Evaluation of the Innovative Programs for Students in the Care of, or Receiving Services from, Children’s Aid Societies

Appendix C: Literature Review

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Table of Contents

1. Objectives of the literature review .................................................. 4
2. Definitions ..................................................................................... 4
3. Methodology .................................................................................. 4
   3.1. Searching online databases and websites ................................ 4
   3.2. Search results ......................................................................... 6
4. Who are the children in care? ......................................................... 8
5. Outcomes Experienced by Children and Youth in Care .................. 9
   5.1. K-12 academic outcomes ...................................................... 9
   5.2. Access to post-secondary education and employment outcomes 12
6. Factors Influencing Outcomes for Children and Youth in Care ...... 13
7. Educational Interventions .............................................................. 16
   7.1. Literacy and numeracy programs .......................................... 20
   7.2. Tutoring programs ............................................................... 24
   7.3. Mentoring programs ............................................................ 28
   7.4. College preparatory programs ............................................. 33
   7.5. Skills and behaviour interventions (behavioural, well-being, living skills and resilience) .......................................................... 35
   7.6. In-home supports and learning material distribution ............. 40
   7.7. Educational liaison .............................................................. 42
   7.8. Other pedagogical strategies and program features ............... 49
   7.9. What do children in care want? ............................................ 51
8. Conclusions .................................................................................... 55
   8.1. Challenges in interpreting the literature ................................. 55
   8.2. Findings ................................................................................ 57
9. References ....................................................................................... 59
Table of Tables

Table 1. Database search terms ................................................................. 5
Table 2: Search results by database/ source ............................................. 7
Table 3: Services included in interventions .......................................... 18
Table 4: Sample literacy and numeracy interventions ............................ 20
Table 5: Sample tutoring interventions ................................................. 25
Table 6: Sample mentoring interventions .............................................. 29
Table 7: Sample college preparatory interventions ................................. 33
Table 8: Sample skills & behaviour interventions .................................... 36
Table 9: Sample in-home supports & learning materials distribution interventions .......... 41
Table 10: Sample educational liaison initiatives ..................................... 43
Table 11: Academic barriers and supports as seen by former youth in care .................. 52
Table 12: Program elements and pedagogical considerations by Salazar et al. (2016) .......... 53

Table of Figures

Figure 1: Flow of the literature through the review .................................. 7
1. Objectives of the literature review

Directions conducted a literature review in English and French to examine academic and grey literature on effective programming across jurisdictions designed to improve student engagement, achievement, and well-being for students in care. Two questions were addressed by the literature review:

- What are the issues and outcomes in terms of student achievement, engagement, or well-being for students in care? (This question provides context for the types of issues and outcomes faced by this population.)
- What evidence is there for effective school-based programming and interventions to improve student achievement, engagement, or well-being for students in care?

2. Definitions

There are several terms used to describe children and youth in care that are used in this report and that vary across Canadian and international jurisdictions. “Children and youth in care” is used to refer to a child or youth who is in the care and custody of child and youth welfare services. Other terms used in the literature include “wards of the state”, “students who have Crown and Society ward status”, “children in foster care”, “looked after children”, and “students in care”, to name a few. The literature also uses a variety of terms to describe the care settings in which these children are placed, including “foster care”, “out-of-school care”, “substitute care”, “government care”, “public care”, “kinship care” or simply “in care.” Different terms are also used to define the authorities responsible for children and youth in care. These include “children's aid society”, “family and children’s services”, “child welfare services”, “local authority”, and “social services”. In this report, we tried to preserve the terminology used in original documents, although some sources use these terms interchangeably.

3. Methodology

3.1. Searching online databases and websites

To locate relevant information, Directions first conducted a search of online databases using Summon (a search engine that allows access to a large number of library databases, online external databases, catalogues and external sites such as Google Scholar via a single search). Additional searches were run in Academic Search Complete, PsycINFO, and ERIC to make use of the database thesaurus and subject terms features.
In addition to a search for academic and peer-reviewed literature indexed in commercial online databases, we conducted a grey literature (research not published in commercial databases) search using Google Scholar and we examined key websites for relevant publications, references, and links to other pertinent sites. The following websites were searched:

- United Kingdom Department for Education [https://www.gov.uk/government/organisations/department-for-education](https://www.gov.uk/government/organisations/department-for-education)
- Research in Fostering and Education Centre, University of Oxford [http://reescentre.education.ox.ac.uk](http://reescentre.education.ox.ac.uk)
- Conference Board of Canada [http://www.conferenceboard.ca/](http://www.conferenceboard.ca/)
- Evidence for Policy and Practice Information and Co-ordinating (EPPI) Centre [http://eppi.ioe.ac.uk/cms/](http://eppi.ioe.ac.uk/cms/)

The reference lists of relevant articles were also reviewed for studies that may not have been captured otherwise.

Included in this review are materials published between 2006 and 2016 in English and French in peer-reviewed journals, research or evaluation reports, or were available online in full text.

The following four sets of search terms were used for the search:

**Table 1. Database search terms**

<table>
<thead>
<tr>
<th>Group</th>
<th>Search terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>student* OR youth OR adolescent* OR children OR child</td>
</tr>
<tr>
<td>Group 2</td>
<td>CAS OR “child in care” OR “children in care” OR “out-of-home care” OR “out of home care” OR “looked after” OR “looked-after” OR “foster care” OR “foster home” OR “foster family” OR “foster parent” OR “foster caregiver” OR “substitute family” OR “family foster home” OR “kinship care” OR “caring adult” OR “wards of State” OR “Children’s Aid Society” OR “Crown ward” OR “temporary care” OR “permanent care” OR “protection services” OR “State ward”</td>
</tr>
</tbody>
</table>
### 3.2. Search results

Through searching online databases we located 4293 potentially relevant publications that met our initial inclusion criteria (See Table 2 below). An additional 52 documents were located through focused searching of online journals such as *Children and Youth Services Review*.

We conducted a supplementary search using the Google search engine to locate publications not available through online databases. The search returned over 33,500 potentially relevant documents; the first 15 screens of the search results were reviewed and 24 potentially relevant publications were identified. The search results were then combined and the duplicates removed (n=93). The total number of publications that met the initial screening criteria was 225. An additional 88 documents were removed after review of full texts and coding of papers because they did not meet the screening criteria. Our review below is based on the remaining 137 documents.

There is a large body of literature devoted to contextual material, issues, and outcomes associated with student achievement, engagement, or well-being of students in care. Because the focus of this review is on providing contextual information for the programming interventions, we began by reviewing the systematic reviews, meta-analyses, and synthesis literature reviews because such documents allow us to evaluate data obtained from a larger (combined) sample that increase the power of the analyses. Such reviews also tend to incorporate large numbers of articles, thus, including a wider range of perspectives and practices. The preliminary screening of the articles revealed that the number of reviews focusing specifically in the effectiveness of educational interventions for students in care is limited. To gather information about effective programs, strategies, models, and interventions, the scope was expanded to include academic articles and reports that evaluate individual programs.
Table 2: Search results by database/source

<table>
<thead>
<tr>
<th>Database name</th>
<th># of papers located</th>
<th># of potentially relevant papers after screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBC Summon</td>
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<td>51</td>
</tr>
<tr>
<td>Academic Search Complete</td>
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<td>55</td>
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<tr>
<td>ERIC</td>
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<td>Google Scholar</td>
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<td>24</td>
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<tr>
<td>Handsearch of online journals &amp; reference lists</td>
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<td>52</td>
</tr>
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<td><strong>Number of papers located in the search</strong></td>
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<tr>
<td>Duplicates removed</td>
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</tr>
<tr>
<td><strong>Number of articles transferred to coding &amp; full text review</strong></td>
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<td>225</td>
</tr>
<tr>
<td>Articles excluded during coding/full text review</td>
<td></td>
<td>-88</td>
</tr>
<tr>
<td><strong>Total number of papers included in Review</strong></td>
<td></td>
<td>137</td>
</tr>
</tbody>
</table>

Figure 1: Flow of literature through the review
4. Who are the children in care?

Although child welfare is a mandatory service in Canada, the legislative power and responsibilities for the welfare of children and youth rest with the individual provinces and territories. While there are differences in child and family policies, service structure, and interventions across jurisdictions, all child protection frameworks focus on the “best interests of the child” that, according to Courtney, Flynn, and Beaupre (2013), means protecting children from harm, respecting family autonomy and cultural heritage, provision of resources and supports to families, and continuity of care. Because there is no national office or national data collection focusing on children and youth in care, there is lack of comprehensive national comparisons or statistics for this population, with reports and studies relying on numbers estimated by individual jurisdictions (Courtney et al., 2013). As noted earlier, even the definition of “children and youth in care” differs from one jurisdiction to another, as certain types of care such as kinship care may or may not be included (Farris-Manning & Zandstra, 2003; McMurtry, 2015).

Ferguson and Wolkow (2012) estimate that there were approximately 85,000 children and youth under the protection of child and family services in Canada in 2012, while others estimated the number of children and youth in out-of-home-home placements at 62,428 in 2013 (Jones, Sinha, & Trocmé, 2015a). In comparison, Statistics Canada reports that there were 47,885 children living in foster care in 2011 (Kirkey, 2012). It should be noted, however, that the differences in estimates might be due to the variations in what was considered as out-of-home care as well as other methodological and reporting issues. The rate of children and youth in out-of-home care, measured as the number of students in care for every 1000 children and youth in the overall population was estimated at 8.5 in 2013 compared to 5.5 children and youth in care per 1000 in 1990s (Jones et al., 2015a).

In Ontario, the Ontario Association of Children’s Aid Societies (OACAS) (2014) reported that, although the number is declining from prior years, the total number of children in care was 23,341 in 2013-2014, representing an approximately 2,000 decrease from 26,221 children in care in 2009-2010. In total, there were over 81,000 investigations, and 47,890 ongoing protection cases served in the province in 2013-14. Also, there was a disproportionate number of Aboriginal children in care, a trend similar to patterns in other provinces (more than 18%, according to OACAS (2014)).

Children and youth are placed in out-of-home care for a variety of reasons, including physical, sexual, psychological, or emotional abuse, deprivation, maltreatment, and neglect. These traumatic and challenging experiences prior to placements, as well as challenges these children and youth experience while in care, often lead to negative
short- and long-term outcomes (Bruce et al., 2010; Courtney & Dworsky, 2006; Scherr, 2007), including poor academic outcomes, mental health issues, and lack of resilience.

However, the children and youth in care population is not a homogenous group as they enter the system at different points in their lives and for different reasons, they have different experiences while in care, and remain in care for different time periods (Coholic et al. 2012; Welbourne & Leeson, 2012). Furthermore, children and youth in care are often exposed to multiple risks (Bruce et al., 2010; Denecheau, 2011; R. Jones et al., 2011) that compound the challenge of developing effective interventions and services.

5. Outcomes Experienced by Children and Youth in Care

5.1. K-12 academic outcomes

There is an extensive body of literature examining educational outcomes for children and youth in care. Researchers use a range of indicators and measurements to evaluate outcomes including: standardized test scores; grades; referrals to special education programs; attendance rates; number of suspensions, expulsions, disciplinary incidents and referrals; grade retention; dropout rates; and graduation rates; to name a few. Overall, studies conducted in Canada, the United States, Australia, New Zealand, the United Kingdom, and other European countries observed that children and youth in care often have poorer educational outcomes than the general population of students of the same age (e.g., Australian Institute of Health and Welfare, n.d.; Barnow et al., 2015; Brady, 2014; Ferguson & Wolkow, 2012; Forsman & Vinnerljung, 2012; Trout et al., 2008a).

Children and youth in care are more likely to repeat a grade compared with their not-in-care counterparts (Barnow et al., 2015; Cox, 2012; Ferguson & Wolkow, 2012;). Children and youth in care also have lower grades and standardized test scores, and are often below their grade level in mathematics and reading (Cox, 2012; Leone & Weinberg, 2010; Zetlin et al., 2012). For instance, Kufeldt et al.’s (2000) study described in Ferguson and Wolkow’s review (2012) reported that approximately 25% of children and youth in care were below their grade level compared to 5% of students in the general population, with the number of students falling below their grade level increasing in middle and high school. Another study of 655 children in care in Illinois also found that students in care who were overage for their grade level, performed poorly on achievement tests, and were more likely to earn low grades in reading and math than students in the age appropriate grades (Hartnett, Bruhn, Helton, Fuller, & Steiner, 2009). A study by Greig et al. (2008) involving 17 Scottish students in foster care and 17 non-foster students found that foster students performed more poorly on tests of narrative coherence, intentionality, and avoidance, even with results that
controlled for age and verbal comprehension. Similarly, Trout et al. (2008b) evaluated 127 students in a residential care program and observed that over 50% of the participants scored in the “low average and below” range on the Reading Fluency and Academic Knowledge subtests of the Woodcock Johnson test.

Turpel-Lafond and Kendall (2010) analyzed data on 32,186 children and youth in care collected by the British Columbia Ministry of Children and Family Development between April 1, 1997 and November 1, 2005 and observed that “children in care arrive in school on average much less prepared to learn, fall further behind as they progress through school, and never recover to meet their graduation requirements” (p. ix). The authors examined the performance levels at Kindergarten, Grade 4, Grade 7, and Grade 12 and found that children and youth in care were two times less likely to be school-ready and were up to three times more likely to be vulnerable in such domains as physical health and well-being, social competence, emotional maturity, language and cognitive development, and communications and general knowledge. Children and youth in care also had lower scores on the provincial Foundation Skills Assessments, which suggested that “the majority of children in care do not acquire the fundamental reading, writing and numeracy skills to meet the demands of high school” (p. ix). Over 55% of youth in care did not enrol in Grade 12 and of those who did, few were enrolled in the academic stream; 7% of students in care compared to 39% of students not in care were eligible for academic programs).

Other issues exhibited by children and youth in care include disorganization, poor social interactions, and inability to concentrate (Cox 2012; Zetlin et al., 2012). These students receive more disciplinary actions and suspensions and are less engaged in school activities, which result in incomplete class and homework assignments, tardiness, and absenteeism (Barnow et al., 2015; Bruce et al., 2010; Cox, 2012; Denecheau, 2011; Ferguson & Wolkow, 2012; Zetlin et al., 2012).

A disproportionate number of children and youth in care are represented in special education (Cox, 2012; Zetlin et al., 2012). According to a meta-analysis conducted by Scherr (2007), students in care are five times more likely to be referred to special education services compared to their counterparts who are not in care. Another study by Trout et al. (2008b), reports that 28% of the 127 students in care included in the study were receiving special education services. This finding was supported by Zetlin et al. (2012) who found that approximately 30% of elementary students in care (ages 6 through 11) were eligible for special education programs compared to 9% of the non-foster children. Similarly, the report produced by Turpel-Lafond and Kendall (2010) suggests that in British Columbia children in care are six times more likely to be identified as having special needs such as intensive behavioural or mental health issues.
compared with students who are not in care (51% and 8.4% respectively). By early adolescence boys were 1.5 times more likely to receive special education services than girls. Still, Ferguson and Wolkow (2012) argue that special education services are sometimes prescribed inappropriately, with students in care being assigned to special education without proper cause while, in other instances, students are not referred to services when such services are needed.

Youth in out-of-home care have higher absenteeism rate and lower engagement, attendance, and graduation rates (Brady, 2014; Denecheau, 2011; Ferguson & Wolkow 2012; Reid, 2007; Pears, Kim, Fisher, & Yoerger, 2013; Trout et al., 2008a). Barnow et al. (2015) suggest that graduation rate for youth in care is up to 20% lower than for their not-in-care peers. A small study in British Columbia that followed 37 youth in care over several years found that 52% of students had not completed high school compared to 25% of youth in the general population (Rutman et al., 2007). In an earlier study by Smithgall, Gladden, Howard, Goerge, & Courtney (2004, cited in Ferguson & Wolkow 2012), 32% of youth in care graduated from high school compared to 59% of their not-in-care counterparts. A Gateway to Success: Cycle Three study that examined case files of 5,054 Ontario Crown wards and former Crown wards, ages 16 through 20, also reported that, in 2012-2013, out of 866 youth in care between 19 and 20 years of age, only 46% completed high school education in comparison to the 83% graduation rate for children and youth not in care (OACAS, 2014). While the data suggests that the number of former youth in care who completed high school has increased by 4 percentage points since 2006-2007, the provincial graduation rate saw an increase of 8 percentage points in the same time period, which suggest that “not only is there a substantial gap in education attainment, but the gap appears to be widening” (OACAS, 2014). Similarly, Turpel-Lafond and Kendall (2010) estimated that the number of students in care who graduated from high school within six years of enrolment in Grade 8 was more than three times lower than in the general population (21% and 78% respectively). Also, in addition to low graduation rates, a disproportionately higher number of youth in care graduate with a GED compared to the general student population (Pecora et al., 2006).

In addition to educational outcomes, children and youth in care tend to have more behavioural and mental health issues compared to their age group peers not placed in care (Akister, Owens, & Goodyer, 2010). For example, a study conducted in the United Kingdom that compared 1,453 children and youth in care to 10,428 deprived and non-deprived children living in private homes found that 46% of children and youth in care had at least one psychiatric diagnosis compared to children living in disadvantaged private households (15%) and non-disadvantaged private households (8.5%) (Ford, Vostanis, Meltzer, & Goodman, 2007). A study that examined 718 Swedish youth found that youth placed in care for behavioural problems (compared to not-in-care youth) were
more likely to die before the age of 25 (5.4% vs. 0.6% for boys and 2.5% vs. 0.3% for girls), be incarcerated (43% vs. 2.9% for boys and 7.6% vs. 0.1% for girls), to be put on probation (57.6% vs. 4.2% for boys and 21% vs. 0.4 for girls; Vinnerljung & Sallnäs, 2008). Youth in care were also more likely to be placed in hospital for mental health problems, receive social assistance, complete only basic education, or become a teenage parent. 75% of males and 40% of females who were in care were more likely to commit a crime after leaving care (compared to 15.7% and 3.2% of males and females from the general population).

5.2. Access to post-secondary education and employment outcomes

For students in care, gaining access to post-secondary education is also challenging due to academic issues in high school, and financial and personal barriers. They are less likely to enrol in college preparatory courses and post-secondary programs, and not all former students in care who attend college complete their programs (Barnow et al., 2015). OACAS (2009), citing the results of the 2006-2007 Gateway to Success study, reports that students who are not in care are twice as likely to enroll in post-secondary institution than youth in care (40% vs. 21%); and that 84% of youth in care who did participate in PSE selected community colleges and apprenticeship programs rather than university programs. A more recent OACAS report (2014) states that the percentage of 19-20 year old former Crown wards who were enrolled or graduated from a PSE program was 29% in 2006-07, increasing to 31% in 2008-2009 and then decreasing to 27% in 2012-13, still remaining significantly below the provincial average of the general population (39%).

Poor educational outcomes tend to lead to negative outcomes later in life (Barnow et al., 2015; Ferguson & Wolkow, 2012). Studies and reports conducted in Canada, the United States, Australia, and Europe consistently show that youth in care have difficulty securing well-paid employment; have higher job and housing mobility rates; are more likely to experience homelessness, loneliness, financial difficulties, or live below poverty level; are more likely to be victimized or be engaged in criminal activities; earn lower wages; and are more likely to have physical and mental health problems (Barnow et al., 2015; Brady, 2014; Bruce et al., 2010; Courtney et al., 2007; Darmody, McMahon, & Banks, 2013; Ferguson & Wolkow, 2012 ).
6. Factors Influencing Outcomes for Children and Youth in Care

Multiple studies have examined factors that influence education and well-being outcomes for students in care. These studies point to the complexity and multitude of risk factors that affect children and youth’s lives and the outcomes they achieve as well as the interactions among various risk factors (Bruce, 2010; Denecheau, 2011; Leone & Weinberg, 2012). A range of factors were identified, including:

- life experiences prior to admission to care (e.g., poverty, lack of educational or developmental experiences, trauma, maltreatment and neglect, low parental education);
- low school readiness;
- age when the child was placed in care;
- lack of material and learning opportunities;
- type of placement;
- school mobility and lack of placement stability;
- poor record keeping and transfer of information;
- lack of coordination and collaboration across agencies;
- poor school attendance, disengagement from school and family, and high dropout rate;
- inappropriate school services (e.g., unnecessary referrals to special education) and poor quality education programs;
- inconsistent social supports;
- lack of supportive home environment;
- weak (or lack of) supervision from parents or their social activities;
- low expectations;
- low self-esteem and confidence;
- little accountability or monitoring of school outcomes (Bruce et al., 2010; Denecheau, 2011; Ferguson & Wolkow, 2012; Leone & Weinberg, 2012; McClung, & Gayle, 2010; Pecora, 2012; Reid & Dudding, 2006; Stoddart, 2012; Stone, 2007; Zetlin, Weinberg, & Shea, 2006a; Weinberg, Zetlin, & Shea, 2009).

Ferguson and Wolkow (2012) report that one of the frequently identified barriers is the “adversarial relationships between public school and child welfare personnel” that results from lack of communication and lack of clear guidelines defining the responsibilities of the parties responsible for a child’s care (p.1146). Leone and Weinberg (2012) also highlight the lack of collaboration and coordination across groups and agencies providing services. According to them, factors contributing to this barrier include “confidentiality provisions, lack of understanding across agencies, lack of a
single person to advocate for the youth, and lack of adequate coordinated efforts to address youth needs” (p. 19). The issue of confidentiality, in particular, was raised by several authors. They suggest that the schools and child welfare agencies were not able to share some of the personal information about children such as grades and test scores which, in turn, negatively affected the ability of child welfare services to advocate for and monitor the child’s education progress (Leone & Weinberg, 2012; Zetlin, Weinberg, & Shea, 2006a; Zetlin, Weinberg, & Shea, 2006b; Weinberg, Zetlin, & Shea, 2009; Stone, D’Andrade, & Austin, 2007).

In addition to the lack of accountability, poor communication and problems with monitoring of student progress, the literature also emphasizes the importance for children in care to have a single individual who would advocate for their behalf (Leone & Weinberg, 2012). As noted by Zetlin et al. (2006a), (2012), due to the large case load of support workers and lack of coordination across agencies, for some children and youth, “no one has specific responsibility for ensuring that students are checked out of school when they are moved to a different home so that they do not receive failing grades in classes they have been taking, immediately enrolled in school once they are placed in the new home, attending school on a regular basis, and enrolled in schools that teach core academic subjects” (p. 170). A number of studies, including a series of focus groups with foster youth and service providers in the United States, highlight the importance of an educational liaison who could advocate for the foster children and their needs, problem-solve issues, and coordinate services (Leone & Weinberg, 2012; Zetlin et al., 2006b).

Instability of out-of-home care placements is another factor affecting children and youth’s educational outcomes and well-being, as a new placement often means a transfer to a new school (Bruce et al., 2010; Denecheau, 2011; Leone & Weinberg, 2012; Stone et al., 2007). Leone and Weinberg (2012) concluded, based on their review of the literature, that the majority of children and youth in care have multiple placements, and that the number of placements increases with the age of the student and the length of time spent in the out-of-home care system. For instance, Webster, Barth, and Needell (2000, cited in Leone & Weinberg, 2012) found that foster children between the ages of 11 and 15 were most likely to have three or more placements. Transfers to a new home leads to school transfers, and students who spend more time in the care system experience more school changes. For example, Stoddart (2012) reports that in 2006-07 36% of Ontario children and youth in care who were between 10 and 15 years of age had at least five or more school changes. As placement changes and school transfers might occur at any time, children and youth might not finish courses, lose academic credits, face re-enrollment problems, miss portions of the
school year, and experience disruption in educational services (Ferguson & Wolkow, 2012).

The transition out of care also affects outcomes for children and youth. Zorc, O’Reilly, Matone, Long, Watts, and Rubin (2013) analyzed enrollment and attendance data for 209 elementary students in care, finding that children who returned home after being in care were 70% more likely to be absent than students with an early single stable placement. Also students with unstable placements who continued to change placements were 37% more likely to be absent than children with early placement stability.

As concluded by Fletcher-Campbell, Archer and Tomlinson (n.d.),

> Beyond their explicit role in enabling educational attainment, schools have a wider role, in the promotion of other aspects of what could be termed ‘normality’ in the lives of children and young people in public care. Schools form a potential source of *continuity* in otherwise disrupted lives, a factor that has only recently been recognised by many social workers, for whom school placements have in past been a secondary concern to care placements. (p. 15)

Not all studies report negative impacts of placement change. For example, Leone and Weinberg (2012) refer to an earlier study by Conger and Rebeck (2001) reporting that some children and youth might experience a positive change in their academic outcomes such as attendance after entering foster care, in particularly children and youth who experienced abuse or neglect in their previous homes, children and youth who were moved to kinship care, or children and youth who had stable placements (also see Hill & Koester, 2015). Similarly, Fernadez (2012), in her study of 59 foster children and youth in Australia, observed that “that alongside concerns related to placement stability, academic achievement and emotional and behavioural development, children and young people in this sample displayed positive outcomes in domains such as family and social relationships and pro-social behaviours as they progressed over time in their care placements” (p. 1092). Font and Maguire-Jack (2013) analyzed the data from the National Survey of Child and Adolescent Well-being, based on a nationally representative sample of child welfare investigations in the United States, and found that children and youth who were placed in out-of-home care had significantly higher levels of emotional and cognitive engagement than children and youth who were maltreated but not removed from their homes.

Another problem related to placement and school instability is the lack of a consistent system for collecting, tracking, and transferring records (Bruce et al., 2010; Cox, 2012; Ferguson & Wolkow, 2012; Leone & Weinberg, 2012; Stoddart, 2012; Zetlin et al.,
During the school changes the records might be delayed or missing, or include incomplete or incorrect information, which can lead to enrolment issues, delay graduation, or result in incorrect grade/program placement. As one of the participants in Zetlin et al.’s (2006a) study explained, “There was a class that I took three times at three different schools and completed that is still not on my transcripts” (p. 169).

Changing placements and schools also disrupts existing social relationships and supports, and the lack of positive social relationships might contribute to poor academic performance and low engagement, while positive relationships with peers, teachers, and caregivers might improve educational outcomes (Stoddart, 2012; Stone, 2007). Reid (2007) suggests that children and youth who have a stable positive relationship with at least one important adult are more likely to demonstrate positive outcomes.

Some caregivers and teachers tend to have low educational expectations of foster children and youth (Ferguson & Wolkow, 2012). For example, both Ontario provincial and Family and Children Services Waterloo data showed that aspirations of foster youth were generally higher than the expectations of their caregivers (Stoddart, 2012). At the same time, children and youth whose caregivers had higher academic expectations had higher academic achievement (Cheung, Lwin, & Jenkins, 2012). Expressing higher expectations for foster youth achievements and supporting their ambitions might help youth overcome educational and emotional challenges.

7. Educational Interventions

Leone and Weinberg (2012) note that, “while much has been made in recent years about the poor educational outcomes of youth in foster care … , little attention has been focused on specific interventions that show evidence of changing the trajectory for these youth” (p.33). Every literature review and meta-analysis reviewed in this report that examined the effectiveness of educational interventions for students in care also commented on the lack of empirical evidence in this area. In the sections that follow we present the descriptions of educational interventions along with the results from evaluations and efficacy reviews where available. However, before we present that information, we have four observations on the existing evidence:

1. The number of school-based programs and interventions described in the literature is limited. Thus, many interventions included below can be classified as “school-aged” rather than “school-based”, as some of them were provided to school-aged children in their homes, through children’s aids societies and child welfare services in cooperation with schools, or through various community partners.
2. Many of the existing reviews (e.g., Forsman & Vinnerljun, 2012; Leone & Weinberg, 2012) also struggled to locate articles examining the effectiveness of educational interventions designed specifically for children and youth in care. As a result, the papers discussing strategies and interventions to improve educational and other outcomes for children and youth in care often refer to strategies and programs that were found to be effective with at risk or disadvantaged children and youth in general, rather than with children and youth in care specifically. While we mention some of these interventions in this report, we focused on programs that were specifically designed for, and implemented with, children and youth in out-of-home care.

3. Most of the authors highlight the heterogeneity of the children and youth in care population. Indeed, these children and youth face multiple (and often unique) challenges before, during, and after being in care, which can partially explain the differences in outcomes and the difficulties in measuring them. However, while the reports and evaluations provide some basic demographic information about students participating in the interventions, this heterogeneity is rarely taken into account in the analysis of the results.

4. Finally, some authors (e.g., Leone & Weinberg, 2012) categorize educational interventions for children and youth in care as literacy programs, out-of-school time programs, tutoring programs, mentoring programs, skills programs, and college preparatory programs. While we have tried to use a similar approach and classify the interventions based on the program focus, this proved to be a challenging task, as the majority of the interventions provided more than one type of service. Thus some of the interventions below are placed in more than one category as they tend to provide a combination of tutoring, mentoring, life skills workshops, and other supports.

The following sections describe the nature and (where available) outcomes of 41 interventions and initiatives that have been implemented in Canada, the United States, Australia, and Europe. Table 3 below presents a summary of services identified in the interventions; however, it should be noted that some articles provided very limited descriptions of the programs, so information below should not be treated as an exhaustive summary. As seen from the table, 17 out of 40 interventions focused on numeracy and/or literacy, 14 provided skills building or behavior activities, 11 provided tutoring or mentoring, and 12 provided personal planning. Collaboration across agencies and caregivers was mentioned in 15 initiatives. 17 initiatives included training for parents or staff.
### Table 3: Services included in interventions

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>First author</th>
<th>Type</th>
<th>Literacy &amp; Numeracy</th>
<th>Staff and parental capacity</th>
<th>Collaboration (school, parents, CAS)</th>
<th>Skills &amp; Behaviours</th>
<th>Personal Education Planning</th>
<th>Tutoring</th>
<th>Mentoring</th>
<th>Ed Liaison</th>
<th>Transition support (P to H or out of school)</th>
<th>In-home resource support</th>
<th>PSE Prep</th>
<th>Transportation</th>
<th>Use of IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading and Math Tutoring by Teacher Volunteers</td>
<td>Forsman &amp; Vinnerljung (2012)</td>
<td>School-based</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Paired Reading (UK)</td>
<td>Osbourne et al. (2010)</td>
<td>School-age</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Paired Reading (Sweden)</td>
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<td>X</td>
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<tr>
<td>Helsingborg project</td>
<td>Forsman &amp; Vinnerljung (2012)</td>
<td>School-based</td>
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<tr>
<td>The Love of Learning Programme</td>
<td>Knight (2013)</td>
<td>School-age</td>
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<tr>
<td>Early Start to Emancipation Preparation</td>
<td>Courney et al. (2008)</td>
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<td>X</td>
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<tr>
<td>RESPs for Kids in Care project</td>
<td>Flynn et al., (2011, 2012)</td>
<td>School-age</td>
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<tr>
<td>In School Tutoring Program</td>
<td>Stoddart (2012)</td>
<td>School-based</td>
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<tr>
<td>TAKE CHARGE</td>
<td>Geenen et al., 2013</td>
<td>School-age</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Big Brothers/ Big Sisters</td>
<td>Scannapieco &amp; Painter (2014)</td>
<td>School-age</td>
<td>X</td>
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<tr>
<td>National Longitudinal Study of Adolescent Health</td>
<td>Ahrens et al. (2008)</td>
<td>School-age</td>
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<tr>
<td>The Michigan Educational Opportunities for Youth in Care</td>
<td>Kirk &amp; Day, 2011</td>
<td>School-age</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Better Futures</td>
<td>Geenen et al.(2015); Phillips et al. (2015)</td>
<td>School-age</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Transition programs (USA)</td>
<td>Barnow et al.(2015)</td>
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<tr>
<td>Fostering Healthy Futures</td>
<td>Taussig et al. (2007, 2012)</td>
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<tr>
<td>Holistic Arts-Based Group Program (HAP)</td>
<td>Coholic et al. (2012)</td>
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<td>ECHO Social Skills program</td>
<td>Coholic et al. (2012)</td>
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<td>The Kids In Transition to School</td>
<td>Pears et al. (2012; 2013)</td>
<td>School-age/ School-based?</td>
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<td>Maher et al. (2008)</td>
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<tr>
<td>The Letterbox Club</td>
<td>Dymoke &amp; Griffiths (2010); Griffiths (2012); Griffiths &amp;</td>
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<td>Skills &amp; Behaviours</td>
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<td>Mentoring</td>
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<td>Transition support (P to H or out of school)</td>
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<td>The Letterbox Club</td>
<td>Comber (2011); Griffiths et al. (2010)</td>
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<td>Distribution of books and computers (UK)</td>
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<td>School-age</td>
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<td>Brady (2013, 2014)</td>
<td>School-age</td>
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<td>Jackson (2015)</td>
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<td>Aberdeen City Council’s Project</td>
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<tr>
<td>The Virtual Schools (UK)</td>
<td>Berridge et al. (2009)</td>
<td>School-age/school-based</td>
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Count 17 17 15 14 12 12 11 11 9 9 7 5 2
7.1. Literacy and numeracy programs

Literacy and numeracy are among competencies that children and youth need to be able to function effectively. However, children and youth in care often have poor skills in these areas and are behind in reading and math compared to their peers not in care. The number of initiatives aimed at improving numeracy and literacy skills of children in care had been increasing in recent years, provided by a range of program providers such as schools, volunteer organizations, children’s aid societies, and universities (Osbourne, Alfono, & Winn, 2010). However, the number of research-based evaluations is limited (Fletcher-Campbell, n.d.). Below we provide several examples of programs that focus on improving literacy and numeracy of children in care.

Table 4 summarizes information about each of the initiatives, followed by more detailed narrative summaries of each project. In the table, outcomes are presented in two columns. The column entitled “Statistically Significant Outcomes” identifies outcomes for which the results of inferential statistical analyses were provided (e.g., effect sizes, t-tests, etc.). These tend to be based on randomised control trials, quasi-experimental designs, time-series analyses, or correlational research. The second column (“Other QUAN and QUAL Outcomes”) lists outcomes supported by anecdotal information or with descriptive statistics. In the “Statistically Significant Outcomes” column, “+” represents a positive statistically significant change in the outcomes reported in the article; “-” represents a negative statistically significant change in outcomes, and “0” is used when no statistically significant changes were reported.

Table 4: Sample literacy and numeracy interventions

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Reference</th>
<th>Type</th>
<th>Age</th>
<th>Statistically Significant Outcomes</th>
<th>Other QUAN and QUAL Outcomes</th>
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<tbody>
<tr>
<td>KUMON</td>
<td>O’Brien &amp; Rutland (2008)</td>
<td>Out-of-school/school-aged</td>
<td>4-13</td>
<td>Math 0</td>
<td>Improved persistence, work completion, task focus, self-esteem, and behaviour; being proud with accomplishments</td>
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<td></td>
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<td></td>
<td>Reading 0/+</td>
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<tr>
<td>Reading and Math Tutoring by Teacher Volunteers</td>
<td>Forsman &amp; Vinnerljun (2012)</td>
<td>School-based</td>
<td>5-11</td>
<td>Reading +</td>
<td>Improved confidence, motivation, and enthusiasm for reading</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Vocabulary +</td>
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<td>Spelling +</td>
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<td>Math (math group) +</td>
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<td>Math (reading group) +</td>
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<tr>
<td>Paired Reading (UK)</td>
<td>Osborne, Alfonso, &amp; Winn (2010)</td>
<td>School-age At home/school testing</td>
<td>5-11</td>
<td>Reading +</td>
<td>Improved confidence, motivation, and enthusiasm for reading</td>
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<td>Intervention name</td>
<td>Reference</td>
<td>Type</td>
<td>Age</td>
<td>Statistically Significant Outcomes</td>
<td>Other QUAN and QUAL Outcomes</td>
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<td>Paired Reading (Sweden)</td>
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<td>School-age</td>
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<td>School-based</td>
<td>7-11</td>
<td>Math 0 IQ + Reading + Spelling +</td>
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<tr>
<td>The Love of Learning Programme</td>
<td>Knight, 2013</td>
<td>School-age</td>
<td>2-17</td>
<td>Improved reading skills</td>
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<td>East Lothian’s project</td>
<td>SGSR, 2008</td>
<td>School-based</td>
<td>Primary</td>
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</tr>
<tr>
<td>Highland Project</td>
<td>SGSR, 2008</td>
<td>School-based</td>
<td>Unknown</td>
<td>Improvement in 5-14 levels in reading and math; higher confidence to approach school and homework, achievement of Standard Grade English and math</td>
<td></td>
</tr>
</tbody>
</table>

**KUMON**: KUMON is a commercial math and reading supplemental program offered by the Family and Children’s Services of Renfrew County to foster children and some “fee paying” students in Ontario (O’Brien & Rutland, 2008). The program was designed to engage students in self-directed learning and increase motivation, assignment completion, and retention. The program focused on students between ages of 4 to 13, although older students could participate. At the beginning of the program students completed a diagnostic test; based on the results, an individualized program was developed for each child. The children were expected to be enrolled in the program for at least a year, during which they attended a learning center twice week to work on reading and math materials under supervision of an instructor and assistants. Children were also expected to complete daily assignments in their homes with the help of foster parents. Volunteer drivers were provided to those who needed transportation to the learning center. Presentations to foster parents and child service workers were also provided and focused on strategies that could be used to improve children’s literacy. Also, at each learning site, an educator was available to provide one-on-one assistance for foster parents whose child had difficulty engaging with the program.

The results of the program were evaluated by O’Brien and Rutland (2008), who compared grades and scores on the Wide Range Achievement Test (WRAT) at four times during the program as well as conducted surveys and focus groups with children, foster parents and teachers. The results showed no statistically significant changes in math grades or test scores. The changes in reported reading scores and grades were
statistically significant between time 1 and time 4, but not between time 1 and time 3 (although the exact timing of when testing occurred is not clear from the article). The sample size included in the analysis was small (up to 26 students) and no comparison group was used. In the focus groups and surveys, children, foster parents, and teachers mentioned a number of improvements in the children’s academic attitudes and preference, including improved persistence, work completion, task focus, self-esteem, and behaviour.

**Reading and Math Tutoring by Teacher Volunteers:** In their meta-analysis of 11 interventions, Forsman and Vinnerljun (2012) describe a tutoring program in the UK (based on the work of Olisa, Stuart, Hill, Male, & Redford, n.d.) in which volunteer teachers (including the child’s classroom teacher) provided tutoring in reading and math to foster children of 5-11 years of age. At the beginning of the program, teachers, foster parents and case workers were involved in the discussion of the program and the type of supports the child might require. Also, a liaison between school and the child welfare agency was assigned to the program. Children attended either reading or math tutoring twice a week for a period of 20 weeks. According to Forsman and Vinnerljun, students in the math and reading groups showed significant improvement in literacy, and only math students showed improvement in mathematics, with effect sizes being small (Hedges’ g=0.3 for both measures). The results are based on a very small sample (10 students participated in the reading group, 10 in math group, and 3 students were in the comparison group) and should be interpreted with caution.

**Paired Reading:** The goal of the paired reading intervention was to support children’s literacy skills through structured paired reading activities and tutoring. As described by Osbourne, Alfono, and Winn (2010), foster carers, school staff, and social workers were offered a workshop on how to use and deliver paired reading. Upon completion of the workshop, foster parents conducted paired reading activities with their children at least three times per week for at least 20 minutes over the period of 16 weeks. The majority of children were between 5 to 11 years of age. At the beginning and at the end of the program, children’s reading age was assessed and the ratio gain was calculated at the end of the intervention. While the authors report statistically significant changes in reading age (which increased by one year on average), most of the students were still behind their chronological reading age. These results were based on the data from 35 students. In informal conversations, parents, teachers, and social workers indicated that children also showed improved confidence, motivation, and enthusiasm for reading. They also reported that there was a better communication and cooperation among teachers, foster parents and social services. One of the challenges identified in this intervention was the issue of mobility of children in care, as the children tended to drop out of the program once they changed foster care placement and/ or school.
This study was later replicated in Sweden by Vinnerljung, Tideman, Sallnas, and Forsman (2014) who provided the paired reading intervention to seven Swedish local authorities, with 81 foster children aged 8 to 12 participating in a 16-week trial. The results were similar to those of Osbourne et al.’s (2010): children’s reading age improved by 11 months on average with younger students (8-9 year olds) showing better improvements than the 10-12 year olds.

**Helsingborg project:** This intervention was described in the meta-analysis produced by Forsman and Vinnerljun (2012). Twenty-four children in care (7-11 years of age) were assessed in terms of their numeracy, literacy, and cognitive ability, and an individualized educational and psychological support plan was developed for each child. Over the course of two years, a special education teacher and a psychologist worked with each child and teacher providing individualized support. Cognitive ability (IQ), reading, spelling, and math were assessed at the beginning and the end of the intervention. The study reported significant changes in IQ and literacy (i.e., reading and spelling) with effect sizes\(^1\) ranging from 0.5 for IQ to 0.4-0.6 for literacy. No significant improvements were found in mathematics.

**The Love of Learning Programme:** This Australian intervention was conducted by the Pyjama Foundation to improve the literacy and numeracy outcomes for foster children (Knight, 2013). The program involved over 1000 volunteers (named “Pyjama Angels”) who worked with foster children between 2 and 17 years of age, helping them develop numeracy, literacy, and learning skills through various learning activities such as book reading, puzzles, and games. Mentors met with children for 1 or 2 hours at least once a month (66% of volunteers met their mentees once a week). Knight surveyed 180 volunteers about their activities with children and their perceptions of the impact these activities have on foster children. After applying structural equation modelling and multiple regression techniques to the 120 randomly selected responses, Knight identified several factors that had statistically significant impact on volunteers’ perceptions of children’s improvements in literacy, including relationship with the child, child’s engagement and length of participation in the program, and frequency of meetings. The study has a number of limitations, including volunteer sampling and the lack of objective measures of children’s literacy outcomes (the results are based on the volunteers’ perceptions of children’s improvements). While the study examines the factors that might affect improvements in children’s literacy skills, no evidence is provided that such improvements had occurred.

\(^1\) Effect size is a quantitative standardized measure of the magnitude of observed effect. Traditionally, effect size of .2 or below is considered to be small, effect size of .5 is considered medium, and effect size of .8 and above is rated as a large effect.
East Lothian’s project: This project focused on improving education outcomes of primary children in care by providing targeted support in English and math (Scottish Government Social Research (SGSR), 2008). Specifically, children were provided with a holistic support, individualised interventions, and personal learning plans. Also, parents and carers received support and resources on how to assist children with homework and school. The participants included primary school-aged children in care or who were considered vulnerable. The project was run by two full time teachers and a home-school link worker who were responsible for working with the caregivers. Additional support was available from the Inclusion Service, Educational Psychology Service, the Family Support Team and the OSHL\(^2\)/Study Support teams. Outcomes reported by the project staff included improved reading skills, although no specific details are provided. One of the challenges identified by the staff was that “high tariff” cases (such as students at risk of exclusion) demanded more time from the staff, leaving little time for other students.

Highland Project: This project was designed to enhance the educational outcomes of children in care, reintegrate them into mainstream education, create educationally rich environments in residential units, and provide out of school study programmes (SGSR, 2008). To achieve these goals, a range of activities and initiatives were developed. Some students attended Highland Football Academy to prepare them for return to school. An out-of-school homework club and individual tutoring were also made available. A Link Worker was assigned to each child and worked with social workers, the school, the child and parents to develop and implement an individualized education plan and to identify additional support services that were required. All students were offered a tutor in English, math, or other subjects. Nine students participated in the Kumon Maths and English scheme; these students showed improvement in 5-14 levels and had higher confidence to approach school and homework. All of the foster children achieved Standard Grade English and math in 2007, in addition to other standard grades. (Tutoring was less effective for children in residential care). This information was extracted from a case study in the SGSR’s report that did not offer any supporting evidence.

7.2. Tutoring programs

Tutoring is a support provided by a person with proficiency in a particular subject to individuals who are having problems acquiring certain concepts or are behind in their studies. This type of support is often provided to at-risk or disadvantaged students through in-school and out-of-school programs. Below we provide several examples of

\(^2\) Out of school hours learning (OSHL)
programs for children and youth in care that offered tutoring support. However, as mentioned above, tutoring was also used in other initiatives classified under other categories in this report.

Table 5: Sample tutoring interventions

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Reference</th>
<th>Type</th>
<th>Age</th>
<th>Statistically Significant Outcomes</th>
<th>Other QUAN and QUAL Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Start to Emancipation Preparation</td>
<td>Courney et al. (2008)</td>
<td>School-age</td>
<td>14-15</td>
<td>Reading 0</td>
<td>Grades 0, Math 0, Improved proud in achievements; Improved reading; Increased interest &amp; engagement; More positive attitude to math and reading; Better reading skills</td>
</tr>
<tr>
<td>RESPs for Kids in Care project</td>
<td>Flynn et al. (2011, 2012)</td>
<td>School-age</td>
<td>6-13</td>
<td>Word reading 0</td>
<td>Spelling 0, Sentence comprehension + Math +</td>
</tr>
<tr>
<td>Teach Your Children Well program</td>
<td>Harper &amp; Schmidt (2012)</td>
<td>School-age?</td>
<td>6-13</td>
<td>Reading + Sentence comprehension</td>
<td>0, Spelling + Math + Reading +</td>
</tr>
<tr>
<td>In School Tutoring Program</td>
<td>Stoddart (2012)</td>
<td>School-based</td>
<td>Unknown</td>
<td>Improved report cards</td>
<td></td>
</tr>
<tr>
<td>Dundee City Council’s Pilot Project</td>
<td>SGSR (2008)</td>
<td>School-based?</td>
<td>Unknown</td>
<td>increased confidence and self-esteem</td>
<td></td>
</tr>
<tr>
<td>Glasgow’s project</td>
<td>SGSR (2008)</td>
<td>School-age</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early Start to Emancipation Preparation (ESTEP)-Tutoring program: Courney et al. (2008) report on an evaluation of the Early Start to Emancipation Preparation (ESTEP)-Tutoring program in Los Angeles County, California. The program was based on an individual learning model and aimed to improve math and reading of 14 or 15 year olds in foster care who were one to three years behind their grade level in reading or math, as well as to encourage them to continue their education, develop independent living skills, and establish a positive relationship with tutors. The program was offered through local community colleges and tutoring was provided by college student volunteers who met youth in their homes 3 hours a week for up to 70 of total program hours. Tutors received brief training in conducting assessments and in engagement and tutoring methods. In addition to tutoring activities, youth could also attend independent living workshops (with transportation to the workshops provided). At the end of the program, tutors also developed individual tutoring plans for youth that outlined how to continue developing their skills. Some tutors also assisted youth with other tasks such as obtaining social security cards, IDs and birth certificates.
The authors used a randomized experimental design with students randomly assigned to either an intervention or a control group. Students were tested at the beginning of the program and then at multiple points using the Woodcock Johnson Tests of Achievement III (letter-word identification, calculation, and passage comprehension). Additional information about grades, attendance, and school behaviour was collected from youth. In both groups, children were in care for an average of nine years, with half of the youth placed in a non-kin foster home at the time of the program. Approximately 50% participated in special education, and 30-40% had learning disabilities or mental health issues. In both groups there were students with a history of prior placements in group homes or residential care, running away, or re-entry into care.

ESTEP youth were more likely to receive educational tutoring in their homes while their control peers were more likely to receive other school-based tutoring. The program evaluation found no impacts on educational outcomes (no statistically significant differences between the ESTEP and control groups). Both groups showed significant decreases in letter-word identification and calculation tests between the baseline and the second-follow-up testing, while the average percentile scores for passage comprehension increased for both groups. No changes over the course of the program were observed in grades reported by youth.

RESPs for Kids in Care project: This project involved individualized direct-instruction tutoring that was delivered by foster parents to their foster children (6-13 years of age) in their homes (Flynn, Marquis, Paquet, & Peeke, 2011; Flynn et al., 2012). Parents received training on how to use the Teach Your Children Well model, after which they tutored their children 3 hours per week (2 hours were spent on direct instruction in reading, 30 minutes on reading aloud by the foster child, and 30 minutes on self-paced instruction in math). Flynn and his colleagues used a randomized pre-test/post-test control-group design, and both treatment and control groups were tested using the Wide Range Achievement Test (WRAT4) and Test of Word Reading Efficiency (TOWRE). The results were mixed. No statistically significant differences were found in word reading (Hedges’ g = 0.19) or spelling (Hedge’s g= -0.08), while the intervention group significantly outperformed the control group in sentence comprehension (Hedges’ g = 0.38) and math computation (Hedges’ g = 0.46) at the end of Year 1 of the project.

Teach Your Children Well program: Harper and Schmidt (2012) modified the model developed by Flynn and Maloney and implemented a group-based, direct-instruction literacy and math tutoring program for children in foster care who were between 6 and 13 years of age. Participants were randomly assigned to a treatment (n=30) and wait-list control (n=35) group. Children worked in small tutoring groups of three or four,
organized according to children’s skill level. The groups were run by 1 or 2 trained university volunteer tutors who met with children for 2 hours every week over a 25 week period. Academic abilities of both the wait-list control and intervention groups were assessed prior to, and following the completion of, the program using the WRAT-4. The author found that students in the intervention group significantly outperformed their control counterparts in reading ($F(1, 62)= 10.58, p=.002$, Hedge's $g=0.42$) and spelling ($F(1, 62)=8.78, p=.004$, Hedge's $g = .38$). There was no statistically significant differences between groups in sentence comprehension ($F(1,60)=.45$, ns, Hedge's $g=.0950$ or mathematics ($F(1,62)=2.12$, ns, Hedge's $g = .26$). In a more recent article, Harper and Schmidt (in press) report on the results from two years of the intervention and included the analysis of assessments from 45 students in treatment and 46 in the wait-list control group. The new analysis found that intervention group significantly outperformed control group in spelling ($g =.25$), mathematics ($g = .34$), and reading ($g = .40$). However, there was no statistically significant effect of condition on sentence comprehension ($g = .15$).

In School Tutoring Program: In her article “Using research and outcome data to improve educational services and supports for young people in care: A case study of a local children's aid society in Ontario”, Stoddart (2012) refers to Ontario’s In School Tutoring Program that used retired school teachers and principals to provide in-school tutoring to children in care. In this program, 85% of students who participated in the tutoring activities showed improvement on their report cards. The article does not provide any specific details regarding the program or its outcomes.

Dundee City Council’s Pilot Project: The aim of this multi-agency project was to provide supports and tutoring to children in care who, at the time of the projects, were in schools, excluded from school, or were facing transitions or exams (SGSR, 2008). Outreach activities were also implemented through after-school clubs and weekend activities, and support activities were provided to children in residential care. Among the project staff were a project manager and two link teachers who were seconded to the project and provided assistance to students and caregivers. Positive outcomes indicated in the report included increased confidence and self-esteem; however, no supporting details were provided.

Glasgow’s project: The aim of this project was to provide direct tutorial support to assist students in care who had gaps in learning or needed extra help for examination preparation (SGSR, 2008). Indirect support was also available to assist foster youth to participate in educational or cultural activities. Finally, resource and training materials were provided to parents, caregivers, and social workers so that they could assist
students in their exam preparation. Because of lack of co-ordination, poor reporting, and staffing issues, project staff was not able to evaluate the effectiveness of the project.

7.3. Mentoring programs

The importance of stable relationships with adults and peers and the role these relationships play in child and youth development are extensively discussed in the literature (Avery, 2010; Avery, 2011; Gallegos & Roller White, 2013; Greeson, 2015). The complex supports provided by parents or other significant adults and peers, relational networks, and norms (what is often called social capital) are linked to more positive life outcomes in such areas as social, educational, psychological development; general well-being; improved self-esteem; and emotional and financial safety; among others (Avery, 2010; Avery, 2011; Semanchin Jones & LaLiberte, 2013; Thompson, Greeson, & Brunsink, 2016). Greeson (2015) argues that “the enduring presence of at least one caring, committed adult in the life of a young person may serve protectively to ameliorate many of [the] risks” faced by foster children and children at risk in general (p.140). However, children in care and young adults transitioning out of care might experience what Samuels called “psychological homelessness” as these youth often lack stable positive relationships, a permanent “home” and a connection to a “parent” (Samuels, 2008, as cited in Avery, 2011).

Greeson (2015) also suggests that, while traditionally the concept of permanence has been defined primarily in legal terms and was linked to adoption, reunification with family, permanent placement with relatives, and transfer of legal guardianship or custody, more recent studies propose to expand this concept beyond the legal or physical aspect to include relational or emotional dimensions (Avery, 2010; Freundlich, Avery, Munson, & Gerstenzang, 2006; Semanchin Jones & LaLiberte, 2013). Similarly, Sanchez (2004, cited in Freundlich et al., 2006) redefines permanency as a multidimensional concept that involves “relational (love, emotional support, belonging, safety, stability, and commitment to life-long continuity in the relationship); physical (family-based care, permanent availability of welcome in home, permanent safety net for safe harbour); and legal (adoption, legal guardianship, etc.)” elements (p. 756). Furthermore, Semanchin Jones and LaLiberte (2013) propose that relational permanence should be viewed in terms of “youth experiencing a sense of belonging through enduring, life-long connections to parents, extended family or other caring adults, including at least one adult who will provide a permanent, parent-like connection for that youth” (p. 509).

Thus, as noted by Avery (2010), “the pursuit of enduring relationships, alongside the delivery of support services, is essential in “permanency oriented” child welfare
services” (p. 401). This can be achieved through a natural mentoring process when foster youth develop connections with a supporting non-parental adult whom children select themselves from their social network or through more formal mentoring programs initiated by schools and child welfare services (Greeson, 2015; Greeson & Bowen, 2008). However, Greeson (20013) argues that natural mentoring might be more effective from theoretical and developmental perspectives than programmatic mentoring as it develops gradually and is built on existing relationships. In a study by Greeson and her colleagues (Gresson, Usher, & Grinstein-Weiss, 2010) that compared foster youth with a normative sample of young adults, the authors observed that natural mentor relationship characteristics such as being “like a parent,” “role model,” and providing “guidance/advice” were significantly associated with youth having better outcomes once they transitioned to an independent life. Also, youth valued characteristics of mentors such as being easy to talk to, directedness of communication and advice, and having similar experiences (e.g., being a former foster child; Munson, Smalling, Spencer, Scott Jr, & Tracy, 2010). Overall, the effectiveness of mentoring seems to lie in its ability to provide support and role modeling by enhancing youth’s social relationships and emotional well-being, improving their cognitive skills through instruction and conversation, and promoting positive identity development by serving as role models and advocates (Avery, 2011).

A number of articles discuss the effectiveness of mentoring programs and their impact on at-risk or disadvantaged youth. For instance, Leone and Weinberg (2012) mention such initiatives as Twelve Together and Check & Connect; however, none of the articles cited in the report involved foster youth but focused on a broader population of at-risk children and youth.

Below we present some of the interventions described in the literature that had a mentoring component.

### Table 6: Sample mentoring interventions

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Reference</th>
<th>Type</th>
<th>Age</th>
<th>Statistically Significant Outcomes</th>
<th>Other QUAN and QUAL Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAKE CHARGE</td>
<td>Geenen et al. (2013)</td>
<td>School-age</td>
<td>14-17</td>
<td>self-determination + self-attribution + educational planning + GPA 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Attitude to school 0</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Homework hours+</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Emotions 0</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Behaviour 0</td>
<td></td>
</tr>
<tr>
<td>Big Brothers/ Big Sisters</td>
<td>Scannapieco &amp; Painter (2014)</td>
<td>School-age</td>
<td>14+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Education</td>
<td>Graham,</td>
<td>School-age</td>
<td>youth</td>
<td></td>
<td>High school</td>
</tr>
</tbody>
</table>
TAKE CHARGE: TAKE CHARGE is self-determination enhancement intervention aimed to promote school achievement of foster care youth with special needs. In a longitudinal randomized study of the program efficacy, 133 adolescents (14 to 17.8 years of age) were randomly assigned into intervention and control groups (Geenen et al., 2013). Over 80% of youth were placed in foster care at the time of the evaluation and had up to 7 placement moves. Intervention students received coaching in how to apply self-determination skills and were involved in group mentoring with near-peer foster care alumni. The results of the study showed that the intervention group demonstrated significantly better educational planning knowledge and engagement, academic performance (homework, catching up on classes, post-secondary and career planning) and reduction in anxiety and depression. TAKE CHARGE students had higher scores on the Parent self-determination scale (Parent AIR) at the post-test ($t(193) = 1.74, p = .0413, ES = .44$) and at follow-up ($t(193) = 1.73, p = .0430, ES = .45$). Student and teacher scales did not show any differences between the groups. Students in the intervention group had higher self-attribution of accomplishments ($t(121) = 2.36, p = .0098, ES = .53$) and better score on educational planning knowledge assessment ($t(238) = 2.02, p = .0221, ES = .45$), with similar results found in teacher and parent assessments as well. While the differences in GPA and attitudes towards school between the groups at the end of the study were not statistically significant, intervention students spent more hours doing homework ($t(204) = 1.79, p = .0372, ES = .37$) and did more postsecondary ($t(121) = 2.47, p = .0076, one-tailed, ES = .53$) and career planning ($t(189) = 1.81, p = .0361, one-tailed, ES = .60$). Finally, no difference between the groups was found on emotional and behaviour outcome measures. Reflecting on strategies that might have had positive impact on students, Geenen et al., (2013) highlighted the role of in vivo coaching and mentoring experiences. However, to be successful such an implementation should be based on coordinated efforts of schools, school districts and foster care agencies. An earlier evaluation of the TAKE CHARGE program by Powers et al. (2012) that involved 69 adolescents also found that students...
participating in the program had higher self-determination, quality of life, and better used transitional services.

**Big Brothers / Big Sisters:** Although several literature reviews referred to this program, only one article in our selection attempted to evaluate its effectiveness for students in care. Scannapieco and Painter (2014) examined a Big Brothers / Big Sisters pilot in Texas that involved 45 pairs of foster youth (14 years of age or older) and mentors. The goal of the program was to match children in out-of-home care with trained mentors to help children overcome such issues as dropping out of high school, behaviour, and criminal issues, and help students develop a “future-oriented outlook” by providing them with knowledge and skills needed for success in society. However, while the expectation was for mentors and youth to meet for at least eight hours (and at least 1 hour per month), only four pairs actually met that requirement. 44% of youth stayed in the program for 6 months or less. The authors concluded that the pilot was not successful, citing such barriers such as busy schedules of youth, mentors, and parents, and youth mobility.

**Higher Education Mentoring Initiative (HEMI):** HEMI is a mentoring program designed to assist youth in care with high school completion and transition to post-secondary education (Graham, Schellinger, & Vaughn, 2015). The program is implemented by local universities and colleges, social services, a board of county commissioners, and career education providers. Each youth is assigned a mentor who is committed to work with them for up to six years and help them to complete high school and transition to post-secondary program. Since 2009, 75 adolescents were matched with a mentor. While the article did not focus on the effectiveness of the program, it mentions that 100% of active HEMI youth have completed high school and most of them have been enrolled into a college program.

**National Longitudinal Study of Adolescent Health:** Using data from the National Longitudinal Study of Adolescent Health (1994 - 2002), Ahrens, DuBois, Richardson, Fan, & Lozano (2008) assessed the impact of mentors on foster care adolescents’ psychosocial and health outcomes. The analysis compared youth who had mentors with those who did not and found that mentored youth demonstrated significantly more of the 13 positive outcomes compared to their non-mentored counterparts. Mentored youth were almost two times more likely to participate in higher education (OR 1.92; 95% CI 1.00, 2.70; \( p = 0.05 \)), were 2.62 times more likely to have better health (OR 2.62; 95% CI 1.15, 5.96; \( p = 0.05 \)), and were less likely to be diagnosed with sexually transmitted diseases or report suicidal ideation. Due to the nature of the survey and the subsequent analysis, there is no information about mentorship activities and their context, or about the participant and mentor characteristics.
East Ayrshire Council’s Pilot Project: This project was designed to support youth in care in their Standard Grade studies by providing access to online interactive individual tutorials, one-on-one mentoring support from teachers, supported study sessions, and training and supports to parents and carers (SGSR, 2008). Schools were awarded funding to purchase computers and educational software (series of mini-lessons covering different areas such as mathematics and English). Schools identified youth in care (S3 and S4 grades, or 14-16 year olds) who would benefit from participation; youth disengaged from school were contacted through social work services. Each student received a password and was able to access lessons from home or at school. The program involved between 30 and 40 staff from educational and social work sectors, residential care and youth strategy services, corporate information technology providers, and central administration, including a quality improvement officer from the local authority who co-ordinated the project, school senior managers, class teachers/assistants, specialist teachers for looked after children, managers, and social workers. Results indicate that project improved attendance by 3.4% for cohort 1 (n=96), and by 9.8% for cohort 2 (n=56). Exclusions from school also decreased by 71% and 82% for cohorts 1 and 2, respectively. School staff commented on the value of the mentoring aspect of the project, “as the young people valued having a professional interested in them as individuals” (p. 90). Challenges identified by the project staff in their interviews were access issues and difficulty in evaluating the short-term intervention.

Due to the lack of research on the effectiveness of mentoring programs for foster youth, a number of researchers have turned to the general literature on mentoring. Avery (2011) suggests that mentorship programs appear to influence youth in several areas including:

- work and education (e.g., higher grades, better attitudes to school, better attendance, enrollment in PSE programs, and employment);
- behavior (e.g., reduced risk of gang membership and risk taking);
- psychological well-being (e.g., improved self-esteem, stronger cultural and ethnic identity, reduced depression); and
- physical health (e.g., increased participation in physical activities, reduced drug use).

Mentorship relationships are also reported to be more effective if the relationships are sustained over a significant period of time (12 months or longer), involve frequent contact between youth and mentors, are authentic, are youth-centered, and positively perceived by youth (Avery, 2011; Leone & Weinberg, 2012; Munson & McMillen, 2009, Munson et al., 2009; Spencer, Collins, Ward, & Smashnaya, 2010). Munson et al.
(2009) also highlight the importance of shared life experiences, suggesting that it was desirable to recruit mentors who had involvement with the foster care system themselves, and recommend: providing ongoing training for mentors; using structured activities for mentors and youth; setting clear expectations for frequency of contact; developing mechanisms for support and involvement of parents; and monitoring overall program implementation (Avery, 2011).

7.4. College preparatory programs

As discussed in earlier sections, youth in care often face challenges during their transition to independent life, including access to and readiness for higher education. While these students might have aspirations to enroll in a post-secondary education (PSE) program, they are still underrepresented in colleges and universities (Kirk & Day, 2011). The literature describes a number of initiatives and approaches designed to assist youth in out-of-home care in their transition to post-secondary education or employment.

Table 7: Sample college preparatory interventions

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Reference</th>
<th>Type</th>
<th>Age</th>
<th>Statistically Significant Outcomes</th>
<th>Other QUAN and QUAL Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Michigan Educational Opportunities for Youth in Care</td>
<td>Kirk &amp; Day (2011)</td>
<td>School-age</td>
<td>15-19</td>
<td>Learning about PSE application process, scholarships, and “campus life”, learning about taking responsibility for their actions, forward planning, decision making and time management, and increased self-concept, empowerment and sense of purpose</td>
<td></td>
</tr>
<tr>
<td>Transition programs (USA)</td>
<td>Barnow et al. (2015)</td>
<td>School-age</td>
<td>16 to 21</td>
<td>Obtaining employment, obtaining GED or diploma, or get accepted into a post-secondary school</td>
<td></td>
</tr>
</tbody>
</table>

The Michigan Educational Opportunities for Youth in Care (MEOYIC): MEOYIC is a three-day residential program offered by Michigan State University (MSU) for youth in care interested in enrolling in a post-secondary education program (Kirk & Day, 2011). The program focuses on the development of self-esteem, skill building, and positive social norms. Camp counselors are selected from former foster care alumni. The
authors suggest that the program had improved participants’ perceptions of educational and developmental outcomes, and gave them an opportunity to practice life skills and learn about college life. Students commented about learning about the PSE application process, scholarships, and “campus life”, learning about taking responsibility for their actions, planning, decision making, time management, and increased self-concept, empowerment and sense of purpose. Youth particularly valued an opportunity to interact with counselors who had experiences similar to their own. These counselors were seen as role models and were able to develop trusting relationships with the participants. Program evaluation was based on a small hand-selected sample of 38 students.

Better Futures: Geenen, Powers, and Phillips (2015) conducted a preliminary evaluation of the Better Futures model using randomized intervention (n=36) and control (n=31) groups. The Better Futures model was designed to empower youth in care (16-18 year olds) with mental health issues to prepare and enrol in post-secondary education programs. To participate in the program, students had to be in care, attend high school or a GED program and be within 1 or 2 years of completion, and have a significant mental health condition. Over the course of 10 months, the intervention group participated in a 4-day summer institute on a university campus, received individual bi-monthly peer coaching from young adults who were participating in PSE and had experience in foster care and/or mental health challenges, and attended 4-5 mentoring workshops. The control group received other services typical for foster youth or youth with mental health issues (e.g., therapy, guidance counselling at school, etc.). Students were assessed four times during the program: at the beginning, and at 1, 10, and 16 months after enrollment. The results of the study showed that a significantly higher percentage of youth in the intervention group were enrolled in post-secondary programs (65% vs. 24%, $\chi^2=9.57; df=1; p=0.001$) and had twice the level of postsecondary participation at follow-up, compared to the control group. Youth in the intervention group also demonstrated significant gains in the areas of transition preparation, quality of life, hope, self-determination, and mental health empowerment (Phillips et al., 2015). One of the important features of the program was an opportunity for youth to interact with mentors who had similar challenges with mental health and foster care and who were successful in pursing their education after high school. As noted by the authors, “Working with role models whose stories mirror their own complicated lives may help young people see that higher education can be attainable for them as well” (Phillips et al., 2015, p. 57). Another unique element of the intervention was its explicit focus on mental health approached from a strength perspective with “an emphasis on normalizing mental health issues, on the importance of self-care, and on communicating the perspective that living through life stressors and accompanying mental health challenges can lead to strength, resilience and unique wisdom” (p. 57). The authors
emphasized the importance of integrating the program’s focus on mental health and wellness throughout the model, systematic support provided to youth through a “fidelity-driven, carefully evaluated approach”, access to special education and developmental disability services, and “near-peer, self-determination-based mentoring.”

Transition programs (USA): Barnow et al. (2015) discussed the outcomes of several (unnamed) programs and services offered to transition-aged youth in out-of-home care, such as job preparation, college preparation, General Educational Development [GED]/basic education, and programs focusing on life skills, parenting, health, income, and substance abuse. The outcomes of the services were evaluated using participants’ data collected at the time of entry into the program and then every three months during the program. The majority of the participants were high school students (42%) or high school dropouts (22%), while the remaining had graduated from high school but were not attending a post-secondary institution (26.2%) or were enrolled in post-secondary program (8.6%). Participants reported obtaining employment (35%), obtaining a GED certificate or diploma (23%), or getting accepted into a post-secondary institution (17%). Age was found to be linked to positive outcomes, with 17-year-olds achieving more positive outcomes than 16 year olds. Length of participation in the program was also a statistically significant factor, as students spending 7 to 9 quarters in the program achieved more positive outcomes than students who spent less time. The article did not provide information about specific program activities, participant characteristics, and program content across sites; no comparison groups were used in the study.

7.5. Skills and behaviour interventions (behavioural, well-being, living skills and resilience)

Resilience is seen a collection of factors, skills, and capabilities that help individuals to adapt and overcome challenges in life and to identify and effectively use personal and community resources. For example, Drapeau, Saint-Jacques, Lepine, Begin, and Bernard (2007) define resilience as “the presence or maintenance of competencies in spite of a high-risk context” (p. 978).

Children who are resilient tend to have a positive self-concept; good interpersonal, problem-solving, conflict-management, and communication skills; and the ability to manage stress and properly express emotions (Coholic, Fraser, Robinson & Lougheed, 2012). However, children and youth in care often demonstrate more behavior and mental health issues and poorer functional and process skills and capabilities, compared to students who are not in care. Drapeau et al. (2007) identified several processes that can be used to foster resilience, including: the development of self-esteem and self-efficacy; fostering risk assessment, self-management strategies and
reduction of risk taking behaviours; and accessing new opportunities and experiencing positive changes in the areas of family, school, social life and personal behaviour. The authors argue that foster youth’s progression to becoming resilient might achieved through action, relationships, or reflection.

Interventions that follow focus on one of more aspects of resilience building (although some might also include other dimensions discussed in earlier sections).

**Table 8: Sample skills & behaviour interventions**

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Reference</th>
<th>Type</th>
<th>Age</th>
<th>Statistically Significant Outcomes</th>
<th>Other QUAN and QUAL Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fostering Healthy Futures</td>
<td>Taussig, Culhane, &amp; Hettleman (2007); Taussig, et al. (2012)</td>
<td>School-age</td>
<td>9-11</td>
<td>Positive impacts on mental health functioning</td>
<td></td>
</tr>
<tr>
<td>Holistic Arts-Based Group Program (HAP</td>
<td>Coholic, Fraser, Robinson &amp; Lougheed, (2012)</td>
<td>School-age</td>
<td>At university campus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECHO (Effective, Comprehensive, Holistic</td>
<td>Coholic et al. (2012)</td>
<td>School-based</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Kids In Transition to School</td>
<td>Pears, Fisher, &amp; Bronz (2007); Peers, Kim, &amp; Fisher (2012); Pears, Fisher, Kim, Bruce, Healey, &amp; Yoerger (2013)</td>
<td>School-age</td>
<td>6</td>
<td>Study 1 social competency (PS)+ Teacher reports 0 Study 2 Early literacy skills+ Prosocial skills 0</td>
<td></td>
</tr>
<tr>
<td>Multidimensional Treatment Foster Care</td>
<td>Leve &amp; Chamberlain (2007)</td>
<td>School-age</td>
<td>At school or in other locations</td>
<td>13-17</td>
<td>School attendance+ Homework completion +</td>
</tr>
<tr>
<td>Cognitive Behavioral Intervention for Trauma in Schools</td>
<td>Maher et al. (2008)</td>
<td>School-based</td>
<td>10-15</td>
<td>Improvements in English and math and changed their attitude towards educations a decrease in exclusion and truancy rates and increase in attendance</td>
<td></td>
</tr>
<tr>
<td>North Ayrshire Project</td>
<td>SGSR (2008)</td>
<td>School-based</td>
<td>S3/ S4</td>
<td>Better attitude to school, higher grades in English and math, and</td>
<td></td>
</tr>
<tr>
<td>West Lothian Project</td>
<td>SGSR (2008)</td>
<td>School-based</td>
<td>P1-S4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention name</td>
<td>Reference</td>
<td>Type</td>
<td>Age</td>
<td>Statistically Significant Outcomes</td>
<td>Other QUAN and QUAL Outcomes</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------</td>
<td>------</td>
<td>-----</td>
<td>------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Fostering Healthy Futures (FHF)</td>
<td></td>
<td></td>
<td></td>
<td>developed more positive connections with their caregivers</td>
<td></td>
</tr>
</tbody>
</table>

**Fostering Healthy Futures (FHF):** The FHF program was developed to assist children in care to address mental health issues, develop competence, and reduce risk behaviours (Taussig, Culhane, & Hettleman, 2007; Taussig, et al, 2012). It involved structured group skills training and mentoring activities and focused on psychological, social, and behavioral domains. Children were assessed using cognitive, academic, and mental health assessments and randomly placed in an intervention or control group. Over a period of 30 weeks, children in the intervention group participated in weekly group sessions with 8 other students and 2 facilitators. The skill sessions focused on a range of topics including addressing worry, peer pressure, anger management, communication, change and loss, dating pressure, problem solving, cultural competence, puberty, abuse prevention, drugs and alcohol, emotion recognition, and future orientation. Mentors (students from a social work university program) provided transportation to and from sessions, and had dinner with children after the skills training. Children also received one-on-one mentoring that focused on topics of interest to the students and skills learned during the skills training sessions. The authors report that FHF demonstrated positive impacts on mental health functioning; however, the supporting data was not provided in the papers.

**Holistic Arts-Based Group Program (HAP):** The objective of this research-based group program was to improve children’s resilience with a specific focus on reinforcing social skills, emotional awareness, regulation, and self-esteem (Coholic, Fraser, Robinson & Lougheed, 2012). HAP used strengths-, arts- and mindfulness-based practices to teach students how to recognize and develop their strengths, listen and pay attention, and explore their feelings and behaviours. Students (8 to 15 year olds) attended weekly 3-hour sessions over a period of 12 weeks and worked in groups of 4 with 2 facilitators. The sessions took place at a local university. Transportation was provided by volunteers. The article provided no information about the impact of the program on the participants.

**The ECHO (Effective, Comprehensive, Holistic & Objective) Social Skills program:** This was a multidimensional and child-focused strengths-based group program that catered particularly to academically marginalized youth in care and was developed to accommodate children with different learning abilities (Coholic et al., 2012). The program was offered at a local elementary school. Children attended two-hour sessions...
twice a week for 8 weeks. Group sessions focused on affective, cognitive and psychomotor activities with the goal to help students develop resilience in academic and social settings. Children participated in such activities as role-play, modeling, yoga, and Tai Chi, dance, rhythm exercises, and cardiovascular exercise. The authors provided a detailed description of the program and identified a strengths-based experiential approach as one of the potentially effective methods, but did not provide evidence of the impact of this initiative on the participants.

**The Kids In Transition to School (KITS) Program:** The KITS program was a focused, short-term intervention to increase school readiness, self-regulation and social competence of young children in care (Kindergarten to Grade 2). Children were randomly assigned to intervention and control groups. The program lasted 16 weeks and was divided into two phases. In the school readiness phase (2 months before Kindergarten entry), children participated in playgroups twice a week. In the transition/maintenance phase, children attended playgroups once a week. Their caregivers attended meetings twice a month during the intervention. Activities focused on early literacy skills (e.g., letter names, phonological awareness, and comprehension), social skills (e.g., problem-solving with peers, emotion recognition), and self-regulatory skills (e.g., handling frustration and disappointment and controlling impulses). Twenty-four children participated in the pilot of the program (Pears, Fisher, & Bronz, 2007). The researchers report that children in the intervention group received significantly higher scores on foster parent ratings in two dimensions: social competency \(d = 1.55\) and lability \(d = 1.15\). No difference was found on teacher ratings. In the next iteration of the program, 192 children participated, and the results showed a positive effect of the intervention on early literacy skills \(d = .18\), controlled for prior literacy and cognitive skills and on self-regulation \(d = .26\), but no significant effect on prosocial skills (Peers, Kim, & Fisher, 2012; Pears, Fisher, Kim, Bruce, Healey, & Yoerger, 2013).

**Multidimensional Treatment Foster Care (MTFC):** MTFC was an alternative program for juvenile justice youth in care. A randomized intervention trial described by Leve and Chamberlain (2007) compared 37 girls in care (13-17 years of age) assigned to the MTFC program with 44 girls from the same background who were receiving standard intervention service provided for delinquent girls in out-of-home care. MTFC youth were provided with intensive support and treatment. They met with an individual therapist weekly to discuss problems at school or in their foster homes. Each girl was also assigned a skills trainer (a recent college graduate) who helped her develop specific social skills and participate in community activities. An MTFC program supervisor coordinated the activities and communicated with the parents, school, and the juvenile justice system. The results of the trial found that the MTFC group had better homework
completion compared to the control group during the program ($F(2, 70) = 3.08, p < .06$, effect size = .08) and 12 months after the program was completed ($F(2,68) = 6.22, p < .01$, effect size = .9). The MTFC group also demonstrated better attendance 12 months after the program ($F(2,68) = 2.80, p < .07$, effect size = .07). According to the authors, ongoing support and encouragement were effective elements that might have influenced educational outcomes of the MTFC youth (however, no evidence to support this claim was provided).

**Cognitive Behavioral Intervention for Trauma in Schools (CBITS):** Maher et al. (2008) describe a school-based cognitive-behavioral program for children (ages 10–15) who have experienced trauma. The program was implemented in the United States through a partnership of a school board, university, researcher consultants and social services. The goal of the program was to help children build resilience, practice coping skills, reduce existing trauma symptoms, and improve their ability to handle stress and trauma through the use of games, presentations, examples, and homework assignments. Students attended 10 weekly group sessions in addition to individual sessions. Caregivers, a therapist facilitator, social workers, and teachers also met to discuss the child’s progress and needs. This descriptive paper did not provide information about the effectiveness of this initiative. Maher et al. (2008) identified several challenges that programs of this type might experience, including systemic/legal, therapeutic, and logistical issues. According to the authors, it is crucial to work “across systems” to involve child welfare, mental health providers, education experts, parents and guardians, and legal services. The authors also stress that “implementation occurs in the context of community and factors such as the following need to be taken into account: (a) Stakeholder readiness, interest, and buy-in; (b) Cultural, linguistic, and geographic contexts; (c) Establishing the right referral mechanisms; and (d) Feasibility in terms of practicality, affordability and sustainability” (p. 561).

**North Ayrshire Project:** The goal of this project was to develop individualized learning services (e.g., Personal Learning Plans) to help youth in care “become engaged in their education, become more confident and resilient and have a sense of control over their lives” (SGSR, 2008, p. 108). Personal Learning Plans focused on core academic subjects such as English and mathematics, but also included work placements and/or college modules. Participants were youth in S3 and S4 who had been through a Joint Support Team process, exhibited high levels of truancy, and were failing to succeed in school. Two teachers and a project manager were seconded to the project. According to the project manager, students showed improvements in English and mathematics and

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3 Joint support Team meets regularly to discuss progress of the student, share information, and identify supports that the student might require. It usually consists of a member of the senior management team in the school, educational psychologist, school social worker, health professional and staff from family learning (where appropriate).
changed their attitude towards education. Also, there was a decrease in exclusion and truancy rates and increase in attendance. Students commented on how extra support helped them to improve and become more focused on education and make better choices and have “a better chance in life” (p. 109). Schools also changed their attitudes toward students in care and became more sympathetic, supportive, and aware of the issues and challenges faced by these students. Co-operation between schools and other professions was a challenge: there was still a lack of understanding between different agencies. Information was not shared in a timely manner. However, this short care study did not offer any supporting evidence.

West Lothian Project: The project intended to improve educational outcomes of children in care by providing flexible curriculum and a supported setting (“nurture groups”) within mainstream primary schools (SGSR, 2008). The program was intended to assist students in their transition from primary to secondary school and develop a supportive environment in secondary schools through inter-agency cooperation. Finally, to improve confidence and self-esteem, students were engaged in regular physical activity (Physical Activity for Confidence and Esteem [PACE]). The participants were students from P1 to P7 in Scotland. By the end of the project, nurture groups were created in nine schools (6 to 8 students per group). At the secondary level, 6 to 8 students participated in the personalised programs. A buddy system was created with secondary students becoming volunteer buddies for elementary students. Approximately 80 students were involved in the PACE program offered by partnership agencies. Program staff observed that students had better attitudes toward school, higher grades in English and math, and developed more positive connections with their caregivers. Schools that piloted flexible curriculum made sure that students “were more successful at accessing courses, attended school on a more regular basis and were more successful in gaining basic qualifications” (p. 123). The staff attributed the success of the initiative to a collaborative, multi-agency, multi-disciplinary team that was “dealing with teaching, health, educational psychology and the confidence and mental wellbeing aspects” of the program (p. 124). However, no further evidence was provided in the report.

7.6. In-home supports and learning material distribution

Other factors that might positively influence the educational and well-being outcomes achieved by students in care are parental involvement and the establishment of a positive home literacy (and learning) environment (Cheung et al, 2012). In particular, a child’s exposure to reading materials, access to books, and book reading practices are moderately to strongly correlated to academic outcomes (Mol & Bus, 2011). Having a book routine and sharing books and stories was found to contribute to children’s language and comprehension skills.
Below we present interventions that focus in-home supports and resource distribution.

**Table 9: Sample in-home supports & learning materials distribution interventions**

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Reference</th>
<th>Type</th>
<th>Age</th>
<th>Statistically Significant Outcomes</th>
<th>Other QUAN and QUAL Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Letterbox Club</td>
<td>Mooney, Winter, &amp; Connolly (2016)</td>
<td>School-age</td>
<td>7-11</td>
<td>Reading or other school outcomes 0</td>
<td>Too much work for parents Children being “book grateful”</td>
</tr>
<tr>
<td>Distribution of books and computers (UK)</td>
<td>Forsman &amp; Vinnerljun (2012)</td>
<td>School-age</td>
<td>9-14</td>
<td>Reading+ Comprehension+ Spelling+</td>
<td></td>
</tr>
<tr>
<td>The Bookworm Club</td>
<td>Brady (2013, 2014)</td>
<td>School-age</td>
<td>6-13</td>
<td>Motivation for reading+ Self-esteem 0 Child-foster parent relationship 0 Literacy environment 0 Foster parent expectations of child 0</td>
<td>Improved sense of belonging and sharing of book and stories Improved motivation for reading</td>
</tr>
</tbody>
</table>

**The Letterbox Club:** This intervention was intended to improve educational outcomes of children in care by providing them with educational materials (books, educational games, and stationery) that they could use in their foster homes with parents and siblings. The intervention was conducted in the United Kingdom beginning in 2003, and the number of participants grew from 20 in the 2003 pilot to over 1500 in 2008. The intervention was documented through several evaluation reports and academic papers, but the results are mixed. Dymoke and Griffiths (2010), Griffiths (2012), Griffiths and Comber (2011), and Griffiths, Combr, and Dymoke (2010) focused on the data from the 2007, 2008, and 2010 cohorts. The authors listed improvements in areas such as increased involvement of children in their own learning, improved scores on reading and mathematics assessments, increased enjoyment for the child in receiving personalized parcels, and increased involvement of caregivers in learning activities. The authors do not discuss whether the changes in assessment scores were statistically significant. Furthermore, no control groups were used. When compared with national levels, the intervention students were still below or approaching the national level in both reading and mathematics. Mooney, Winter, & Connolly (2016) conducted a randomised controlled trial with a sample of 116 children in Northern Ireland between April 2013 and June 2014 (56 children randomly allocated to the intervention group and 60 children from a waiting list control group). This study found “No evidence that The Letterbox Club had any effects on the children’s reading outcomes or their attitudes to reading or school more generally” (p. 5). Some parents indicated that the program required too much work. While children were grateful for the packages, some indicated that they also
had books at home. Also, children were more interested in the quality of the books than in the fact of having received a package.

**Distribution of books and computers (UK):** In another United Kingdom-based intervention (described in Forsman & Vinnerljun, 2012), 58 students from 9-14 years of age were provided with a handheld computer and books. The project staff then visited the children to provide support and address any issues that they might have. To evaluate the impact of the intervention, reading, reading comprehension, and spelling were assessed before and after the intervention, and the results showed significant improvements in literacy skills (with effect sizes ranging from 0.6 to 0.9 on all measures).

**The Bookworm Club:** The Bookworm Club is an Ontario-wide literacy program based on the UK-based Letterbox Club model (Brady, 2014). The pilot started in 2012 with 12 Children’s Aid Societies with 87 children in care (6 to 13 years of age) and their foster parents. In the following year the number of children increased to 532. Similar to the Letterbox Club model, children received packages with books, games and other related materials. If a child changed placement, the packages were sent to the new address. Brady (2013) provides evaluation results for the 2012 pilot of the program. The only outcome that demonstrated a positive and statistically significant change between the beginning and the end of the intervention was a child’s motivation for reading (61.2 vs. 67.7 mean score, p=0.000). In interviews, foster parents identified several positive changes they had observed in their children, such as improved sense of belonging and sharing of books and stories. Overall, this evaluation was prone to the same methodological issues as its UK counterpart. It did not have a comparison group, involved a self-selected group of children and their foster parent, and did not use any standardized measures to evaluate children’s literacy skills.

### 7.7. Educational liaison

To improve educational and well-being outcomes of children in care, Children’s Aid Societies and schools cannot work in isolation. Inter-agency and cross-system collaboration among individuals and agencies responsible for children in care, including foster parents, schools, child welfare, and juvenile services are critical to the well-being and success of children in out-of-home care (Zeltin et al., 2004). Agencies need to collaborate to “developed a comprehensive system to provide the necessary supports and procedures to overcome educational hurdles that hinder school progress” (Zeltin et al., 2004, p. 432). Vulin-Reynolds, Lever, Stephan, and G hunney (2008) suggest that integrated supports can be achieved by establishing a specialist within the school or in the child welfare office who would coordinate services, help solve timetabling issues,
assist children in keeping up with their assignments, facilitate the process of school mobility and transition, and advocate on behalf of children.

**Table 10: Sample educational liaison initiatives**

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Reference</th>
<th>Type</th>
<th>Age</th>
<th>Statistically Significant Outcomes</th>
<th>Other QUAN and QUAL Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Initiative Project</td>
<td>Zeltin, Weinberg, &amp; Kimm (2004)</td>
<td>School-age/ school-based</td>
<td>All</td>
<td>Math + Reading + GPA 0 Number of absences (increased) + Number of special education services decreased</td>
<td></td>
</tr>
<tr>
<td>The Virtual Schools (UK)</td>
<td>Jackson (2015)</td>
<td>School-age/ school-based</td>
<td>All</td>
<td>Increased number of students who received financial support for post-secondary education, improved attendance, and reduced number of expulsion and behaviour issues</td>
<td></td>
</tr>
<tr>
<td>The Virtual Schools (UK)</td>
<td>Berridge et al. (2009)</td>
<td>School-age/ school-based</td>
<td>All</td>
<td>Increased proportion of students completing tests and examinations in reading, writing, science, mathematics at KS1- KS4.</td>
<td></td>
</tr>
<tr>
<td>On the Way Home</td>
<td>Trout et al. (2012)</td>
<td>School-age/ school-based</td>
<td>13-17</td>
<td>Less likely to return to care or to jail More remained in their homes after transition Better attendance and graduation rates</td>
<td></td>
</tr>
<tr>
<td>Aberdeen City Council’s Pilot Project</td>
<td>SGSR (2008)</td>
<td>School-age/ school-based</td>
<td>E/S</td>
<td>Improved attendance, reduction in exclusions, re-engagement with education, accessing further education, engaging with out of school activities and moving on to employment</td>
<td></td>
</tr>
<tr>
<td>Edinburgh City Council’s pilot project</td>
<td>SGSR (2008)</td>
<td>School-based</td>
<td>P7-S1</td>
<td>Increased attendance, re-engagement with education, and nurturing of talents</td>
<td></td>
</tr>
<tr>
<td>Midlothian Project</td>
<td>SGSR (2008)</td>
<td>School-based</td>
<td>Unknown</td>
<td>Reintegration of students into mainstream education</td>
<td></td>
</tr>
</tbody>
</table>

**Education Initiative Project - Education Liaison Model:** Zeltin and her colleagues have examined the role of an educational liaison in several articles. According to a 2004 paper (Zeltin, Weinberg, & Kimm, 2004), the goal of the model was to enhance inter-
agency collaboration and improve educational outcomes for children in care. An educational specialist (liaison) was placed in the child welfare office and provided assistance to social workers who worked with children experiencing school problems. The liaison’s involvement ranged from providing one-time counseling and assistance to the social worker to more direct interventions such as: contacting a resource person at the school; soliciting information from, or providing information to, the caregivers and social workers; attending meetings with the school staff, foster parents and social workers at the school; and investigating alternative school options. Zeltin et al. (2004) examined the data from the year prior to intervention (1997–1998) and the year following the intervention (1998–1999). Reading, math, grade point average (GPA) and attendance were compared for two groups of students: 50 students (5 to 17 years of age) who received assistance from educational liaison and 38 control cases. The results showed statistically significant differences in math and reading test scores. There were no differences in GPAs between the groups. The control group had significantly fewer absences during the post period and fewer control students were receiving special education services. The study did not control for pre-existing differences between the groups and was based on a small sample of students.

The Virtual Schools (UK): In the United Kingdom, local authorities have developed virtual schools to support students in out-of-home placements (Ofsted, 2012). Unlike their counterparts in the United States that teach courses online using a wide range of online methods and technologies, the UK’s virtual schools are not a teaching institution but rather a unit aimed to support children in care by acting as their “champions” by coordinating services and resources and tracking children’s progress as students attend their “ordinary neighbourhood schools (Berridge, Henry, Jackson, & Turney, 2009).

Figure 2. UK’s virtual school model
Virtual Schools vary in structure, operations, and size and are led by virtual school head-teachers who are often supported by a virtual school team. Larger teams provide more direct services to students in care such as attending meetings; training foster parents, social workers, teachers; and liaising with schools; while smaller teams focus on consultations and solving challenging situations involving children in care. Some schools offer services to older students such as college preparation, training, and employment services. Virtual school teams support school teachers and social services in the development of a personal education plan (PEP) for each student and allocate a Pupil Premium (financial support available to students in care). For example, in East Riding Authority, the virtual school tasks include:

- Coordinating and quality assuring all Personal Education Plans (PEP);
- Monitoring and challenging schools to make effective use of Pupil Premium
- Tracking the academic progress, attendance and exclusions of children in care and providing them with additional educational support.
- Ensuring Special Educational Needs or Disability (SEND) needs are identified and supported appropriately.
- Implementing a range of targeted interventions to raise academic standards.
- Providing support and challenge to students, schools and carers.
- Ensuring effective transition between schools or specialist providers.
- Encouraging our young people to have high aspirations about their futures and remove barriers to further education.
- Leading training for Foster Carers, Designated Teachers, school governors and bespoke training for alternative learning providers and staff in schools.
- Celebrating LAC Achievements at end of key stages (p. 3, Virtual School Head Teacher Report, 2016).

During the pilot stage of the Virtual School Head (VSH) initiative in 2007-2009, 11 pilot authorities were funded by the UK’s Department of Children, Schools and Families to create and facilitate Virtual Schools for children and youth in care. Each VSH pilot has received approximately £70,000 per year (depending on the number of children and youth in care in their authority). Berridge et al. (2009) were tasked to document activities undertaken by the pilot VSHs, examine experiences of educators and students, evaluate the outcomes for children and youth in care and identify examples of “best practices”, using statistics from the Department of Children, Schools and Families, VSH progress report, and surveys and interviews with virtual school heads and staff, social workers, students, teachers and foster parents. Berridge et al. reports that based on the achievement indicators, “pilot authorities performed well when compared to the national picture for the educational attainment of looked after children” (p. 24). For example, the
authors report that for the children and youth in care in the three pilot authorities, the proportion of students completing General Certificate of Secondary Education examinations with grades A-C was higher than the national percentage. In 11 pilot areas, students showed better results writing at the Key Stage 1 (ages 5-7). In reading at Key Stage 1, attainment levels ranged from 42-69 percent in 2005 to 40-74 percent in 2008. Also, in 2008, four pilot authorities reported an increase in a number of children and youth in care who achieved Level 4 at Key Stage 2 English (7-11 year olds) and five authorities reported improvements in Key Stage 2 Mathematics. And while the pilot authorities seemed to perform strongly against the national average at the higher grades (Key Stages 3 and 4), the patterns fluctuated from year to year and from one subject area to another. Furthermore, the information about student achievement was not available for every pilot authority and for those areas that provided the data, the number of children and youth in care were very low. Thus, comparisons of the pilot data with the national averages reported in this study should be interpreted with great caution. After presenting their analysis of the achievement and interview data, Berridge et al. (2009) questioned whether the changes in student outcomes were linked more to the admirably high level of resource the authority committed to this area. Indeed, the education of looked after children is a multifaceted problem with many potential influences. Benefits may be indirect and proving causal relationships in this case are impossible. Official statistics can be volatile, depending on the cohort, and they exclude some of the work of virtual heads. (p. 57)

In seeking evidence regarding virtual schools’ efficacy, we located many annual reports produced by school authorities. These reports follow a range of templates and report on activities and outcomes observed in each authority. While the analysis of virtual schools’ annual reports was outside of scope of this literature review, a cursory examination of the documents suggests that while the reports provide some information about student outcomes, the data are usually based on small numbers of students or are anecdotal/descriptive in nature, making it difficult to draw any definitive conclusions. For example, according the East Riding 2014-15 report, youth in care assessed in 2015 had significantly higher attainment for the General Certificate of Secondary Education exams than the national level (based on the data from 47 youth in care). Furthermore, 23% of the 47 students in care passed English and Mathematics examinations, compared to 16% of students in care at the national level. Furthermore, 45% of the East Riding students in care received grade above C, compared to 25% of students in care nationally. However, while the GCSE attainment measures such as proportions gaining above grade C in mathematics, science and humanities, and average point scores seem to be higher than the national levels, this information should be interpreted with caution.
The only peer-reviewed article focusing on virtual schools that we were able to locate was authored by Jackson (2015), provided an illustrative case study of one of the UK’s virtual schools. Jackson describes how its staff solved problems, liaised with student services of schools and universities attended by children in care, held financial advice days and visited students “as a parent would do” (p. 331). Ofsted (2012) and Jackson (2015) provide anecdotal evidence of how the virtual school model improved the education and well-being of children in care. For example, Jackson mentions outcomes such as an increased number of students who received financial support for post-secondary education, improved attendance, and a reduced number of expulsion and behaviour issues. It was also asserted that foster parents, schools, and social workers developed better understanding of the issues and challenges faced by children and acquired strategies to support them. Neither document provided empirical evidence on the impact of the virtual schools on students.

On the Way Home (OTWH): OTWH was a 12-month transition program administered by Family Consultants (Trout et al., 2012). The program focused on school-age youth (13-17 years of age) who were transitioning out of foster care to home, school, and community settings. The OTWH programs combined three integrated interventions: Check & Connect, Common Sense Parenting, and homework support. Each Family Consultant worked with up to 15 families and was on call 24 hours a day / 7 days a week. Check & Connect was a school-based intervention to improve educational outcomes and attendance of at risk youth. The program involved mentoring, case management, close monitoring of school performance, and other supports (Leone & Weinberg, 2012). Students were assigned a “school mentor” or “monitor” who communicated with parents, teachers, administrators, and special educators; monitored and recorded student’s progress and alterable indicators of school engagement such as attendance, detentions, and suspensions; provided ongoing feedback and encouragement to the student; and arranged additional interventions as needed. In addition to Check & Connect, the OTWH program included a Common Sense Parenting component that provided training and resources to parents, and a homework intervention that was used to improve youth’s academic engagement and outcomes and enhance school-home communication. Family Consultants worked with schools, youth, and their families to develop functional homework routines and monitoring procedures, and to identify additional services and supports at school or through other means. Although the OTWH program was focusing on educational outcomes, other services were provided on as needed bases, including transportation and health / mental health services. Trout et al. (2012) compared 24 youth and families who took part in the OTWH program with 20 youth who received traditional support services from a residential agency. Youth in both groups had up to 17 formal placements and attended up to 10
schools. The authors found that youth in the OTWH group were less likely to return to care or to a jail setting: 22 OTWH youth remained in their homes compared to 13 youth from the control group. Similarly, the OTWH group had better attendance and graduation rates.

The job of an educational liaison is not an easy task as these specialists experience a number of barriers. Shea, Zetline, and Weinberg (2010) who surveyed 94 liaisons in California found that the greatest challenge was the communication between education agencies and the child welfare services. For example, educational liaisons often did not receive information about the student from child welfare services or were not notified when a student was moved into or out of the school district. Also, educational coordinators often did not know who the foster children were or were lacking records and information to make education-related decisions for that student.

Aberdeen City Council’s Pilot Project: The Aberdeen City project was intended to improve educational outcomes of the children in care (living in foster care and residential care) as well as to develop effective practices within the Aberdeen authority (SGSR, 2008). The project provided at-home supports to children in residential care through developing personalized supports. Family liaisons and designated teachers worked with children and their caregivers to examine reasons for non-attendance and develop strategies to improve attendance. Packages with educational books and other resources were also sent to primary school aged children in care. Students from one secondary school and three associated primary schools (Strand 1) and from two medium-to-long term residential units (Strand 2) participated in this pilot. Two groups of professionals provided services. Staff in Strand 1 included a project manager, project strategist, project assistant, a dedicated family liaison officer, four designated teachers within the target schools, an educational researcher, and an educational psychologist. Strand 2 involved two teachers and a principal support for learning worker, three support workers, a project co-ordinator, and two teaching assistants. These professionals worked together to create individualized services for students. The SGSR report lists a number of positive outcomes. For example, the Family Liaison Officer was able to successfully engage with the families involved (potentially due to the fact that she was seen as a “neutral” point of contact). The project staff also reported positive changes in students such as improved attendance, reduction in exclusions, re-engagement with education, accessing further education, engaging with out of school activities, and moving on to employment. No evidence supporting these claims is provided. Among the challenges identified by the project manager were difficulties in staffing, such as teachers who did not have the specific skills required for working with the children in care, some of whom exhibited challenging behaviours.
Edinburgh City Council’s pilot project: The objective of this project was to support children through their transitions from primary to secondary school, to build better links between the schools and homes of students, and to improve the secondary school’s response to the needs of students in care (SGSR, 2008). To raise awareness of issues faced by children in care, training was provided to key members of school staff. The project involved 6 secondary and 28 primary schools within Edinburgh. To replicate a primary school-type setting that would be more ‘nurturing’ in nature, learning assistants within the secondary school were assigned to monitor students’ progress. These learning assistants were constantly available to students and assisted them in their transition. Over the course of the project, they developed close relationships with the students, which allowed them to identify students’ talents and interests. Project staff reported that “there was evidence of increased attendance, re-engagement with education, and nurturing of talents” (p. 93). Challenges included delays in staffing, resistance from some schools to develop additional planning and support plans, and a “clash of ideas” between school and learning assistants. However, no empirical evidence supporting these conclusions was provided in the report.

Midlothian Project: The goal of this project was to provide individualized tutoring and mentoring to “young people who were disaffected with education and who, despite flexible plans from schools, still did not attend” (SGSR, 2008, p. 106). A principal teacher was assigned to support the students and to provide flexible, continuous, and needs-led responsive service; this teacher was working in the residential units and in one of the secondary schools. Tutors were the existing teachers “who were prepared to do additional work” (p. 106). The project was deemed to be successful as all youth in care were reintegrated into mainstream education. One of the key factors of success was the principal teacher who worked with students and school staff, advocating for students’ needs, and making sure that all the required protocols and processes were followed. Among the challenges identified by the project staff were school timetables that often could not be overcome, as well as communication between schools and the principal teacher. However, the case study did not provide any supporting empirical evidence.

7.8. Other pedagogical strategies and program features

In addition to initiatives described above, we located a number of articles that provided more general descriptions of program development and pedagogical approaches, or discussed program components that might be effective with children in care (although very few articles supported these recommendations with empirical evidence).
In their review of “best practices” that UK schools used to support the education of children in public care, Fletcher-Campbell et al. (n.d.) described a number of national and local models used in UK schools. While the authors provided only general descriptions that did not allow us to tease out individual program characteristics and outcomes, the report outlines some of the types of services provided by schools. Among the reported services were:

- the Learning Mentors in schools – an initiative that involved mentors working with children in care;
- partnerships between schools districts and Educational Action Zones that provided funds for homework support, workers who visited children at home after school, and clinical psychologists who worked with students in care at school;
- Quality Protects grants that provided children and youth in care with laptop computers;
- weekly after-school sessions on stress management study and exam skills;
- peer-mentoring with Years 8 and 9 students who had been trained by a learning mentor providing mentoring to younger students;
- an ICT literacy initiative in partnership with the National Literacy Association and a local building society that provided books, computers and personal digital assistants to residential homes;
- tuition, educational resources, and computer access for youth in residential care; and
- ceremonies and events to celebrate achievement.

Using data from interviews with educators, child welfare representatives, and students, Fletcher-Campbell et al. (n.d.) identify several programming and pedagogical strategies that participants found to be effective with children and youth in care. For example,

- Some schools use a “pastoral structure” with students working in small group settings, sometimes arranged by teams consisting of students from different grade levels.
- An individual approach is emphasized with school, child welfare, and other professionals responsible for the child in care, developing an individual learning plan reflecting the child’s needs.
- A designated teacher is assigned to monitor the child’s progress.
- Learning support assistants (LSAs), teaching assistants (TAs) or learning mentors (LMs) are made available to support children with additional needs.
- Schools develop procedures and strategies to make sure that children in care are treated in the same way as other students and are not singled out as “foster kids”.

• Schools monitor children’s progress and provide assistance in case of school transfers (e.g., additional tutoring, development of timetables that allow students to integrate into their peer group)
• Ongoing support is made available. This might include additional educational services, financial support, transportation, or supervision. For example, in one of the schools that had 20 teacher assistants, two assistants were assigned to provide mentoring and in-class support to one child in care and were meeting that child from the taxi to “ensure that she made it into lessons” (p. 67).
• Schools create collaborative relationships with other agencies responsible for children in care.
• To improve attendance and reduce truancy, schools use a number of strategies including telephoning home on the first day of non-attendance, home visits, and providing transportation to school via taxi or school bus.

While the report does not provide in-depth analysis of the outcomes resulting from these activities, the authors mention improved academic achievement, resulting in students completing their program, as well as “social successes” such as improved self-esteem, ability to form and maintain friendships, ability to see the differences between right and wrong, ability to speak confidently and appropriately, and development of positive relationships.

7.9. What do children in care want?

The program characteristics and interventions discussed above have been viewed from the perspective of educators and researchers. We turn our attention in this section to the expectations and desires of children and youth in care. Several studies included in this review explored this topic by eliciting the views children and youth in care. Sugden (2013) asked children in care about their learning and what supports help them learn. The six 8-9 year olds in the United Kingdom who participated in the interviews described a good learning environment as “a place where I am accepted”, “a place where I can make choices”, and “a place which personalizes learning.” These insights reinforce the importance of the role of teachers, peers, and schools in the lives of children and youth in care and the connections and supports that they provide.

In another study, Rios and Rocco (2014) interviewed 24 college students who grew up in foster care, asking them to reflect on barriers related to their academic achievement they had experienced in elementary and secondary school and the supports that helped them to overcome those challenges. As seen from the table below, stable and encouraging relationships with immediate family or other adults and peers, and
strengthening youth’s self-efficacy are vital to the future success of youth in care. Rios and Rocco suggest that because of the importance of caring adults at school, schools and school board should designate an educational liaison who would advocate for students in care in school and outside of school. Furthermore, because children and youth in care also experience multiple internal challenges, school staff and teachers need to receive training in identifying and mitigating these internal barriers and promoting the educational success of youth in care.

Table 11: Academic barriers and supports as seen by former youth in care

<table>
<thead>
<tr>
<th>Type</th>
<th>Academic barriers</th>
<th>Academic supports</th>
</tr>
</thead>
<tbody>
<tr>
<td>School-related</td>
<td>• Non-empathetic teachers/administrators</td>
<td>• Caring teachers</td>
</tr>
<tr>
<td></td>
<td>• Lack of academic rigor</td>
<td>• Helpful counselors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Challenging academic environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Stable school placement</td>
</tr>
<tr>
<td>Foster care-related</td>
<td>• Uninformative caseworkers</td>
<td>• Education-promoting caseworkers</td>
</tr>
<tr>
<td></td>
<td>• Uninvolved foster parents</td>
<td>• Education-minded foster parents</td>
</tr>
<tr>
<td></td>
<td>• Homes non-conducive to study</td>
<td>• Stable residential placement</td>
</tr>
<tr>
<td></td>
<td>• Low-performing and abusive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Peers</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td></td>
<td>• Conscientious relatives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Education-savvy mentors</td>
</tr>
<tr>
<td>Internal</td>
<td>• Anger</td>
<td>• Perseverance</td>
</tr>
<tr>
<td></td>
<td>• Bad behaviour</td>
<td>• Responsibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Resourcefulness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Diligence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Motivation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Goal orientation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Self-efficacy</td>
</tr>
</tbody>
</table>

Source: Rios & Rocco (2014), p. 230

One of the most comprehensive summaries of program elements and pedagogical and program considerations is offered by Salazar et al. (2016), who used focus groups with former foster youth, community partners, and representatives from educational and child welfare agencies to explore how to develop interventions to assist foster youth in their transition from high school to higher education. These are presented in the table below. As can be seen from the table, participants suggested that programs include mentoring, educational advocacy, and substance use prevention services, as well as providing more general recommendations for intervention development. Among the
overarching conclusions are the importance of consistent, youth-driven, student-centered, relationship-based, and flexible programming provided by staff who are knowledgeable and who have first-hand experience or in-depth understanding of foster youths’ lives and challenges.

Table 12: Program elements and pedagogical considerations by Salazar et al. (2016)

<table>
<thead>
<tr>
<th>Focus</th>
<th>Program elements</th>
<th>Considerations</th>
</tr>
</thead>
</table>
| General recommendations for intervention development | Community-collaborative program development and implementation | • Broad systems-level collaboration  
• Participatory process for all stakeholders, including youth  
• Willingness and ability to implement depends on effectiveness  
• Willingness and ability to implement depends on needed program resources |
| Program services and characteristics |                                | • Bridge high school to postsecondary transition period  
• Cohort/group elements may be helpful  
• Flexible and tailored to youth needs  
• Help youth expand social network/supports  
• Incentivize youth participation  
• Program should be strengths based, youth centered, and youth empowering  
• Program should have structured protocols in place  
• Program should support staff to be successful  
• Support youth in exploring options/goal planning  
• Youth should be supported in easily accessing and navigating higher education and relevant systems and services  
• Youth with foster care experience involved in program implementation |
| Program staff                        |                                | • Relationship-based factors  
• Trained and knowledgeable staff |
| Recommendations for mentoring intervention component. | Mentor characteristics | • Authentic and engaged  
• Empathetic  
• Knowledge and experience  
• Proactive  
• Qualifications (e.g., experience working with youth, successful postsecondary experience, able to make long-term commitment to position)  
• Role model  
• Understands foster youth-specific issues and circumstances |
<p>| Mentor concrete                      |                                | • Consistent and reliable |</p>
<table>
<thead>
<tr>
<th>Focus</th>
<th>Program elements</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| responsibilities                                |                                                                                  | • Helps build social connections/capital  
• Long-term commitment  
• Mentor as life coach  
• Support goal planning and pursuit                                                                                                                                 |
| Mentoring program characteristics               |                                                                                  | • Flexible matching  
• Flexible programming  
• Mentoring activities (e.g., accompany youth to campus events; college visits; help youth navigate first week of college; career exploration; having fun)  
• Program structure (e.g., mentor as volunteer position; framed as postsecondary focused; aligned with existing campus programs to avoid duplication of services; based on youths’ needs; intentional relationship closing process)  
• Program support and supervision  
• Relationship-based                                                                 |
| Mentoring program structure varieties            |                                                                                  | • Group mentoring  
• Natural mentoring  
• Peer mentoring                                                                                                  |
| Potential mentoring program challenges           |                                                                                  | • Potential mentoring program challenges (e.g., youth feeling over-mentored; mentors adopting saviour mentality; risk of creating complete dependence on mentor; youth not ready for mentoring relationship) |
| Recommendations for educational advocacy (EA)    | EA concrete responsibilities                                                     | • Concrete supports (e.g., arranging college visits, helping work out housing arrangements; help with legal issues; help plan for catching up on credits; help choose appropriate college courses; assist with moving to college)  
• Connect/link to resources  
• Deal with conflict  
• Help expand social support networks  
• Help with financial issues  
• Help with skills development  
• Monitoring progress  
• Planning / goal setting / being future-focused                                                                 |
| intervention component.                         |                                                                                  |                                                                                                                                                 |
| EA relational skills                             |                                                                                  | • Empowering youth  
• Being proactive and assertive  
• Positive, healthy relationships with youth                                                                                     |
| EA knowledge and experience                      |                                                                                  | • EA experience and qualifications (i.e., before starting the job, EA should have recent experience navigating postsecondary education and a college degree)  
• EA knowledge and/or experience of foster care                                                                                                                                 |

Directions Evidence and Policy Research Group, LLP  
Page 54 of 68
### Focus

<table>
<thead>
<tr>
<th>Program elements</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Specific types of knowledge (e.g., knowledge of relevant policies, procedures, and resources applicable to child welfare, high school/GED, and higher education; barriers to academic success; training on the first-year college experience)</td>
</tr>
</tbody>
</table>

#### Recommendations for substance abuse prevention component.

<table>
<thead>
<tr>
<th>Sensitivity to the experiences of youth with foster care experience</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>• Potential foster youth-specific programmatic pitfalls (e.g., potential triggering of past traumas; challenge of implementing this without making youth feel stigmatized or singled out)</td>
<td></td>
</tr>
<tr>
<td>• Normalize content to avoid stigma</td>
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</table>

#### Interventionist characteristics and skills

<p>| |</p>
<table>
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<th></th>
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<tbody>
<tr>
<td>• Skillful, authentic, and engaged program delivery</td>
</tr>
<tr>
<td>• Relationship-based programming</td>
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</table>

#### Program structure

<p>| |</p>
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<tbody>
<tr>
<td>• Acknowledge not all substance use is problematic</td>
</tr>
<tr>
<td>• Importance of understanding substance use context</td>
</tr>
<tr>
<td>• Program structure and guidelines (e.g., embedding substance abuse material into broader trauma/mental health and wellness framework; presented as a college-prep activity; implemented before student transitions into higher education; use campus-based substance use guidelines to guide work with students)</td>
</tr>
<tr>
<td>• Intervention structure varieties (e.g., universal or selective; voluntary or required; individual or group-based)</td>
</tr>
<tr>
<td>• Strengths-based programming</td>
</tr>
</tbody>
</table>

### 8. Conclusions

#### 8.1. Challenges in interpreting the literature

While the number of articles and reports focusing on children and youth in out-of-home care is large, there are a number of knowledge gaps and serious methodological flaws in the literature reviewed. Without a national office and national data collection initiatives in Canada, the information about children and youth in care is inconsistent and incomplete. While we know that children and youth in care tend to fall behind their not-in-care peers in many areas (including education, health, and well-being), there are few longitudinal studies tracking their progress. The studies that exist use different definitions, indicators, and samples, making comparisons over time and across jurisdictions difficult. Other methodological flaws include the voluntary nature of some of the programs, lack of randomization, lack of control/comparison groups, and selection bias. While some studies reviewed did use control groups, the non-intervention students
were receiving other types of services that might have affected the validity of the evaluation results.

Research that examines the effectiveness of educational school-based interventions is very limited. As a result, reviewers often use interventions developed for other at-risk populations, extrapolating their potential effects to children and youth in care. While those assertions might be accurate, we did not find any studies that examine whether a particular program would have the same effect on children and youth in care as it did on other at risk students.

The concept of participation in a program is very complex. Roth et al. (2010) identify five dimensions of participation, including intensity (i.e., frequency of attendance), duration (i.e., years of attendance), total exposure (i.e., frequency of attendance over multiple years), breadth (i.e., involvement in different types of program activities), and engagement (i.e., effort and interest in program activities). However, none of studies examined in this review attempted to tease out the role of engagement or program breadth on the educational outcomes of children and youth in care.

Another fundamental issue in this area of study is the relatively poor and narrow conceptualization of educational experiences, issues, and outcomes. As noted by Stone (2007), “the literature focuses on fairly traditional outcomes (test scores, grades, grade retention, and dropout) with little emphasis on their interrelationships” (p. 157). Moreover, studies tend to report on relatively short-term outcomes, often without controlling for prior achievement or experience.

The diversity of the characteristics of children and youth in care and the environmental conditions that might influence their outcomes are not easily taken into account. The literature acknowledges and highlights this heterogeneity of the population. It is quite diverse both in terms of children and youth’s characteristics as well as their experiences before, during and after being in care; in other words, there is heterogeneity “both within and across the permanent outcomes of adoption, reunification, subsidized guardianship, and emancipation” (Cushing, Samuels, & Kerman, 2014, p. 75). Moreover, children and youth in care often are faced with multiple, overlapping challenges. However, while studies often provide information about demographic characteristics of students, few researchers actually use that information in the analysis of the intervention effectiveness, instead treating students in care as a homogeneous group. To address this complexity, some authors call for a “person-oriented” ecological approach that takes into account a range of factors that might moderate program-related effects.
8.2. Findings

While the empirical evidence supporting the effectiveness of school-based or school-age educational interventions is mixed, there are several program features and strategies that can be highlighted.

**Relationships matter.** Almost every paper included in this review emphasized the importance of helping children and youth in care develop stable trusting relationships with peers and adults in their lives. Since many of these children and youth experience “relational homelessness” and desire a stable “home” and connection to “parent”, positive relationships are critical for their development and well-being because they can provide children and youth with a much needed social network and support system. Adults and near-peers can serve as role models, providing support, advice and assistance; sharing experiences and information; and supporting children and youth’s aspirations. Long-term mentoring, natural mentoring, as well as mentoring provided by individuals with experiences similar to those of children and youth in care are recommended.

**Everyone can succeed.** Children and youth in care often have lower aspirations and self-confidence than their not-in-care peers. Caregivers and teachers often do not expect these children and youth to achieve. Setting high expectations for children and youth in care, encouraging them to push themselves, and designing safe, caring, and inclusive learning spaces and environments might lead to better educational and well-being outcomes.

**“One size does not fit all”.** The challenges and issues faced by children and youth in care are multiple and diverse, which means that different children and youth in care require individualized services and supports. Child- and youth-centered, integrated, and flexible programs that address the individual needs of children and youth are recommended, including tutoring, mentoring, and skills workshops. A number of authors specifically emphasize the importance of an integrated approach where a combination of services and a personal educational plan are developed to address the needs of children and youth.

**Additional supports.** To improve educational outcomes schools, schools often need to start with addressing other individual needs and issues that children and youth in care might experience first before children and youth can start engaging in the school activities. Program providers and educators in the interventions presented above supported students in care with a number of services that exceeded their job

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4 In natural mentoring, a mentor is selected by the child from their social network.
descriptions; for example, they provided transportation to school or learning sites, ensured that children and youth had food or place to live, walked children to school, and attended their graduation and other ceremonies (often doing what a parent would do).

**Collaboration.** One of the problems identified in the literature is the insufficient cooperation and communication across agencies. Inter-agency collaboration can be improved by establishing clear roles and responsibilities, providing cross-training, and resolving conflicting policies within and across systems. Also, partnerships with local organizations and communities can provide additional learning opportunities to students, and engage them in place-based experiential learning activities.

**Educational liaison.** A designated educator located in the student’s school (an educational liaison) can provide much needed coordination across services and groups responsible for the child or youth in care. Such educator can coordinate timely information sharing and services, advocate for the student, help the student to address school problems, and communicate with the student’s caregivers. A case management information system might be established to record and monitor students' programs and share and transfer information among the professionals who are entitled to possess such information.
9. References


to participate in higher education. The Journal of Behavioral Health Services & Research, 42(2), 150-171. doi: 10.1007/s11414-014-9451-6


