001)
 - More human capital facilitates innovation and growth. (Romer, 1990; Foster & Rosenzweig, 1996; and others)

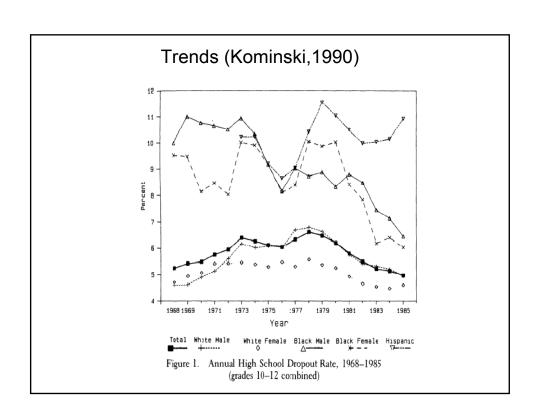
Case Studies

- Siblings
- Desegregation
- Compulsory Schooling

Sibling comparison via Barrow & Rouse (2006)

- Determine effect of additional schooling returns (not specific to dropout)
- Stratify by race/ethnicity
- Similar returns to schooling for all racial groups (6% per year schooling)
- Some issues with ability bias and measurement error merit consideration





Desegregation Evidence (Guryan, 2004)

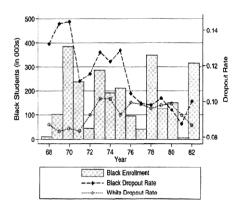


FIGURE 1. AGGREGATE TRENDS IN BLACK AND WHITE DROPOUT RATES AND THE NUMBER OF BLACK STUDENTS NEWLY AFFECTED BY DESEGREGATION

Recent Evidence

- Negative impact of dropping out on wealth, health, and happiness (Oreopolous, 2007)
 - 15% increase in wealth per year of schooling
 - Students ignore or too heavily discount the future in deciding to drop out
 - Compulsary Schooling Laws as exogenous variation
 - Instrument the actual patterns with the "rules"

Results: (Oreopolous, 2007)

Percent increase in present value wealth from one year of compulsory schooling

	(1)	(2)	(3)
		Discount rate	
	0.03	0.05	0.08
Percent change in present value wealth, OLS estimate	11.0%	10.8%	8.5%
Percent change in present value wealth, IV estimate	17.6%	16.9%	16.0%
Percent change in present value wealth, assuming 8% return	7.1%	6.4%	5.6%
Hurdle rate	1.20%	1.80%	2.60%

Notes: The regression specification follows Table 3 for the sample of U.S. males and with log annual income as the dependent variable. Estimated income profiles from ages 15 to 65 and estimated annual returns to compulsory schooling (17.4% for the IV estimate and 9.5% for the OLS estimate) are used to calculate present value changes in wealth using the discount rate indicated in the table. The overall change in wealth includes the expected income loss from attending school an additional year. The hurdle rate is the minimum annual return required to make an individual financially better off from taking one year of school instead of one year of work. It is based on the projected earnings profile for a 15-year old high school dropouts and uses the discount rate indicated in the table.

Results (Cont.)

Table 6
Reasons for leaving school among 16 to 25-year olds

	Fraction mentioning reason		
	Finished school immediately at minimum school-leaving age	Finished school 1–2 years after minimum school-leaving age	Finished school 3+ years after minimum school-leaving age
Had gone as far as I could	0.148	0.332	0.540
I saw no point in going on	0.295	0.172	0.193
I did not like it	0.243	0.114	0.040
I needed money	0.126	0.095	0.053
I wanted to work	0.445	0.437	0.293
Family needed money	0.039	0.034	0.013
Couldn't afford course	0.009	0.019	0.013
Had to bring up children	0.015	0.009	0.067
N	461	325	150

Notes: Sample includes 16 to 25-year olds in Britain from the 1990 Eurobarometer Youth Survey.

Discussion

- · Different discount rates matter little.
- Lack of motivation more pertinent than actual constraints (time, money, children).
 - See Brideland, Dilulio, Morrison, and Burke (2006).

Wrapping Up:

- Other Effects
- Policy Recommendations

Schooling and Various Concerns:

- Angrist & Krueger (1991)
 - Compulsory Schooling & Earnings
- Black, Devereux & Salvanes (2004)
 - Compulsory Schooling and Teenage Births
- Moretti (2001, 2004)
 - Schooling and Civic Participation & Crime
- Bray et. al. (2000)
 - Marijuana initiation and dropout

Black, Devereux & Salvanes (2004)

Table 9: Effect of Compulsory Schooling Laws on the Probability of Birth Conditional on Not Already Having a Child

Dependent Variable	Birth at 16/No prior birth	Birth at 17/No prior birth	Birth at 18/No prior birth	Birth at 19/No prior birth	Birth at 20/No prior birth
Dropout Age=16	0001	0025*	0035*	0021	0024
	(.0006)	(.0009)	(.0013)	(.0019)	(.0036)
Dropout Age=17	0009	0045*	0057*	0047*	0056
	(.0008)	(.0012)	(.0013)	(.0018)	(.0040)
Dropout Age=18	.0002	0015	.0005	0007	0061
	(.0010)	(.0049)	(.0078)	(.0054)	(.0050)
White	0271*	0349*	0344*	0292*	0182*
	(.0020)	(.0029)	(.0034)	(.0033)	(.0033)
N	1,572,513	1,545,369	1,493,288	1,414,844	1,311,693

Morettti (2001)

Table 3: Census Incarceration Rates for Men Ages 20-60 by Drop Out Status

	All Years	1960	1970	1980
411.34				
All Men				
Drop Out	.012	.010	.010	.015
HS Graduate +	.003	.002	.002	.004
Difference	.009	.008	.008	.011
White Men				
Drop Out	.008	.007	.006	.009
HS Graduate +	.002	.001	.001	.002
Difference	.006	.006	.005	.007
Black Men				
Drop Out	.036	.029	.029	.041
HS Graduate +	.019	.013	.012	.020
Difference	.017	.016	.017	.021

Bray et. al. (2000)

Table 2. Dropout rate by substance use initiation

Variable	Proportion of	sample droppi	ng out at age:	
	16 ($N = 1, 392$)	17 (<i>N</i> = 1, 302)	18 (N = 1, 191)	All ages (N = 1, 392)
All respondents	0.027 (0.003)	0.040 (0.003)	0.038 (0.003)	0.099 (0.003)
Marijuana use Did not initiate prior to age of dropout Initiated prior to age of dropout	,	0.021 (0.004) 0.063 (0.007)	, ,	0.047 (0.006) 0.153 (0.008)
Cigarette use Did not initiate prior to age of dropout Initiated prior to age of dropout		0.015 (0.004) 0.054 (0.005)		0.046 (0.008) 0.125 (0.006)
Alcohol use Did not initiate prior to age of dropout Initiated prior to age of dropout		0.023 (0.007) 0.044 (0.004)		
Other drug use Did not initiate prior to age of dropout Initiated prior to age of dropout	, ,	0.026 (0.004) 0.059 (0.007)	, ,	, ,

Policy Recommendations

- · Clear causal relationship between dropout and outcomes
 - Economic & social
- Economic human capital externalities for society.
- · Variety of prior methods employed
 - Mandatory schooling laws
 - Incentive devices to staying in school



Chiswick and DebBurman (2004)

Summary statistics of selected variables, by country of origin, first-generation adults, United States, 1995

Country of origin	Sample size	Educational attainment	Age at immigration
English-speaking countries	720 (9.61) ^a	13.73 (2.68) ^b	23.70 (11.66) ^b
Africa	94 (1.25)	14.98 (3.26)	26.66 (8.54)
Mexico	1650 (22.01)	8.66 (3.83)	22.79 (9.94)
Cuba	233 (3.11)	11.96 (3.35)	24.04 (13.10)
S. and C. America	890 (11.87)	11.58 (3.87)	25.54 (9.97)
Caribbean	287 (3.83)	11.06 (3.72)	26.44 (8.94)
Southern Europe	360 (4.80)	11.64 (4.16)	20.26 (11.158)
E. and C. Europe	698 (9.31)	14.10 (2.96)	27.22 (13.82)
N. and W. Europe	70 (0.93)	15.31 (2.31)	22.70 (8.74)
Philippines	438 (5.84)	14.11 (2.82)	26.78 (11.28)
China	259 (3.46)	13.60 (4.37)	30.61 (11.67)
Vietnam	191 (2.55)	11.99 (4.17)	29.18 (13.06)
East Asia	363 (4.84)	14.43 (2.64)	27.73 (10.42)
South Asia	307 (4.10)	15.57 (3.04)	26.74 (7.86)
Middle East	183 (2.44)	14.33 (3.62)	25.58 (10.14)
Other Asia	252 (3.36)	11.71 (4.52)	26.10 (10.42)
Remaining countries	501 (6.68)	13.97 (3.17)	25.87 (10.77)
Total	7496 (100.00)	11.82 (4.23)	24.79 (11.07)

Source: Current Population Survey, United States Bureau of the Census, October 1995. Variables are as defined in Table A1

Percent foreign-born are in parentheses.
 Standard deviations are in parentheses.

Patterson (2008)

Appendix Table 4
Dropout Rates and Teen Childbearing Rates by Neighborhood Professional Rates

	All	White	Black	Hispanic	Asian
	Dropout	Dropout	Dropout	Dropout	Dropout
% Professional	Mean 95 % C.I.	Mean 95 % C.I.	Mean 95 % C.I.	Mean 95 % C.I.	Mean 95 % C.I.
0% - 20%	12.0% [11.8% 12.3%] 9.4% [8.9% 9.9%]	10.7% [10.0% 11.5%]	14.3% [13.9% 14.6%]	5.2% [4.5% 5.8%]
20% - 40%	6.3% [6.1% 6.4%] 5.5% [5.3% 5.8%]	6.6% [5.9% 7.4%]	9.3% [8.9% 9.8%]	3.6% [3.3% 4.1%]
40% - 100%	3.2% [3.0% 3.4%] 3.2% [2.9% 3.4%]	D	5.1% [4.3% 6.0%]	D
Overall Rate:	8.0% [7.9% 8.1%] 5.6% [5.5% 5.8%]	8.7% [8.2% 9.2%]	12.4% [12.1% 12.6%]	3.8% [3.5% 4.1%]

	Te	All en Births	S		hite Births		_	lack en Birth	s		panic Births			Asian n Births	
% Professional	Mean	95%	C.I.	<u>Mean</u>	95 %	C.1.	<u>Mean</u>	95 %	C.I.	Mean	95%	C.L.	<u>Mean</u>	95 % (C.I.
0% - 20%	7.0% [6.7%	7.3%]	5.1% [4.6%	5.6%]	12.0% [10.9%	13.2%]	7.7% [7.3%	8.1%]	D		
20% - 40%	3.5%[3.3%	3.7%]	2.6% [2.4%	2.8%]	8.1% [7.1%	9.3%]	5.5% [5.1%	6.0%]	D		
40% - 100%	1.1%[1.0%	1.3%]	0.9% [0.7%	1.1%]	D			D			D		
Overall Rate:	4.4% [4.3%	4.5%]	2.6% [2.4%	2.7%]	9.9% [9.2%	10.7%]	6.8% [6.5%	7.1%]	1.4% [1.1%	1.6%

Exact binomial confidence intervals are calculated. D: not disclosed because sample size is less than 75 observations

Acemoglu and Angrist (2001)

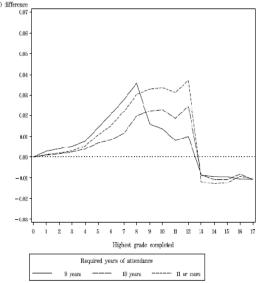


Figure 2 CDF difference by severity of compulsory attendance laws. The figure shows the difference in the probability of schooling at or exceeding the grade level on the X-axis. The reference group is 8 or fewer years required schooling

Boosting High School Graduation Rates Would Save U.S. \$127,000 Per New Graduate, Researchers Find Posted by Administrator (admin) on Feb 06 2007 at 4:54 PM

Teachers College Report Says Nation Could Save \$45 Billion Each Year By Investing in School Interventions Aimed at Reducing Dropouts

Biggest savings would come in minority student populations

NEW YORK February 7, 2006 – The U.S. taxpayer could reap \$45 billion annually if the number of high school dropouts were cut in half, according to a new study conducted by a group of the nation's leading researchers in education and economics.

The savings would be achieved via extra tax revenues, reduced costs of public health, crime and justice, and decreased welfare payments. Even a one-fifth reduction would result in an annual \$18 billion public savings, according to the study, whose figures do not even include the private benefits of improved economic wellbeing that would accrue to the new graduates themselves.

The study identifies five cost-effective educational strategies already shown to boost high school graduation rates and estimates that the country could save a net of \$127,000 per each new graduate added through "successful implementation of the median" of the five interventions.

"Educational investments to raise the high school graduation rate appear to be doubly beneficial," the study's authors write. "The quest for greater equity for all young adults would also produce greater efficiency in the use of public resources."

The study – titled "The Costs and Benefits of an Excellent Education for America's Children" – was conducted by Henry Levin, William Heard Kilpatrick Professor of Economics and Education at Teachers College; Clive Belfield, Assistant Professor of Economics and Education at Queens College, City University of New York; Peter Muennig, M.D., Assistant Professor at Columbia University's Mailman School of Public Health; and Cecilia Rouse, Theodore A. Wells '29 Professor of Economics at Princeton University. Support for the study was provided by to Teachers College by Lilo and Gerry Leeds.

To arrive at their estimates, the researchers calculated the public benefit generated by each intervention and subtracted the investment required to implement them.

The \$127,000 figure reflects the mean for both genders and all ethnic groups. The net public savings for each new graduate added among black males – the group most at risk for dropping out – is estimated at \$186,500.

The new findings build on data presented in October 2005 by the same team and other researchers that estimated that the U.S. loses hundreds of billions of dollars each year when young people fail to graduate from high school.

"What makes this study so powerful is that it has been conducted by economists of the first rank, using sophisticated approaches that, if anything, understate the potential value of investing up front in education," said former West Virginia Governor Bob Wise, who heads the Alliance for Excellent Education, based in Washington, D.C. "At a time when Congress is reevaluating the effectiveness of the federal No Child Left Behind Act, it provides lawmakers with a valuable tool to make the case that schools must be given more capacity to improve the achievement of their students."

The conservative approach used by the researchers does not include some of the benefits of graduation such as reductions in juvenile crime and teenage pregnancy that cannot be accurately quantified. In addition, national data tends to underestimate the numbers of high school dropouts, suggesting that the actual savings from increasing dropouts might be higher than those presented in the study. Among the study's other findings:

- The average lifetime benefit in terms of additional taxes paid per expected high school graduate is \$139,100.
- The average lifetime public health savings per expected high school graduate (achieved through reduction in Medicare and Medicaid costs) is \$40,500. For black females, the highest users of these programs, the figure is \$62,700.
- The average lifetime crime-related cost reduction per expected high school graduate is \$26,600.
- Being a high school graduate is associated with a 40 percent lower probability
 of Temporary Assistance for Needy Families (TANF); a 1 percent lower
 probability of receiving housing assistance; and a 19 percent lower probability
 of receiving food stamps. For college graduates, the probability reductions
 are 62 percent, 35 percent and 54 percent.

Of the five successful interventions identified by the researchers, two take place in preschool, one in elementary school, one in high school and one throughout the K-12 years. In general, the study's authors identify several features that characterize effective school interventions: small-size schools; personalization; high academic

expectations; strong counseling; parental engagement; extended time; and competent and appropriate personnel. They note that one of the interventions, First Things First, has the largest economic benefits relative to costs and combines all these features. Other interventions (described in the attached summary) include Perry Preschool Project, Chicago Parent-Center Program, class size reduction, and increasing teacher salaries.

The Center for Benefit-Cost Studies of Education (CBCSE) conducts research on the benefits and costs of alternative educational policies and interventions. The CBCSE brings together scholarship on both benefits and costs so that the full value of investments in education can be evaluated, and the most productive use of resources can be chosen.

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Teachers College is the largest graduate school of education in the nation. Teachers College is affiliated with Columbia University, but it is legally and financially independent. The editors of U.S. News and World Report have ranked Teachers College as one of the leading graduate schools of education in the country.

For more information, please visit the college's Web site at www.tc.columbia.edu.

SCHOOL INTERVENTIONS PROVEN TO RAISE HIGH SCHOOL GRADUATION RATES

- **Perry Pre-School**, the oft-chronicled pre-K program in Ypsilanti, Michigan . Perry provides children with 1.8 years of a center-based program for 2.5 hours per weekday, offering a child-to-teach ratio of 5:1; home visits; and group meetings of parents. The researchers estimate that, implemented on a broad scale, Perry's benefit-to-cost ratio would be 2.31 to 1, and that it would create an additional 19 new high school graduates per 100 students.
- Class-size reduction. This approach based on the parameters of Project Star, a four-year, randomized field trial in Tennessee would include four years of schooling (from kindergarten through third grade) with class size reduced from 25 to 15. The researchers estimate that, implemented on a broad scale, class-size reduction along these lines would achieve a benefit-to-cost ratio of 1.46 to 1, and that it would create an additional 11 new high school graduates per 100 students.
- First Things First, a comprehensive school reform of small learning communities that includes dedicated teachers, family advocates and instructional improvement. FTF would achieve an estimated benefit-to-cost ratio of 3.54 to 1 and create an additional 16 high school graduates per 100 students.

- Chicago Child-Parent Center Program. A center-based preschool program with parental involvement, outreach and health/nutrition services, based in public schools. This approach would achieve an estimated benefitto-cost ratio of 3.09 to 1 and create an additional 11 high school graduates per 100 students.
- Teacher salary increase of 10 percent for all years K-12. This approach would achieve an estimated benefit-to-cost ratio of 2.55 to 1 and create an additional five high school graduates per 100 students.

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The checklist on the following page is a useful guide for viewing public policy or potential public policy through a family lens. With it, policymakers and those who implement policies can assess the impact of policy on families.



A Checklist for Assessing the Impact of Policies on Families

The first step in developing family-friendly policies is to ask the right questions:

- What can government and communities do to enhance the family's capacity to help itself and others?
- What effect does (or will) this policy (or proposed program) have for families? Will it help or hurt, strengthen or weaken family life?

These questions sound simple, but they can be difficult to answer.

The Family Criteria (Ad Hoc) Task Force of the Consortium of Family Organizations (COFO) developed a checklist to assess the intended and unintended consequences of policies and programs on family stability, family relationships, and family responsibilities. The checklist includes six basic principles that serve as the criteria of how sensitive to and supportive of families policies and programs are. Each principle is accompanied by a series of family impact questions. The principles are not rank ordered and sometimes they conflict with each other, requiring trade-offs. Cost effectiveness also must be considered. Some questions are value-neutral and others incorporate specific values. People may not always agree on these values, so sometimes the questions will require rephrasing. This tool, however, reflects a broad nonpartisan consensus, and it can be useful to people across the political spectrum.

This checklist can be used to conduct a family impact analysis of policies and programs.

✓ For questions that apply to your policy or program, record the impact on family well-being.

Principle 1. Family support and responsibilities.

Policies and programs should aim to support and supplement family functioning and provide substitute services only as a last resort.

Does the proposal or program:

- support and supplement parents' and other family members' ability to carry out their responsibilities?
- provide incentives for other persons to take over family functioning when doing so may not be necessary?
- set unrealistic expectations for families to assume financial and/or care giving responsibilities for dependent, seriously ill, or disabled family members?
- enforce absent parents' obligations to provide financial support for their children?

Principle 2. Family membership and stability.

Whenever possible, policies and programs should encourage and reinforce marital, parental, and family commitment and stability, especially when children are involved. Intervention in family membership and living arrangements is usually justified only to protect family members from serious harm or at the request of the family itself. Does the policy or program:

- provide incentives or disincentives to marry, separate, or divorce?
- provide incentives or disincentives to give birth to, foster, or adopt children?
- strengthen marital commitment or parental obligations?
- use appropriate criteria to justify removal of a child or adult from the family?
- allocate resources to help keep the marriage or family together when this is the appropriate goal?
- recognize that major changes in family relationships such as divorce or adoption are processes that extend over time and require continuing support and attention?

Principle 3. Family involvement and interdependence.

Policies and programs must recognize the interdependence of family relationships, the strength and persistence of family ties and obligations, and the wealth of resources that families can mobilize to help their members. To what extent does the policy or program:

- recognize the reciprocal influence of family needs on individual needs, and the influence of individual needs on family needs?
- recognize the complexity and responsibilities involved in caring for family members with special needs (e.g., physically or mentally disabled, or chronically ill)?
- involve immediate and extended family members in working toward a solution?
- acknowledge the power and persistence of family ties, even when they are problematic or destructive?
- build on informal social support networks (such as community/neighborhood organizations, religious communities) that are essential to families' lives?
- respect family decisions about the division of labor?
- address issues of power inequity in families?
- ensure perspectives of all family members are represented?
- assess and balance the competing needs, rights, and interests of various family members?
- protect the rights and safety of families while respecting parents' rights and family integrity?

Principle 4. Family partnership and empowerment.

Policies and programs must encourage individuals and their close family members to collaborate as partners with program professionals in delivery of services to an individual. In addition, parent and family representatives are an essential resource in policy development, program planning, and evaluation.

In what specific ways does the policy or program:

- provide full information and a range of choices to families?
- respect family autonomy and allow families to make their own decisions? On what principles are family autonomy breached and program staff allowed to intervene and make decisions?
- encourage professionals to work in collaboration with the families of their clients, patients, or students?
- take into account the family's need to coordinate the multiple services they may require and integrate well with other programs and services that the families use?
- make services easily accessible to families in terms of location, operating hours, and easy-to-use application and intake forms?
- prevent participating families from being devalued, stigmatized, or subjected to humiliating circumstances?
- involve parents and family representatives in policy and program development, implementation, and evaluation?

Principle 5. Family diversity.

Families come in many forms and configurations, and policies and programs must take into account their varying effects on different types of families. Policies and programs must acknowledge and value the diversity of family life and not discriminate against or

penalize families solely for reasons of structure, roles, cultural values, or life stage.

How does the policy or program:

- affect various types of families?
- acknowledge intergenerational relationships and responsibilities among family members?
- provide good justification for targeting only certain family types, for example, only employed parents or single parents? Does it discriminate against or penalize other types of families for insufficient reason?
- identify and respect the different values, attitudes, and behavior of families from various racial, ethnic, religious, cultural, and geographic backgrounds that are relevant to program effectiveness?

Principle 6. Support of vulnerable families.

Families in greatest economic and social need, as well as those determined to be most vulnerable to breakdown, should be included in government policies and programs.

Does the policy or program:

- identify and publicly support services for families in the most extreme economic or social need?
- give support to families who are most vulnerable to breakdown and have the fewest resources?
- target efforts and resources toward preventing family problems before they become serious crises or chronic situations?

This checklist was adapted by the Policy Institute for Family Impact Seminars from Ooms, T. (1995). *Taking families seriously as an essential policy tool.* Permission for use is given by the Policy Institute for Family Impact Seminars at the University of Wisconsin-Madison/Extension. For further information and resources, see http://www.uwex.edu/ces/familyimpact.