The impact of alternative education: A summative evaluation of the Achieve Alternative Education Program

CATHY BENDIC SEN COLLOQUIUM PRESENTATION APRIL 21, 2018
Dropout prevention
US Dept. of Education (2014) reported:
- Nearly 745,000 students did not graduate;
  21,374 from Illinois
- 86% Graduation Rate in Illinois
  - Achievement Gap for students of color, ELL, IEP, & Low-Income

Consequences of dropping out:
- less likely active in labor force
- Earn substantially less (≈1 million over a lifetime)
- higher rates of crime
- 50% of inmates in state prisons
- More likely on public welfare and health services
- Cost: over $148 billion in lost tax revenues & public expenditures over a lifetime

(Belfield, Levin, Muennig, & Rouse, 2006)
Achieve Program implemented in 2012-13 school year

- regular & special education students with academic, behavioral, and/or social-emotional issues
- prevent at-risk from dropping out of high school
- Tier 2 intervention of RTI model
  - helps students who are unsuccessful in the regular classroom setting
- 5th year of implementation & yet to be evaluated
The purpose of this quantitative quasi-experimental study was to evaluate and document the effectiveness of the Achieve Alternative Education Program, in order to determine the impact on at-risk students, establish accountability, and identify areas for improvement.
Significance of the Study

- **Limited empirical studies** on the effectiveness of alternative education (Aron, 2006; Foley & Pang, 2006; Lehr, Tan, & Ysseldyke, 2009)
  - Specifically on student outcomes (Culbertson, d’Entremont, & Poulos, 2014)

- Student attending alternative education programs tend to be from **marginalized populations who already at-risk** in our society

- **Moral & legal obligation** to provide a free and appropriate education with access to the most rigorous curriculum

- **Important to all stakeholders** in the school district
  - **Costly program** with heavy resources allocated
    - full-time counselor and social worker
    - co-taught class structure
    - smaller class sizes
Literature Review

Descriptive studies on student characteristics:

- Poor grades, truancy issues, behavior issues, teen pregnancy (Carver & Lewis, 2010)
- Disproportionate students of color (African-American & Hispanic), students with IEP, male students, & low-income (Chiag & Gill, 2010; Fairbrother, 2008; Perzigian, Afacan, Justin, & Wilkerson, 2016)

Evaluating alternative education programs:

- Studies on small, academically non-selective found increased graduation rates, fewer failed classes, more credits earned, higher percentage of students' college ready (Bloom, Thompson, Unterman, 2010; Bloom & Unterman, 2014)
- Study on behavior-focused alternative found lower discipline referrals, lower suspensions, but earned fewer credits and had lower attendance rates compared to students in traditional schools (Wilkerson, Afacan, Perzigian, Justin, & Lequia, 2016)
- Study on academic remediation found decrease in discipline referrals, suspensions, and increase in credit completion (Wilkerson, Afacan, Yan, Justin, & Datar, 2016)
- Fairbrother (2008) found students valued the small, supportive, and caring environment but programs lacked rigor with low expectation and remedial course work.
Research Questions:

What differences exist in **academic achievement** for at-risk students who attended the Achieve Program and at-risk students who remained in the traditional setting?

What differences exist in **attendance rates** for at-risk students who attended the Achieve Program and at-risk students who remained in the traditional setting?

What differences exist in **office discipline referrals** for at-risk students who attended the Achieve Program and at-risk students who remained in the traditional setting?

What differences exist in **graduation rates** for at-risk students who attended the Achieve Program and at-risk students who remained in the traditional setting?
Research Design

- Quantitative quasi-experimental 2x2 Mixed Model Design
- Groups were already intact and lacked random assignment
- Pre & Post Archival Data
  - Attendance
  - Office disciplinary referrals
  - Cumulative GPA
  - Graduation frequency counts for all participants
- Demographic Data
  - Ethnicity
  - SES
  - Gender
  - IEP or No IEP
Participants

112 At-risk students

• Achieve Group: 57 students
  (Participated for at least one year)

• Control Group: 55 students*
  (Identified for Tier 2 support: Corrective Reading, Math Resource, or Academic Resource AND failed at least 2 classes during 9th grade)

*may include students referred to Achieve who chose not to participate

<table>
<thead>
<tr>
<th></th>
<th>Achieve</th>
<th>No Achieve</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>57</td>
<td>55</td>
<td>112</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>39</td>
<td>39</td>
<td>78</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>16</td>
<td>34</td>
</tr>
<tr>
<td>SES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free/Reduced Lunch</td>
<td>31</td>
<td>43</td>
<td>74</td>
</tr>
<tr>
<td>No Free/Reduced Lunch</td>
<td>26</td>
<td>12</td>
<td>38</td>
</tr>
<tr>
<td>Special Needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEP</td>
<td>16</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>No IEP</td>
<td>41</td>
<td>41</td>
<td>82</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>15</td>
<td>26</td>
<td>41</td>
</tr>
<tr>
<td>American Indian</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Asian</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>African American</td>
<td>14</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td>White</td>
<td>22</td>
<td>15</td>
<td>37</td>
</tr>
<tr>
<td>Multi-Racial</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>
What differences exist in **ACADEMIC ACHIEVEMENT** for at-risk students who attended the Achieve Program and at-risk students who remained in the traditional setting?

**Data:** Cumulative GPA  
**Analysis:** Mixed Factorial ANOVA

**Results:**

**Statistically significant interaction between school setting & time on GPAs**  
\( F(1,110) = 9.663, p = .002, h^2_p = 0.081 \)

**Statistically significant main effect of time on GPA**  
\( F(1,110) = 9.878, p < .001, h^2_p = 0.057 \)
What differences exist with ATTENDANCE RATES for at-risk students who attended the Achieve Program and at-risk students who remained in the traditional setting?

Data: Attendance Rates
Analysis: Mixed Factorial ANOVA

Results: **Statistically significant interaction between school setting & time on attendance rates**

\( F(1, 104)=10.576, \quad p = .002, \quad h^2_p = .092 \)
What differences exist in **DISCIPLINE OFFICE REFERRALS** for at-risk students who attended the Achieve Program and at-risk students who remained in the traditional setting?

**Data:** Office Discipline Referrals

**Analysis:** Mixed factorial ANOVA

**Results:**

No statistically significant interaction between school setting and time on discipline office referrals

\( (F(1,105)=0.021, \ p = .885, \eta_p^2 <.001) \)

Statistically significant main effect of time on discipline referrals

\( (F(1,105)= 21.464, \ p < .005, \eta_p^2 =.170) \)
What difference exist in **GRADUATION RATES** for at-risk students who attended the Achieve Program and at-risk students who remained in the traditional setting?

Data: Graduation Rates  
Analysis: Pearson Chi Square Test  

Results: **Statistically significant relationship between school setting and graduation from high school**  

\[ \chi^2 (1, N = 112) = 24.115, \ p = <.001 \]  
Cramer’s V = .464  

- **Very strong relationship between graduation and attending the Achieve Alternative Education Program**
Based on the findings of this study, participation in the Achieve Program had positive effects on student outcomes:

- Improved academic achievement as measured by GPAs
- Improved attendance rates
- Increased graduation rates
  - 95% of Achieve graduated compared to only 55% of non-Achieve

Support should continue for the Achieve Alternative Education Program and other similar alternative programs.
Limitations

- **Generalizability**
  - Findings are specific to the investigated school program

- **Quasi-experimental design & inherent limitations due to not having a random sample**
  - Not able to control for other variables
  - Students who chose to participate in Achieve may have been more motivated academically

- Only examined quantitative student outcome data
Recommendations

More research needed to examine the effectiveness of alternative education programs

- Explore **additional ways to measure** student outcomes
  - **Academics:** credit completion, standardized test scores, commons assessments
  - **Discipline:**
    - distinguish between specific nature of discipline referral
      - help to identify patterns and changes in behavior
    - Pre-Post Behavior rating scales which may help measure changes/improvements

- Expand to include **other types of data** (student outcome data only tells part of story)
  - Incorporate **quantitative data** including student voice

- Longitudinal data to examine long term outcomes to determine if prepared for post secondary options & success contributors to society
References


References


