Iowa Legislative Services Agency Fiscal Services



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High School Dropouts

ISSUE

An examination of the trends and costs of programs to prevent and retain high school dropouts.

AFFECTED AGENCIES

Department of Education and local school districts

CODE AUTHORITY

Sections 257.11(4) and 257.38 through 257.41

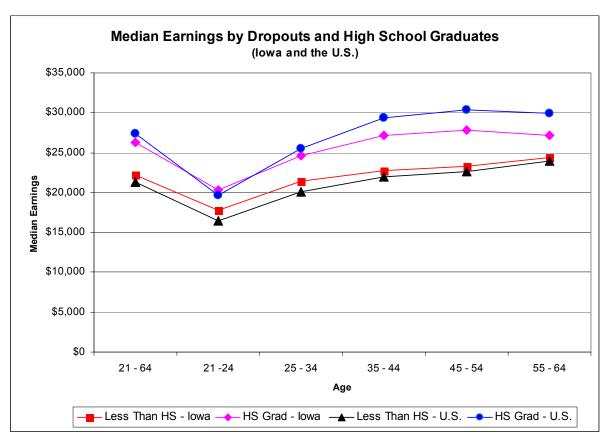
BACKGROUND

Failure to complete high school is associated with a number of negative consequences:

- Reduced personal income and less tax revenues for governmental entities.
- Higher unemployment and increased welfare burden.
- Increased risk of incarceration.
- Lessened social growth and potential accompanied by a reduced sense of control over one's life. (Veale, 2002:1-2)

Chart 1 compares the median earnings of dropouts with high school graduates. The overall median income differences between the two lowa groups is \$4,093 (U.S. 2000 Census). In constant 2000 dollars, an lowa high school dropout earns \$184,000 less in a 45-year working life than does a high school graduate. Nationwide, a dropout's lifetime earnings are approximately \$271,000 less. Iowa's dropouts earn more than the national average, while lowa's high school graduates earn less than the national average.

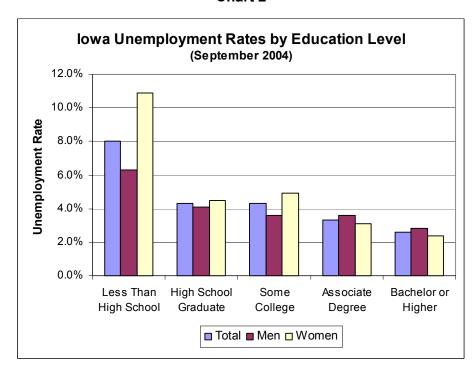
Chart 1



Source: U. S. Census 2000

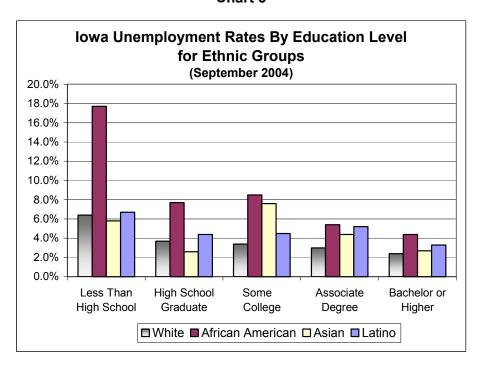
Charts 2 and **3** show unemployment rates by education level for men and women and for different ethnic groups. The unemployment rate for dropouts is almost twice that of high school graduates. Likewise, ethnicity affects unemployment. While the pattern is inconsistent for those with post-secondary education, all ethnic groups show a significant drop in unemployment rates by earning a high school diploma.

Chart 2



Source: U. S. Department of Labor

Chart 3



Source: U.S. Department of Labor

CURRENT SITUATION

lowa has consistently had some of the lowest dropout rates in the nation and achieved the nation's lowest rate in FY 2000. Iowa's dropout rate for FY 2002 was 2.41% of all grade 9 through 12 students. At this rate, approximately one tenth of lowa's students do not graduate from high school. **Chart 4** shows lowa's dropout rates for grades 9 through 12 and grades 7 through 12 since FY 1992. Over this period, dropout rates for high school age students decreased by 30.9%, while dropout rates for grades 7 through 12 decreased by a similar 29.6%.

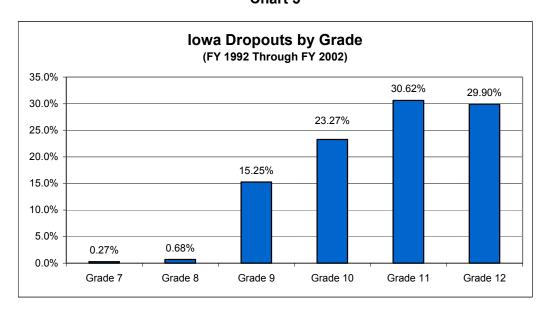
Iowa Dropout Rates (FY 1992 Through FY 2002) 4.0% 3.49% 3.41% 3.31% 3.5% 3.14% 2.98% 2.92% Percentage Dropping Out 3.0% 2.70% 2.56% 2.57% 2.41% 2.5% 2.10% 2.11% 2.02% 1.98% 1.85% 2.0% 1.62% 1.5% 1.0% 0.5% 0.0% FY 1992 FY 1993 FY 1994 FY 1995 FY 1996 FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 -Grades 7-12 - Grades 9-12

Chart 4

Source: Iowa Department of Education, The Annual Condition of Education Report, 2003

Chart 5 shows the grade level at which students dropped out of school between FY 1992 and FY 2002. Almost two thirds of those dropping out leave school during their junior and senior years.

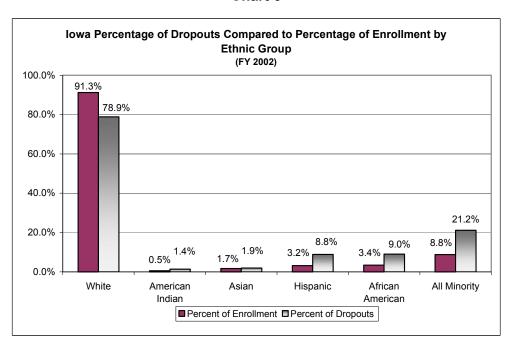
Chart 5



Source: Iowa Department of Education, Basic Educational Data Survey, Dropout File

Chart 6 shows the effect of minority group membership on dropping out of high school. If ethnicity had no effect, then the percentage dropping out would be approximately the same as the percentage of enrollment. American Indians, Hispanics, and African Americans are more than twice as likely to drop out of high school as would be expected from their percentage of enrollment.

Chart 6



Source: Iowa Department of Education, Basic Educational Data Survey

BUDGET IMPACT

Programs for returning dropouts and dropout prevention are developed and administered at the local level. The lowa Department of Education has application and approval procedures, and oversight for programs using funding through State Foundation Aid. Schools may apply for program funding through the additional allowable growth (funded with property taxes) subject to approval of the School Budget Review Committee. Beginning in FY 2001, schools also receive a supplemental weighting in the State Foundation Aid formula to fund programs for at-risk students. **Chart 7** shows the historical funding for returning dropouts and dropout prevention programs.

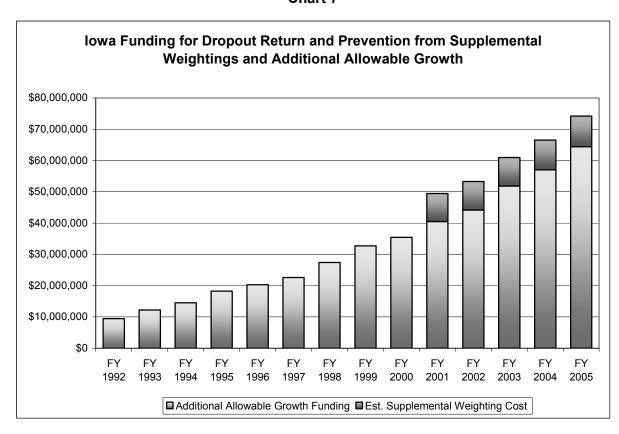


Chart 7

Source: Iowa Department of Management, Aid and Levy Worksheets

Additional allowable growth funding for at-risk students has increased from \$9.5 million in FY 1992 to \$64.4 million in FY 2005. Funding through supplemental weighting has grown from \$8.9 million in FY 2001 to \$9.8 million in FY 2005.

Improving the educational level leads to increased personal income, and increased income results in more taxes paid. The median income for an lowa high school dropout is \$22,200; the median income for an lowa high school graduate is \$26,293, for a difference of \$4,093. For the 2002 tax year, a person in the \$25,000 to \$29,999 income range paid 3.2% of their adjusted gross income in taxes. So the potential dropout who remained in school and graduated would on average pay an additional \$130 in income tax. If it is assumed that 30.0% of the increased income (subtracting payroll deductions, savings, etc.) is spent on purchases subject to 5.0% sales tax, then the additional income would yield another \$61 in sales tax. Other taxes are assumed to be insignificant

for State revenues. Over a 45-year working life, this individual would pay an additional \$8,595 ($$191 \times 45 \text{ years} = $8,595$) in taxes to the State. (This is stated in constant dollars.)

The unknown factor in this analysis is how many individuals these at-risk programs have kept from becoming dropouts. In order to break even for FY 2005, the at-risk programs will need to have prevented 8,639 students from dropping out. That is, \$74.3 million in program costs divided by \$8,595 (constant dollars) in increased taxes equals 8,639 potential dropouts.

In FY 1992, there were 4,783 lowa dropouts; in FY 2002, there were 3,711, a decrease of 1,072 students, suggesting an impact for dropout prevention programs. A more important question is how many potential dropouts (at-risk students) remained in school and graduated? The calculation to fund the at-risk supplemental weighting in the State Foundation Aid Formula includes two factors students eligible for free and reduced price meals and budget enrollment. Those eligible for free and reduced price meals are considered at a higher risk of dropping out. Approximately, one third of the students in grades 1 through 6 are eligible. If this same proportion is applied to students entering high school (9th graders), the five year average (FY 1998 to FY 2002) would be 13,628 "atrisk" students. Over the same period, an average of 4,319 students dropped out of each graduating class. This would leave 9,309 "at-risk" students in the graduating class.

This analysis makes a cursory examination of the impact of retaining dropouts on tax revenues and suggests the returns may exceed the investment in dropout prevention programs. Obviously, a more rigorous and detailed analysis would be needed to confirm this implication. Such a study could include a multiple factor approach to better identify potential dropouts, an examination of program effectiveness, and an estimate of other results and benefits, such as, the offsets from reduced welfare and incarceration costs.

REFERENCES

Iowa Department of Education, The Annual Condition of Education Report, 2003

Iowa Department of Education, Basic Educational Data Survey (1991-1992 through 2001-2002)

Iowa Department of Revenue, 2002 Iowa Individual Income Tax Annual Statistical Report

U. S. Census Bureau (2000 Census):

http://www.census.gov/hhes/income/earnings/call1iaboth.html

U. S. Department of Labor, Bureau of Labor Statistics

ftp://ftp.bls.gov/pub/suppl/empsit.cpseea17.txt

Veale, James R. "The Costs of Dropping Out of School in Iowa." Iowa Association of Alternative Education. December 2002.

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http://staffweb.legis.state.ia.us/lfb/ireview/ireview LSA/FSD: IRMDF000.Doc/11/29/04/10:45 am