Symposium 7: Understanding High-Ability High School Dropouts in the Context of USA Schools

Michael S. Matthews
Bonnie Cramond
Rebecca Nordin Landis
Kyung Hee Kim

World Conference on Gifted and Talented Children
Vancouver, BC Canada – August 6, 2009
Symposium Overview

- Three studies
  - One is qualitative
    - Matthews
  - One is mixed methods
    - Cramond & Landis
  - One is quantitative
    - Kim

- We reached similar conclusions
- Synthesis of our emerging understanding of gifted dropouts
- Discussion and Questions
Background: There are Real Problems in Estimating Dropout Rates

- Widespread misquoting of the Marland Report of 1972: “17-20% of dropouts are gifted” has somehow become “20% of gifted students drop out”

- There are at least four ways of counting dropout rates, each yielding a different estimate (see Matthews, 2006), as well as varied definitions of ‘gifted’ (which often have been left unstated)

- As many as 37% of students have been counted ‘gifted’

- There is widespread underreporting of dropout rates, so problems are not limited to the gifted
What did the *Marland Report* really say?

- Marland (1972) actually stated that 17-20% of gifted students drop out, and that 3.4% of dropouts are gifted
  - Gifted in this case was a WISC IQ $\geq 120$
- Marland used data from Iowa
  - This information was originally collected before 1958, so these estimates are now 50 years out of date!
A very low dropout rate among talent search participants:

- 37 out of 7,916 = 0.47 %; largest estimate = 0.72%
- 7th grade SAT score differences were observed across groups of dropouts, as well as between dropouts and those not dropping out
  - Verbal scores of dropouts attending community college were no lower than among the entire talent search population, but verbal scores of dropouts not attending CC averaged 32 points lower
  - Differences were smaller for SAT Math scores (27 points), but were visible across all dropouts including those attending CC
- Reasons reported for dropping out may be biased due to generally high SES of the talent search population
Statewide Data from Georgia (McBee, 2006):

- The statewide reported dropout rate for non-gifted students was **5.78%** (almost certainly an under-estimate)
- Only **1.24%** of dropouts were also gifted
- Only **0.68%** of gifted students dropped out

*See Kim study for another estimate*
Selected Conclusions from Matthews, 2006 article in Roeper Review:

- The dropout rate is in fact well below the oft-stated “20%” when using a strict definition of giftedness.
- Dropouts may consciously choose to attend GED programs as an alternative to traditional pathways to graduation.
- The gifted appear to persist longer in school before dropping out.

So: Do gifted students’ circumstances and reasons for dropping out differ from those of non-gifted dropouts?
Matthews Study: Interviewing Gifted Dropouts

- Retrospective, guided interviews with six participants aged 18 to 27
- Interviews conducted by phone or via 2-way internet video, followed by member checks
- Giftedness was operationally defined as meeting at least 4 components from a list of 12 possible characteristics of giftedness
- Five females and one male
  - Not representative of the dropout population, in which males outnumber females by approximately 2 or 3:1
- From four different U.S. states
- Two Latina individuals; four White
Qualitative study of participants’ responses identified **four themes:**

- Individual Differences
- Structure of Schooling
- Family & Parenting
- Current and Future Plans
Theme: Individual Differences

- A dislike of, or difficulty with, coursework in mathematics and sometimes in science. However, elsewhere in the same interview, some learners reported that they thought all subjects were easy (i.e., non-challenging).

- In high school, some learners reported having relatively few close friends; they found that their age peers seemed to be concerned more with social interaction, and less committed to learning or academic performance.
Theme: Structure of Schooling

- Participants saw their high school classes as ‘more of the same’, and indicated that they would rather have felt that they were learning something new.
- They reported keenly felt differences between the middle school and high school environments, which led to dissatisfaction with high school.
  - High school was perceived as a less caring environment
  - Due to a lack of gifted programming in high school, some no longer felt ‘special’ due to their gifted status, as they had when younger.
- In one case, individualized educational options would be available to the student only if she officially stated her intention to drop out (see quote).
- Family mobility in some cases led to difficulties in transferring course credit across schools; students were forced to repeat coursework they had already completed elsewhere.
Theme: Family and Parenting

- Parents apparently offered little input in some cases, yet actively supported the decision in others.
  - Some cases may be consistent with Rimm’s view that over-enablement leads to academic underachievement.
- Early family responsibilities were sometimes evident; these responsibilities appear to have interfered with these young women’s education.
  - One participant at age 16 had entered what turned out to be an unsuccessful marriage
  - Another was now engaged, at the age of 18
  - A third left school for work so that she could help support her parents
Most of those interviewed were completing or had completed a GED program. Many were attending a four-year or community college, although not all achieved success on their first try. Younger participants reported few (if any) specific career aspirations. Among the two older respondents, one was completing a master’s degree and the other had already obtained one.
Dropping Out as a Non-traditional Educational Path

- Most interviewees reported rapid progress in obtaining a GED
- For some, dropping out ended up as a form of academic acceleration; one study participant reported completing her M.A. at age 21

What are the Implications for Parents and Schools?
Implications for Parents (1)

- Some learners may need extra help in mathematics once in high school, even without prior difficulty in math.
- Gifted learners may benefit from assistance in understanding the changing nature of curriculum between middle school, high school, and college.
  - Help your child to understand that school moves from a more social or group-oriented approach toward one that emphasizes individual learning performance.
  - The nature of giftedness changes too over this time, from an early emphasis on ability and potential to a view that also takes into account prior academic accomplishments.
If you believe your child should be allowed to make this decision, be sure first to discuss the potential drawbacks and develop a plan for pursuing future goals in education or other areas.

Parents who desire to keep their children on track to a traditional high school diploma should inform themselves about the regulations and options available at their child’s school, and should carefully monitor their child’s progress.
Help your child to explore career options in areas of interest; few students had developed specific career aspirations prior to their mid-20s.

Forming or joining a local advocacy organization (see, for example, www.gachflorida.org) can help in finding support and developing awareness of the experiences of other students and parents in your area.
Some Suggestions for Schools (1)

- Caring teachers are vital
- School policies should allow flexibility in meeting students’ individual needs
  - Alternative schedules should be available to accommodate students who have family responsibilities (i.e., taking care of an ill parent) that preclude regular attendance
  - Acceleration options should be readily available
Suggestions for Schools (2)

- Schools’ unwillingness to offer flexible individualized educational alternatives was partially responsible for these gifted learners’ decisions to drop out.
  - This is consistent with other studies that have found a lack of acceleration options
  - The general lack of gifted education training and programming in secondary settings may also be partially responsible for these difficulties
“a slew of people [in my high school gifted program] ended up dropping out and none of those people are unsuccessful in their lives. I mean, all those people are all people that I still know and have gone on to law school and things like that, and I think the fact that [the gifted program] didn’t capture that in them is really, you know, is kind of a travesty.” – Deb
STOPPING THE CYCLE OF POVERTY THROUGH DROP-OUT PREVENTION

Bonnie Cramond
Rebecca Nordin Landis
Educational Psychology and Instructional Technology
University of Georgia
The problem of high school dropouts is so troubling that the National Governors Association adopted this critical issue as a high school reform priority. In the Southern states, the graduation rate is estimated to be worse than the national average.
Estimates range from 5 to 25 percent of gifted students drop out. Estimates are that half of gifted students are not even identified. (Renzulli & Park, 2002; Robertson, 1991; Howley, Howley & Pendarvis, 1995)

Using the 5% estimate, about 11,000 identified gifted students a year drop out.
Not just a poor, minority problem

- In 1983, 59% dropouts were white, 57% middle class
  (National Center for Education Statistics)

- Robertson (1990) reported that gifted dropouts are from majority culture, higher socio-economic levels than other dropouts and speak English as their first language.
Why do bright students drop out of school?
Can we use what they tell us to make schools more engaging
Mixed Methods--in depth interviews and psychological tests
  - Creativity and sensitivities
Majority of the group had creativity scores at the 99th percentile.
Dropouts scored significantly higher than the norming population on a psychological measure of heightened sensitivity in the sensual ($t = 2.846, p < .01$) and the intellectual ($t = 2.509, p < .02$) areas.
Case Study Results

- Case studies of 13 high ability students who dropped out of their regular schools
- Preliminary analyses of the interviews conducted with these students indicate that they were bored and frustrated with classes they felt were irrelevant, had lost interest in school by the end of elementary school/beginning of middle school, experienced emotional and intellectual asynchrony with their peers, and did not feel respected, trusted, or cared about by school personnel. Many wanted a relationship with a mentor and questioned the way in which discipline was carried out. Some were picked on by their peers and few had extracurricular involvement.
Comparison Group

- 21 high ability high school students planning to graduate
- No difference in emotional sensitivities
- Creativity--Some differences in expression of creativity:
  - Elaboration scores were significantly higher for comparison group
  - Abstractness of Titles and Creative Strengths Checklist scores higher for dropouts
None considered dropping out

Reasons students chose to stay in school:

- future aspirations
- being in school because they valued education
- thinking dropping out was a bad decision
- feeling a sense of responsibility to themselves and their parents to stay in school
- social reasons
Dissemination

- Article in progress
- 4 presentations at professional meetings
- Grant proposal submitted
- Formation of dropout study group--White paper
- Article in COE magazine
Kim’s Study

An Examination of Creative Personality and Anti-creative School Environments as Predictive Factors in High School Dropouts

Presented by Kim & Hull at the 2008 NAGC convention in Tampa, Florida
Background to Kim study: Creativity & School

- Very creative persons had difficulty in school (Amabile, 1989)
  - 60% of the 400 had serious school problems (Goertzel & Goertzel, 1960)
- Children’s creative behaviors are punished & discouraged by parents & teachers (Torrance, 1981, 2000a, 2000b; Seeley, 1984)
Highly Creative Students (HCS) & Conformity

- HCS display characteristics that teachers find undesirable (Davis & Rimm, 1994; Oliphant, 1986; Rimm & Davis, 1976; Ritchie, 1980; Robinson, 1980; Torrance, 1962)
- Teachers’ choices of favorite students negatively correlate with creativity (Scott, 1999; Westby & Dawson, 1995)
- HCS who are energetic & unconventional misidentified as having ADHD (Cramond, 1994)
- Preference for conformity & structure in the educational system may cause HCS to drop out
Creative Dropouts:

- Show signs of maladjustment, problems with authority, & nonconformity, family conflicts, hostility, suspiciousness, oversensitivity, & egotism (Davis, 1984; Johnson, 1970; Vaughan, 1968)
- Annually 100,000 estimated (Taylor & Ellison, 1983)
Two National-level Data Sources

**NELS:88** (National Educational Longitudinal Study of 1988)
- 24,599-8th-graders
- 1,052 schools & parents, teachers, & school administrators

**ELS:2002** (Educational Longitudinal Study of 2002)
- 17591-10th-graders
- 752 schools & parents, teachers, & school administrators
Defining the Creative Person

A Creative Person was defined based on the following questions:

• It is okay to ask challenging questions: Yes
• It is okay to solve problems using new ideas: Yes
• Make up methods to solve science problem: At least once a week
• Conduct own experiments in science: At least once a week (Once a week, Almost everyday, or Everyday)
## Frequency & Percentage of Dropouts by Gender

<table>
<thead>
<tr>
<th>Dropout</th>
<th>Frequency</th>
<th>Percentage/Dropouts</th>
<th>Percentage/N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ELS</td>
<td>NELS</td>
<td>ELS</td>
</tr>
<tr>
<td>Male</td>
<td>151,802</td>
<td>164,215</td>
<td>51.7</td>
</tr>
<tr>
<td>Female</td>
<td>140,550</td>
<td>119,065</td>
<td>47.8</td>
</tr>
<tr>
<td>No response</td>
<td>1,420</td>
<td>34,340</td>
<td>.5</td>
</tr>
<tr>
<td>Total</td>
<td>293,772</td>
<td>317,620</td>
<td>100</td>
</tr>
</tbody>
</table>
Frequency & Percentage of Dropout by Reason on *ELS 2002* \( (N = 317,619) \)

<table>
<thead>
<tr>
<th>Dropout Reason</th>
<th>Dropout Frequency (Percentage)</th>
<th>Male Frequency (Percentage)</th>
<th>Female Frequency (Percentage)</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not Liking School</strong></td>
<td>47546 (15.0)</td>
<td>23848 (50.2)</td>
<td>18681 (39.3)</td>
<td>5020 (10.6)</td>
</tr>
<tr>
<td>Low Academic Achievement</td>
<td>37480 (11.8)</td>
<td>20833 (55.6)</td>
<td>13462 (35.9)</td>
<td>3185 (8.5)</td>
</tr>
<tr>
<td>Financial/Support Issues</td>
<td>25267 (8.0)</td>
<td>15097 (59.7)</td>
<td>8308 (32.9)</td>
<td>1862 (7.4)</td>
</tr>
<tr>
<td><strong>Easy to Get GED</strong></td>
<td>22240 (7.0)</td>
<td>13076 (58.8)</td>
<td>6749 (30.3)</td>
<td>2415 (10.9)</td>
</tr>
<tr>
<td>Missed Too Many School Days</td>
<td>16069 (5.1)</td>
<td>8390 (52.2)</td>
<td>5728 (35.6)</td>
<td>1950 (12.1)</td>
</tr>
<tr>
<td><strong>Suspended or Expelled</strong></td>
<td>9923 (3.1)</td>
<td>4912 (49.5)</td>
<td>3851 (38.80)</td>
<td>1160 (11.7)</td>
</tr>
<tr>
<td>Pregnant, Baby, Married</td>
<td>9500 (3.0)</td>
<td>3057 (32.2)</td>
<td>5602 (59.0)</td>
<td>840 (8.8)</td>
</tr>
<tr>
<td>Not Safe</td>
<td>3401 (1.1)</td>
<td>451 (13.3)</td>
<td>2489 (73.2)</td>
<td>461 (13.5)</td>
</tr>
<tr>
<td><strong>Dropout Was A Good Decision</strong></td>
<td>22736 (7.2)</td>
<td>12145 (53.4)</td>
<td>8005 (35.2)</td>
<td>2586 (11.4)</td>
</tr>
</tbody>
</table>
Significant odds ratios

- IVs that **increase** the odds of dropout
  - CREATIVE † 1.62
  - Okay to disobey school rules 1.30
  - Being put down by teachers 1.28

- Being CREATIVE is associated with a **62% increase** in the odds of dropout.
Implications of Kim’s Study

- To encourage creativity, schools must remove environmental blocks that inhibit creativity.
- The best creative techniques & the strongest creative personality may not be sufficient to compensate for an environment that crushes creativity.
Discussion and Questions?

- Contact Dr. Matthews at michael.matthews@uncc.edu
- Contact Dr. Cramond at bcramond@uga.edu
- Contact Ms. Landis at rebeccan@uga.edu
- Contact Dr. Kim at kkim@wm.edu