WWC Intervention Report U.S. DEPARTMENT OF EDUCATION

## **What Works Clearinghouse**



Dropout Prevention January 24, 2008

### **New Chance**

#### **Program description**

New Chance, a program for young welfare mothers who have dropped out of school, aims to improve both their employment potential and their parenting skills. Participants take GED (General Educational Development) preparation classes and complete a parenting and life skills curriculum. Once they complete this first phase of the program, they can receive occupational training and job placement assistance from *New Chance*, which also offers case management and child care.<sup>1</sup>

#### Research

One study of *New Chance* met What Works Clearinghouse (WWC) evidence standards. This randomized controlled trial, including over 2,000 women, was conducted in 16 sites in 10 states: California, Colorado, Florida, Illinois, Kentucky, Michigan, Minnesota, New York, Oregon, and Pennsylvania. Based on this

one study, the WWC considers the extent of evidence for *New Chance* to be small for completing school. That study did not examine the effectiveness of *New Chance* in the domains of staying or progressing in school.<sup>2</sup>

#### **Effectiveness**

New Chance was found to have potentially positive effects on completing school.

	Staying in school	Progressing in school	Completing school
Rating of effectiveness	na	na	Potentially positive effects
Improvement index <sup>3</sup>	na	na	Average: +8 percentile points

na = not applicable

- 1. The WWC dropout prevention review includes interventions designed to encourage students who drop out to return to school and earn a high school diploma or GED certificate, as well as interventions designed to prevent initially enrolled students from dropping out. For more details, see the <a href="https://www.wwc.ncbi.nlm.
- 2. The evidence in this report is based on available research. Findings and conclusions may change as new research becomes available.
- 3. These numbers show the average improvement indices for all findings across the study.

## Additional program information

#### **Developer and contact**

New Chance, developed and evaluated by MDRC, is no longer an active program, and no current developer or contact information is available. Additional information about the New Chance model and the implementation experience of the organizations that used it can be found in Quint, Fink, and Rowser (1991), listed in the "References" for this report.

#### Scope of use

New Chance operated in 16 communities (as part of the MDRC evaluation) in 10 states between 1989 and 1992. Local institutions, including schools, community colleges, and community service organizations, ran the New Chance programs using funding from both private and government sources.

#### **Description of intervention**

New Chance aims to improve the education, parenting, life skills, and employment prospects of young welfare mothers. Program services have two phases. In the first phase, participants receive adult basic education, GED preparation, and pre-employment skills training. They also receive life skills training, including health education, family planning, parenting education, and pediatric health services. In this phase, participants attend classes five days a week for six hours a day. After five months (or after they

receive their GED certificates if this occurs first), participants enter the second phase of New Chance. During this phase, participants receive occupational skills training, participate in internships, and receive job placement assistance, services typically provided by an outside agency. Throughout their time in the program, they have access to free child care and a case manager who monitors and assists their progress. To create a personal environment, New Chance programs are small, serving no more than 40 participants at any time. New Chance services are available to participants for a period of up to 18 months. Participation in the program is voluntary. To be eligible young mothers must be 16 to 22 years old, have first given birth as a teenager, be economically disadvantaged (most often determined by their receipt of cash assistance), lack a high school diploma or GED certificate, and not be pregnant at program entry. Programs are also allowed to serve a small number of young mothers who have already completed high school if they have poor reading skills and would benefit from the program's adult basic education classes.

#### Cost

According to study authors, the average cost of *New Chance* is just over \$11,700 per participant.<sup>4</sup> Child care and case management services represent more than half of the total cost of the program.

#### Research

The WWC reviewed one study of the effectiveness of *New Chance* (Quint, Bos, & Polit, 1997), a randomized controlled trial that met WWC evidence standards.

The Quint, Bos, and Polit study (1997) examined the *New Chance* program in 16 sites in 10 states. Between 1989 and 1991, 2,322 women who were eligible and volunteered for the program were randomly assigned: 1,553 to the *New Chance* group and 769 to the control group. The results summarized here

are based on data for the 1,401 *New Chance* mothers and 678 control group mothers who completed the 42-month follow-up survey.

#### Extent of evidence

The WWC categorizes the extent of evidence in each domain as small or moderate to large (see the What Works Clearinghouse Extent of Evidence Categorization Scheme). The extent of

4. See Quint, Bos, & Polit (1997). The WWC converted costs to 2007 dollars using the consumer price index.

#### **Research** (continued)

evidence takes into account the number of studies and the total sample size across studies that met WWC evidence standards.<sup>5</sup>

The WWC considers the extent of evidence for *New Chance* to be small for completing school.

#### **Effectiveness**

#### **Findings**

The WWC review of interventions for dropout prevention addresses student outcomes in three domains: staying in school, progressing in school, and completing school. The *New Chance* study by Quint et al. examined outcomes in the completing school domain.

Completing school. The study showed a statistically significant difference between New Chance and control group youth on the likelihood of receiving a high school diploma or GED certificate. Three and a half years after random assignment, 52% of the New Chance group had earned a diploma or GED certificate, compared with 44% of the control group. This positive effect on completion came entirely from New Chance's positive and statistically significant effect on the likelihood of receiving a GED

certificate. *New Chance* was found to have a small, but statistically significant, negative effect on the likelihood of earning a high school diploma.<sup>6</sup>

#### **Rating of effectiveness**

The WWC rates the effects of an intervention in a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings, the size of the difference between participants in the intervention and the comparison conditions, and the consistency in findings across studies (see the WWC Intervention Rating Scheme).<sup>7</sup>

## The WWC found New Chance to have potentially positive effects on completing school

#### Improvement index

The WWC computes an improvement index for each individual finding. In addition, within each outcome domain, the WWC computes an average improvement index for each study as well as an average improvement index across studies (see <a href="Technical Details of WWC-Conducted Computations">Technical Details of WWC-Conducted Computations</a>). The improvement index represents the difference between the percentile rank of the average student in the intervention condition and that of the average student in the comparison condition.

Unlike the rating of effectiveness, the improvement index is based entirely on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analyses. The improvement index can take on values between –50 and +50, with positive numbers denoting results favorable to the intervention group.

Based on the one study of *New Chance* that met evidence standards, the average improvement index for completing school is +8 percentile points.

- 5. The Extent of Evidence Categorization was developed to tell readers how much evidence was used to determine the intervention rating, focusing on the number and size of studies. Additional factors associated with a related concept, external validity—such as students' demographics and types of settings in which studies took place—are not taken into account for the categorization. Information about how the extent of evidence rating was determined for *New Chance* is in Appendix A6.
- 6. As in other WWC dropout prevention reviews, the combined effect of *New Chance* on receiving a high school diploma or GED certificate was used to determine the effectiveness rating. These results are reported in Appendix A3. The separate effects of *New Chance* on receiving a high school diploma or a GED certificate are reported in Appendix A4.2.

# The WWC found New Chance to have potentially positive effects on completing school (continued)

#### Summary

The WWC reviewed one study of the effectiveness of *New Chance*. This study met WWC evidence standards. Based on the

results from the one qualifying study, the WWC found potentially positive effects on completing school. The conclusions presented in this report may change as new research emerges.

#### References

#### Met WWC evidence standards

Quint, J. C., Bos, H. M., & Polit, D. F. (1997). New Chance: Final report on a comprehensive program for young mothers in poverty and their children. New York, NY: MDRC.

#### Additional sources

Quint, J. C., Fink, B. L., & Rowser, S. L. (1991). New Chance: Implementing a comprehensive program for disadvantaged young mothers and their children. New York, NY: MDRC. Quint, J., Polit, D., Bos, H., & Cave, G. (1994). New Chance: Interim findings on a comprehensive program for disadvantaged young mothers and their children. New York, NY: MDRC.

For more information about specific studies and WWC calculations, please see the <u>WWC New Chance Technical</u> <u>Appendices</u>.

### **Appendix**

#### Appendix A1 Study Characteristics: Quint, Bos, & Polit, 1997 (randomized controlled trial)

Characteristic	Description
Study citation	Quint, J. C., Bos, J. M., & Polit, D. F. (1997). New Chance: Final report on a comprehensive program for young mothers in poverty and their children. New York, NY: MDRC.
Participants	To be eligible for <i>New Chance</i> , women had to meet several criteria: (1) be 16 to 22 years old, (2) lack a high school diploma or GED certificate, (3) receive Aid to Families with Dependent Children (AFDC), and (4) not be pregnant at program entry. The sites were offered some flexibility in these eligibility rules; 25% of their participants could be either: (1) women who were high school graduates but read below a ninth-grade level or (2) non-AFDC recipients who were deemed economically disadvantaged by another accepted standard. Among those in the analysis sample, 6% had a high school diploma or GED certificate at random assignment; 5% were not receiving AFDC at this point.
	New Chance served a disadvantaged group of young mothers. Only 30% read at a tenth-grade level or above. The majority (63%) had not been employed in the previous 12 months. Almost 4 in 10 had left school before their first pregnancy. More than one in four were at high risk of clinical depression according to their self-reported prevalence of depressive symptoms. Their average age at study entry was 19. About half the sample was African-American, and about one in four was Hispanic.
	From 1989 to 1991, 2,322 eligible young mothers were randomly assigned—1,553 to <i>New Chance</i> and 769 to the control group. The analyses summarized in this report are based on data collected on the 42-month follow-up survey; 1,401 <i>New Chance</i> mothers and 678 control group mothers responded to this survey, resulting in response rates of 90% and 88% respectively.
	Among those who responded to the 42-month follow-up survey, the study authors compared program and control group members on more than 50 baseline characteristics. These included their ethnicity, marital status, number of children, highest grade completed, education aspirations, employment history, reading ability, mental health status, contraceptive use, and family background. On almost all these measures there was no statistically significant difference between the research groups at the .05 level of significance. Two exceptions were the education of the sample member's father (with program group members slightly less likely to have a father with a high school degree) and the number of pregnancies at baseline (with program group members slightly more likely to have had only one pregnancy prior to program entry). The study authors controlled for these and other baseline characteristics when estimating program impacts.
Setting	The study was conducted in 16 sites in 10 states: California (Chula Vista, Inglewood, San Jose), Colorado (Denver), Florida (Jacksonville), Illinois (Chicago Heights), Kentucky (Lexington), Michigan (Detroit), Minnesota (Minneapolis), New York (Bronx, Harlem), Oregon (Portland, Salem), and Pennsylvania (Allentown, Philadelphia, Pittsburgh). Most host organizations were either education institutions (adult schools, community colleges, secondary schools) or community service organizations.

(continued)

#### **Appendix A1** Study Characteristics: Quint, Bos, & Polit, 1997 (randomized controlled trial) (continued)

Characteristic	Description
Intervention	New Chance had wide-ranging goals for improving the lives of young mothers on welfare. The program aimed to foster women's personal and economic development by increasing their employment potential, as well as their life and parenting skills. The services were broad, from GED preparation to family planning, with the intention of decreasing the likelihood of long-term poverty among participants and improving outcomes for their children.
	The focus of the program was education and training, with additional services provided to improve parenting and life skills. The local programs were small, serving about 40 participants at a time. Case managers were available to monitor and assist participants in their progress through the program. Although their caseloads were supposed to be no larger than 25 participants, case managers at more than half the sites exceeded this level at some point (Quint, Bos, & Polit,1997). The programs also offered free child care, usually on site. Women were allowed to remain in the program for 18 months, with case managers providing up to 12 additional months of follow-up beyond this point.
	New Chance services had two phases. The first phase focused on education and personal development. Participants were expected to attend classes from 9am to 3pm, five days a week. The education components, which lasted two to three hours a day, included GED preparation, career exploration, and pre-employment skills training. Life skills could include instruction on health education and family planning, communication skills, budgeting, and child development. For some of these components, such as communication skills, assertiveness, and problem solving, the program used the Life Skills and Opportunities (LSO) curriculum, which was adapted specifically for the demonstration. Services in Phase I could be offered for the five months or until a participant received her GED certificate.
	In the second phase of <i>New Chance</i> the emphasis was on occupational preparation. Participants could engage in vocational training, paid or unpaid internships, and job placement. College attendance was not a formal component of the <i>New Chance</i> model, but some sites encouraged participants to enroll. Most of the Phase II activities occurred off site and were offered through other agencies. Even so, participants still received child care and case management services through the local programs.
	According to study authors, participants often had difficulty making the transition from Phase I to Phase II (Quint, Bos, & Polit, 1997). Staff reported that many participants were motivated to receive a GED certificate but did not have specific goals for acquiring job skills. About 85% of women assigned to <i>New Chance</i> attended some adult education activities. But fewer than a third participated in occupational skills training and only 20% participated in an internship. Women who did attain their GED certificate typically dropped out of the program rather than move on to Phase II.
Comparison	Control group members were not eligible to participate in <i>New Chance</i> . They were given a list of other community programs and services and were free to participate in these or any other services available in the community. Based on responses to follow-up surveys, many of the control group members participated in adult education and literacy programs. During the 42-month follow-up period, 86% reported that they participated in an education program, job skills training, or job club (Quint, Bos, & Polit, 1997).
Primary outcomes and measurement	One relevant outcome from the <i>New Chance</i> study is included in this summary and used for rating purposes: receiving a high school diploma or GED certificate within 42 months of random assignment. (For more detailed description of outcome measures, see Appendix A2.) The study also examined the program's effects on college credits, trade certification, reading scores, living arrangements, fertility, mental and physical health, employment, earnings, AFDC receipt, and child outcomes. These outcomes, however, do not fall within the three domains examined by the WWC's review of dropout prevention interventions (staying in school, progressing in school, and completing school). So, they are not included in this report.
Staff training	To be selected as a <i>New Chance</i> site, sites were required to have experience providing services to adolescent parents in at least two of the following four areas: education, employment-related services, health and personal development, and services for participants' children (Quint, Fink, & Rowser, 1991). Therefore, all sites had some experience delivering some of the services offered by <i>New Chance</i> ; however, no site previously had delivered all of the major <i>New Chance</i> components. MDRC hosted a "kick-off" conference for sites, followed by a two-and-a-half day training on the Life Skills and Opportunities curriculum for staff expected to teach life skills to participants. MDRC also sponsored an all-site conference with sessions on case management, job development, and family planning. In addition to the training, MDRC provided regular on-site technical assistance, visiting sites every four to six weeks (Quint, Fink, & Rowser, 1991).

<sup>1.</sup> The WWC dropout prevention protocol specifies that relevant interventions should target students aged 14 to 21. At program entry, 98% of *New Chance* participants were in this age range. For this reason, the WWC deemed this intervention appropriate for inclusion in the dropout prevention reviews.

#### Appendix A2 Outcome measures for the completing school domain

Outcome measure	Description
Received high school diploma or GED certificate within 42 months of random assignment	This binary measure represents the percentage of students who received either a high school diploma or earned a GED certificate within 42 months of random assignment. This measure was based on the person's response to the 42-month follow-up survey. A small proportion of sample members (6%) had already received a high school diploma or GED certificate at baseline. These sample members are included in this measure as cases who received a diploma or GED certificate within 42 months of random assignment.

#### Appendix A3 Summary of study findings included in the rating for the completing school domain<sup>1</sup>

			Authors' finding	s from the study	-			
			Mean o	utcome		WWC ca	lculations	
Outcome measure	Study sample	Sample size (students)	New Chance group	Comparison group	Mean difference <sup>2</sup> ( <i>New Chance</i> – comparison)	Effect size <sup>3</sup>	Statistical significance <sup>4</sup> (at $\alpha = 0.05$ )	Improvement index <sup>5</sup>
Quint, Bos, & Polit, 1997 (randomized controlled trial) <sup>6</sup>								
Earned a high school diploma or GED certificate within 42 months of random assignment (%)	Full sample	2,079	51.9	43.8	8.1	0.20	Statistically significant	+8
Domain average for completing	school <sup>7</sup>					0.20	Statistically significant	+8

- 1. This appendix reports findings considered for the effectiveness rating and the average improvement index for the completing school domain. Subgroup findings by age are presented in Appendix A4.1. Appendix A4.2 reports the separate impacts of *New Chance* on earning a high school diploma and earning a GED certificate.
- 2. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group.
- 3. Effect sizes for dichotomous variables were computed using the Cox Index. For an explanation of the effect size calculation, see <u>Technical Details of WWC-Conducted Computations</u>.
- 4. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between groups.
- 5. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and the average student in the comparison condition. The improvement index can take on values between -50 and +50, with positive numbers denoting results favorable to the intervention group.
- 7. This row provides the study average, which in this case is also the domain average. The WWC-computed domain average effect size is a simple average rounded to two decimal places. The domain improvement index is calculated from the average effect size.

#### Appendix A4.1 Summary of subgroup findings by age for the completing school domain<sup>1</sup>

			Authors' finding	s from the study	-			
			Mean outcome		WWC calculations			
Outcome measure	Study sample	Sample size (students)	New Chance group	Comparison group	Mean difference <sup>2</sup> ( <i>New Chance</i> – comparison)	Effect size <sup>3</sup>	Statistical significance <sup>4</sup> (at $\alpha = 0.05$ )	Improvement index <sup>5</sup>
	Quint, Bos, & Polit, 1997 (randomized controlled trial) <sup>6</sup>							
Earned a high school diploma or GED certificate within 42 months of random assignment (%)	16–17 years old at baseline	402	50.8	44.1	6.7	0.16	ns	+7
Earned a high school diploma or GED certificate within 42 months of random assignment (%)	18–19 years old at baseline	997	51.5	46.1	5.4	0.13	ns	+5
Earned a high school diploma or GED certificate within 42 months of random assignment (%)	20–22 years old at baseline	678	52.9	40.2	12.7	0.31	Statistically significant	+12

#### ns = not statistically significant

- 1. This appendix presents subgroup findings by age for the intervention's effects on high school diploma and GED receipt. The full sample was used for determining the effectiveness rating. These findings are presented in Appendix A3.
- 2. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group.
- 3. Effect sizes for dichotomous variables were computed using the Cox Index. For an explanation of the effect size calculation, see <u>Technical Details of WWC-Conducted Computations</u>.
- 4. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between groups.
- 5. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and the average student in the comparison condition. The improvement index can take on values between -50 and +50, with positive numbers denoting results favorable to the intervention group.

#### **Appendix A4.2** Summary of additional findings for the completing school domain<sup>1</sup>

			Authors' finding	s from the study	-				
			Mean o	utcome	WWC calculations				
Outcome measure	Study sample	Sample size (students)	New Chance group	Comparison group	Mean difference <sup>2</sup> ( <i>New Chance</i> – comparison)	Effect size <sup>3</sup>	Statistical significance <sup>4</sup> (at $\alpha = 0.05$ )	Improvement index <sup>5</sup>	
	Quint, Bos, & Polit, 1997 (randomized controlled trial) <sup>6</sup>								
Earned a high school diploma within 42 months of random assignment (%)	Full sample	2,079	6.9	10.4	-3.5	-0.27	Statistically significant	-11	
Earned a GED certificate within 42 months of random assignment (%)	Full sample	2,079	45.2	33.4	11.8	0.30	Statistically significant	+12	

- 1. This appendix presents findings for the intervention's separate effects on high school diploma and GED receipt. The intervention's combined effect on high school diploma and GED receipt was used for determining the effectiveness rating and is presented in Appendix A3.
- 2. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group.
- 3. Effect sizes for dichotomous variables were computed using the Cox Index. For an explanation of the effect size calculation, see <u>Technical Details of WWC-Conducted Computations</u>.
- 4. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between groups.
- 5. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and the average student in the comparison condition. The improvement index can take on values between -50 and +50, with positive numbers denoting results favorable to the intervention group.

#### Appendix A5 New Chance rating for the completing school domain

The WWC rates an intervention's effects for a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. 
For the outcome domain of completing school, the WWC rated *New Chance* as having potentially positive effects. *New Chance* did not meet the criteria for positive effects because only one study showed a statistically significant or substantively important effect in this domain. The remaining ratings (mixed effects, no discernable effects, potentially negative effects, negative effects) were not considered because *New Chance* was assigned the highest applicable rating.

#### **Rating received**

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

Criterion 1: At least one study showing a statistically significant or substantively important positive effect.

Met. One study of New Chance demonstrated a statistically significant positive effect.

#### **AND**

• Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

Met. No study found statistically significant or substantively important negative effects in this domain.

#### Other ratings considered

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

• Criterion 1: Two or more studies showing statistically significant positive effects, at least one of which met WWC evidence standards for a strong design.

Not met. New Chance had only one study meeting WWC evidence standards.

#### **AND**

· Criterion 2: No studies showing statistically significant or substantively important negative effects.

Met. No study found statistically significant or substantively important negative effects in this domain.

#### Appendix A6 Extent of evidence by domain

	Sample size						
Outcome domain	Number of studies	Schools	Students	Extent of evidence <sup>1</sup>			
Staying in school	0	na	na	na			
Progressing in school	0	na	na	na			
Completing school	1	16	2,079	small			

#### na = not applicable/not studied

<sup>1.</sup> A rating of "moderate to large" requires at least two studies and two schools across studies in one domain, and a total sample size across studies of at least 350 students or 14 classrooms. Otherwise, the rating is "small."