Recruitment and Retention Challenges and Strategies

Understanding and Addressing Workforce Shortages in Early Childhood Education and Care (ECEC) Project



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INTRODUCTION

About the Project

Recruitment and retention is a long-standing and well-documented challenge facing the early childhood education and care (ECEC) sector. An accurate understanding of workforce shortages—the number of ECEC workers needed across Canada—and the implications of these shortages is critical in order to address this challenge. To achieve this, the Child Care Human Resources Sector Council (CCHRSC) developed the *Understanding and AddressingWorkforce Shortages in ECEC Project*. Funded by Human Resources and Skills Development Canada, the project focused on:

- Defining current workforce shortages by exploring the factors that influence supply and demand of ECEC workers;
- Reporting on available data and data deficiencies;
- Documenting the impact of current shortages on the sector, labour market engagement, and on the economy;
- Identifying current strategies and other options for addressing ECEC worker shortages; and
- Exploring the feasibility of developing a forecasting model to predict future shortages.

The CCHRSC engaged the Centre for Spatial Economics (C4SE), a consulting organization created to improve the quality of spatial economic and demographic research in Canada, to conduct the project research and create reports designed to meet the project objectives.

Research Approach

Between 2008 and 2009, The Centre for Spatial Economics (C_4SE) worked to define current shortages of ECEC workers, assess their impact, and explore the feasibility of predicting future shortages. Most specifically, C_4SE :

- Conducted 18 key informant interviews with provincial/territorial/municipal government officials in the ministries responsible for child care or their representatives, along with other key stakeholders and analysts of the ECEC sector;
- Conducted a review of literature on factors that influence the demand for and supply of the early childhood education and care workforce; and
- Analyzed a variety of administrative data provided by municipal, provincial, and territorial governments, along with public data source including: demographic, employment, labour force, hours worked, wages, child care spaces and turnovers.

By considering a variety of factors such as the available workforce, employment, unemployment rates, vacancies and wages this project will determine the current shortages facing the sector.

Project Reports

The information gathered for the *AddressingWorkforce Shortages in ECEC Project* has been used to create a variety of reports that help define key findings. The **Recruitment and Retention Challenges and Strategies report** examines recruitment and retention challenges in the ECEC sector from an economic and human resource management perspective. Research into these challenges is examined and ways to reduce the recruitment and retention problem are proposed. The report is the fourth in a series of reports produced, including:

• Literature Review of Socioeconomic Effects and Net Benefits: This report examines the literature on ECEC and its' impact on children, their parents and society in order to determine the socioeconomic implications of work-force shortages in early childhood education and care (ECEC). The implications of workforce shortages are inferred from the available literature, as the academic literature available does not directly address this issue;

- Literature Review of the ECEC Labour Market: This report summarizes available evidence regarding the factors that influence the demand and supply for ECEC workers and examines some conundrums in the ECEC labour market;
- Estimates of Workforce Shortages: This report examines the literature on ECEC workforce shortages, describes the technique that is used to estimate workforce shortages in the ECEC sector and estimates the economic costs of current workforce shortages;
- Data and Model Feasiblity: This report examines existing data sources and provides an assessment of the data gaps and limitations of available data. The feasibility of developing occupational demand and supply models for the provinces and territories is also explored; and
- Executive Summary: Understanding and Addressing Workforce Shortages in ECEC Project: This report contains background information on the *Understanding and AddressingWorkforce Shortages in ECEC Project* and a brief, plain language executive summary of each of the reports produced.

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Report Overview

Section 1: Review of Economic, Human Resource and ECEC Sector Literature on Recruitment and Retention

Section 2: Human Resource Management Practices

Section 3: Recruitment and Retention Challenges and Strategies in Early Childhood Education and Care

Section 4: Recruitment and Retention Initiatives

Section 5: Conclusions of Research and Recommendations

SECTION 1: REVIEW OF ECONOMIC, HUMAN RESOURCE AND ECEC SECTOR LITERATURE ON RECRUITMENT AND RETENTION

Recruitment and retention of workers are influenced by some basic economic factors that influence the choice of qualified workers to work in the labour market as well as labour mobility. The choice to work in the labour market has been explored in economics. People are faced with a basic time constraint when deciding how many hours they work and how many hours they have for leisure (the term leisure is used in the economic literature, but this concept can include family responsibilities, and other non-work related activities). Given that there are only 24 hours in each day, and fewer waking hours, the more hours that people work, the fewer hours there are for leisure and other non-work activities and vice versa.

Basic economics suggest that a person will take the net benefits they derive from working and leisure into account when offering their labour. If the benefits they derive from an extra hour of leisure exceeds the benefits they derive from their hourly wage they will want to reduce their hours of work.¹ At the extreme some workers will not work at all. For this group of workers their reservation wage, which is equal to the net benefits they derived from the last hour of leisure, is greater than the wage they are offered in the labour market, so they don't work. Since many of those with the qualifications to work in the ECEC sector have dropped out of the labour market altogether, the factors that influence this group are relevant to recruitment in the ECEC sector.

To bring non-workers back into the labour market, the benefits they derive from work must exceed their reservation wage.² If leisure has declining marginal benefit, then the net loss from working one hour (loss of one hour of leisure) would be less than the net loss in benefit they suffer from increasing their hours of work from 9 to 10 hours. Since there are costs to employment, the implication is that the wage must be at least as large as the benefits to the last hour of leisure less the costs of working.

It is helpful to realize that there are non-financial costs and benefits as well as financial costs and benefits. Therefore, to induce a person not in the labour force to return to work:

- either the financial benefit (eg. wage and non-wage financial benefits) must increase;
- the financial cost of working decrease (eg. transportation cost);
- or some non-financial benefit of working must rise and/or non-financial cost of working fall.

One complicating factor that impacts this analysis is that the employer typically pays all workers with the same qualifications and productivity the same amount.³ Since by definition the reservation wage of those outside the labour market is higher than the existing wage the employer is offering, the employer would have to increase the wage (or in general the net benefit of working) to bring those people back into the labour market. From the employer perspective the increase in costs to entice someone who has left the labour market is not simply the wage of that person, but the cost of increasing the wage (or net benefits) for all employees with that qualification. Therefore, the benefit to the employer from this action must exceed the total increase in costs for the move to be financially justified.

¹ Lydon and Chevalier (2002), Clark and Oswald (1996) and Cowling (2007) suggest there is a marginal disutility of additional hours of work, which implies that the marginal utility of leisure is positive. Some researchers suggest there could be increasing marginal benefits to leisure, while the above analysis assumes that the benefits of leisure are positive, but at a decreasing rate.

² The factors that affect the reservation wage include the opportunity cost of employment, including unemployment insurance and family commitments. The reservation wage is also affected by labour market conditions, the distribution of wage offers and an individual's past wages. If an individual is unemployed, a longer duration of unemployment will tend to lower their reservation wage.

³ As reported by Mitchell and Morgan (2000), in the service sector measuring productivity is more complex than for other industries such as manufacturing. In child care, improved performance (greater productivity) requires staff to develop skills in understanding growing children's continually changing wants and needs, and this requires constant adjustment to new situations. Herzenberg et al. (1998) posit that investments in training create both quality improvements and cost savings by producing "economies of depth" and "economies of coordination".

If a prospective employee derives more benefit from the first hour of leisure than the second hour of leisure, and derives more benefit from the second hour than the third hour of leisure, etc., then their reservation wage will rise along with the hours of work they must provide and the reservation wage will depend on the number of hours of work that are required for the job on offer.⁴ However, it may be impossible to sub-divide the available job so that the worker obtains the wage that equals or just exceeds their reservation wage. For example, the current wage might induce a worker to provide ten hours of labour, but if the job requires 30 hours of work, the prospective employee will not offer any labour whatsoever. This suggests that the more hours a new employee must work, the higher the reservation wage will be.

While the unit of analysis is the individual, their labour/leisure decision will be influenced by other members of the household. For example, if one member of the household loses their job, another member of the household could change their reservation wage. So there would be a change in the number of people willing to work in the sector during periods of rising unemployment. Conversely, fewer people might be willing to work in the sector during periods of falling unemployment.

Recruitment and retention are also influenced by general labour mobility factors. Labour mobility from an economic perspective was discussed in the *Literature Review on the ECEC Labour Market*.⁵ In general, the evidence suggests that occupational mobility (moving from one occupation to another or from work to non-work) is influenced by financial and non-financial factors. Financial factors include wage and non-wage benefits. Non-financial factors try to reflect different preferences and include age, formal education, training, gender and perhaps ethnicity. Most economic analysis of the decision to quit and change jobs tends to focus on the factors above. However, a few studies have moved beyond these more objective measures to include more subjective measures in the analysis.

Of particular note for the current analysis are the studies that have examined the importance of job satisfaction for turnover or quits. Freeman (1978) and Akerlof et al. (1988) examined the connection between quits and job satisfaction for the U.S. More recently, Clark et al. (1998) and Lévy-Garboua et al. (2001) use British and German data on previous levels of job satisfaction and individual labour market outcomes like quits and wages. Shields and Price (2002) carry out a case study of British nurses and Appelbaum et al. (2003) examine low-wage workers in U.S. hospitals. In general these studies find that workers reporting dissatisfaction with their jobs are statistically more likely to quit than those with higher levels of job satisfaction. This naturally leads to the question of how job satisfaction can be improved.

Research has typically found that consistent with economic theory, pay and work hours are positively and negatively related to job satisfaction. Other important contributing factors are individual traits, such as age and gender, and some features characterising the individuals' workplaces and jobs.⁶ Bradley et al. (2004) use British data and find that after controlling for personal, job and firm characteristics, that several human resource management (HRM) practices raise workers overall job satisfaction and their satisfaction with pay. Specifically, they find that on-going learning, job autonomy and working in teams have positive effects. Close supervision of work is disliked, but workers prefer some assessment of their performance, suggesting that some monitoring is desirable. Furthermore, giving workers a 'voice' through employee involvement has a positive effect on job satisfaction. Managers who hold regular meetings with employees to enable them to express their views about work have a substantial effect in raising job satisfaction. Satisfaction with pay is higher where seniority and individual performance-related schemes are in place. When they investigated differences in the effect of human resource management practices on the job satisfaction of union members and non-members, they found that many of the effects are only important for non-union members. They also found that a pay structure that is perceived as overly dispersed is associated with low levels of job satisfaction. They found these effects to be large, but only apply to non-union members.

⁴ Assuming that leisure is a "normal" good, which means that people derive benefit from its consumption, more leisure is preferred to less leisure. Also assumed is that the benefits of leisure rises at a diminishing rate.

⁵ See also Fairholm and Somerville (2005).

⁶ D'Addio et al. (2003).

Kaiser (2002) makes use of data for Denmark, Germany, the Netherlands, Portugal and the United Kingdom. He finds that in most of the countries under study fixed-term contracts are associated with lower reported job satisfaction levels. Satisfaction levels appear to differ little between employees working part- and full time. D'Addio et al. (2003) find that for women, monetary factors matter less, but working conditions and a higher degree of flexibility carry a larger weight in their job preferences.⁷





Source: Lydon and Chevalier (2002)

Lydon and Chevalier (2002) examined data for the U.K. and find that wages matter more to job satisfaction than has been reported by other researchers in this field because wages affect job satisfaction. An examination of the relationship they illustrate between wages, job satisfaction and the quit rate shows that as wages rise the quit rate falls, and that the importance of non-wage factors diminishes. This can be seen from Figure 1, which is reproduced from their report. This evidence shows that at low wage levels there is a very large dispersion in quit rates which seems to be related to job satisfaction. At the lowest income levels in their figure, there is more than a 20% spread in the quit rate between highly satisfied and poorly satisfied workers. Changing the job satisfaction rate from the lowest to the highest rating would lower the quit rate dramatically and be the equivalent to a huge increase in pay. According to their estimates, pay, managerial status and the number of children have a significant and positive impact on the individual's job satisfaction, whereas the number of weekly working hours, public sector employment, clerical job, workplace size, age and being a male has the opposite effect. The employee's educational level and months employed turned out insignificant.

Kristensen and Westergaard-Nielsen (2006) find that the inclusion of job satisfaction as a proxy for the unobserved factors significantly improves the prediction of quits. This is of importance for the human resource management policy of a firm that wants to retain workers. They also find that satisfaction with the "type of work" is the most important factor in Denmark and that earnings are only second in importance. This is opposed to the U.K. where security is found to be the most important job satisfaction domain – while it is insignificant in Denmark, which may be caused by the relatively high unemployment benefit in Denmark. This variability in the job satisfaction domains suggests that there are a number of country specific effects.

⁷ D'Addio et al. (2003).

There might also be sector specific effects. For example, according to Rolfe (2005) in the U.K. ECEC sector where pay is low, non-payment issues, including the atmosphere and relationships at work take on far greater importance than in sectors where pay forms a greater part of the reward package. In a similar vein, Schwarz et. Al. (2005) indicate that in the U.S. ECEC sector the quality of work life is a critical component of any successful approach to reducing quit rates because research suggests that wages alone do not predict job satisfaction, turnover, or the quality of care provided for children (see Jorde-Bloom, 1996). Aspects such as collegiality among co-workers, supervisor support, the decision-making structure, professional growth opportunities, goal consensus, communication, and general working conditions are also important. These are non-financial factors that influence job satisfaction and turnover. So research that focuses on Canada or specifically on the Canadian ECEC workforce might determine the components of job satisfaction that influence quits and therefore what human resource management policies could influence job satisfaction and therefore quits.

Whitebook et al. (2001) find in the U.S. ECEC sector that low wages remain the most important factor influencing intent to leave, but that the direct association between wages and turnover is rather weak. They indicate that the relationship between wages and turnover depends on other factors. Employee satisfaction with the intrinsic nature of ECEC work, including co-worker relations, opportunities for autonomy and challenge, and working conditions, but dissatisfaction with extrinsic aspects, such as compensation, is common. Also it was reported by Whitebook et al. (2001) that teachers with higher salaries and benefits have stronger qualifications and more formal education and specialized training than teachers with low salaries. Teachers who contribute the most to rapid turnover are those who have little or no college-level experience or specialized early childhood training.

According to Rolfe (2005) in the U.K. ECEC sector factors other than pay that affect recruitment are short working hours, low status and competition from other sectors. In contrast with the expectation that work hours were negatively related to job satisfaction, she found that some providers believed that the short hours of work in their type of setting limited the pool of applicants because this results in low take home pay. The low status of child care work makes it unattractive to some people (see Cameron et al. 2001a). Providers also referred to competition from other employers such as supermarkets, call centres and from schools, which offer relatively good pay to teaching assistants. U.K. studies of turnover in the sector have identified low pay, poor terms and conditions such as pension rights and sick pay, poor career structures, lack of consistent training and poor quality standards as key factors resulting in turnover.

Human resource management (HRM) practices are among the factors that may be responsible for high ECEC turnover rates. In the U.K., Rolfe (2005) reports that poor staff management in the ECEC sector has been identified by a number of studies as contibuting to retention problems. She found that awareness of the importance of human resource practices in retaining staff varied among providers, but practices were generally very poor. Many had inadequate systems for integrating new employees into their centres. On starting work, staff sometimes worked initially under supervision but usually took on their full duties from the first day. Rolfe also reports that research on U.K. employer practices has found poor training opportunities, low priority given to staff development, poor planning and staff supervision and limited non-contact time for administrative work and staff discussions (see Vernon and Smith, 1994).

SECTION 2: HUMAN RESOURCE MANAGEMENT PRACTICES

Recruitment and retention practices are the cornerstone of human resource management (HRM). In order to put the practices of the ECEC sector into context and identify innovative strategies, it is helpful to compare them to the practices identified in the human resource management literature. From the perspective of the firm, there are several stages in the employee recruitment process:

- 1. The company needs to identify the skills and competencies needed to perform the job that is available and the qualifications the candidates need to possess.
- 2. The outreach process needs to inform prospective candidates of the vacancy and solicit applications.
- 3. The qualifications of candidates have to be assessed.
- 4. New hires need to be selected.

After the new hire is brought on board, a process is needed to integrate the new recruit into the workforce and procedures are required to encourage the retention of these employees.

For the ECEC sector it is important to keep in mind that there are essentially two primary goals of the ECEC system: improving the quantity of services provided, and improving the quality of services provided. These goals can be aligned in some instances, but also pull in opposite directions in other instances. Therefore this duality of purpose will be examined where relevant in the discussion below.

Job Assessment

Before a firm can recruit a candidate the skills and competencies required in the vacant position must be assessed. The identification of the skills and competencies required for a position can be a time consuming and costly exercise, so not all organizations follow this approach, particularly small and medium sized enterprises (SME) and small and medium sized organizations (SMO). Society has developed a formal qualifications system that infers the attainment of many of these skills and competencies. Therefore many organizations, particularly SME/SMO, determine the formal qualifications that are needed for the position as opposed to the skills and competencies required.

In the ECEC sector the education system provides formal credentials and provincial or territorial regulations state the minimum qualifications required for different positions. All provinces and the Yukon have specific staff requirements, while the other two territories do not require formal qualifications to work in the ECEC sector. However, not all positions in all provinces and the Yukon require specific ECE credentials. Therefore employers must utilize the qualification system to assess the skills and competencies that are needed for a particular job in the ECEC system for which a specific credential is required. For positions that do not require formal qualifications, obviously employers will have greater leeway in the job assessment, but even in the jurisdictions where there are regulations there will be some leeway, since the regulations represent a minimum standard.

Clearly, the job assessment will impact the number of people available for a particular job. If the employer uses a departure to re-examine the position and determine that a more qualified person is needed then the pool of prospective employees will be less than if the employer decides that a less qualified person is required. The literature indicates that economic conditions affect the relationship between the needed qualifications and skills. For example, during periods of relatively strong demand for labour, employers often substitute less qualified people for more qualified individuals. Conversely during periods when labour demand is relatively weak there is often crowding out of less qualified employees by more qualified employees. Also over time, a general qualifications creep has been observed in society whereby a higher level of qualifications is needed to perform a job than in the past.

The job assessment will have a direct impact on the quality versus quantity trade off. For example, not finding qualified workers will impact the quantity of ECEC provided. If during a tight labour market organizations reconsider the needed skills and competencies for a particular position and determine that the position does not require a higher level qualification, there would be potentially a larger pool of available workers. For example, many employers in B.C. interviewed by the Social Planning and Research Council Of British Columbia (SPARC) (2008) said that with the current difficulties of finding trained potential ECEC employees they have to be more willing to take on employees without relevant qualifications and do on-the-job training. However, hiring workers with lower educational attainment could impact the quality of ECEC provided.

Furthermore, the job assessment could include some aspects of the job that could make it more attractive to prospective employees. If prospective employees prefer part-time work, then it could be beneficial to the employer to hire two part-time employees rather than one full-time employee, if doing so increases the potential pool of qualified candidates. It is possible that the preferences of potential workers will vary over the economic cycle depending on changes in prospective employees' leisure/work trade off and their reservation wages. In the SPARC survey some employers said that they adjusted the job descriptions for positions where there have been long vacancies to allow for promotion from within the organization or to find better-suited candidates.

Recruitment Process

Once an organization has a clear indication of the particular requirements of the job, they can begin the process of recruitment to attract suitable candidates for the particular vacancy. Anderson and Shackleton (1986) indicate that the quality of new recruits depends upon an organization's recruitment practices. Indeed Smith et al. (1989) argue that the more effectively the recruitment stage is carried out the less important the actual selection process becomes.

As indicated by Heraty and Morley (1999), the first decision facing recruiters is whether to recruit internally from those already employed by the organization, or to recruit from the external labour market. Most studies suggest that employers should use the internal labour market before searching for external candidates. The decision to access the internal labour market brings with it a number of distinct advantages. It is cost effective, both in terms of eliminating the need for external advertising/sourcing and also in terms of reducing the settling-in period. It is also considered to be good personnel practice, for not only may it be viewed as a positive motivator by current employees, but the quality of the internal labour market is continuously upgraded and maintained through high quality recruitment, selection, promotion and career development. Larger organizations have a greater tendency to recruit internally than smaller companies. This is not altogether unexpected since large organizations, by virtue of their size, have access to a larger pool of potentially suitable candidates. Many ECEC employers will be constrained by their size in using this channel.

A number of studies have suggested that some recruitment methods are more effective than others. Cook (1993) indicates that while advertising is usual for job vacancies, applicants are sometimes recruited by word of mouth, through existing employees. Besides being cheaper, the "grapevine" finds employees who stay longer (lower voluntary turnover) and who are less likely to be dismissed (lower involuntary turnover) (Breaugh and Mann, 1984; Kirnan et al., 1989). It is suggested in the literature that people recruited by word of mouth stay longer because they have a clearer idea of what the job really involves. DeWitte (1989) reviewed five studies in which average labour turnover of those recruited by advertising was 51 per cent. The labour turnover for spontaneous applicants was 37 per cent and turnover for applicants recommended by existing employees was 30 per cent. Some organizations provide bonuses to encourage employees to supply referrals of potential new recruits. This avenue might help the ECEC sector reduce turnover.

According to the survey of B.C. employers by SPARC (2008), one fifth of the organizations interviewed mentioned that they had success in recruiting new staff among people who have worked for the organization in the past through internships or volunteer opportunities. Almost every single employer mentioned the importance of exposing youth to the work in the sector, which is done by sending staff and clients to do presentations or to staff tables at job fairs. Employers

said that creating internship programs with local universities is another means of generating interest in the sector. One employer suggested that offering job shadowing for students who might be interested in the sector is also a good option for creating interest. Terpstra (1996) argues that the source of recruits is significantly linked to differences in employee performance, turnover, satisfaction and organizational commitment. In a survey of 201 large U.S. companies, Terpstra asked respondents to rate the effectiveness of nine recruitment sources in yielding high-quality, high-performing employees. The three top ranked sources were employee referrals, college recruiting and executive search firms. Other methods of recruitment include public employment services, internet based employment advertisements and industry association websites, commercially available job sites and job placement services available through the private sector. Certainly, the first two of the top three rank recruitment approaches should be followed by the ECEC sector. In Ontario, the Best Start Expert Panel on Quality and Human Resources (2007) recommended developing recruitment and retention programs that target high school students, guidance counsellors and parents. In the U.K., according to Rolfe (2005) there has been interest in diversifying recruitment to include older workers because they tend to have lower turnover rates than young women.

Current Selection Practices

Generally, McCole et al. (2001) found the traditionally used selection techniques such as the interview, the application form and the reference continued to be popular, despite their reported lack of reliability and validity, while only a small number of organizations report the use of more sophisticated selection tools such as assessment centres and psychological testing. The data indicate that organizations vary the types of selection tools used depending on the vacancy being filled and so are likely to make greater use of some of the more "sophisticated" selection techniques for critical job positions.

In terms of organization size, larger organizations are more likely to adopt a greater range of strategies than are their smaller counterparts. This is particularly so in terms of those strategies requiring substantial resources, such as improving the market image of the organization, relocation, or increased pay.

In the SPARC (2008) survey, all employers said that flexibility is key when trying to recruit in a competitive labour market. One employer said that interviews need to be more flexible to get a better sense of the potential employees' needs and career goals and then design the position to suit those needs.

Evaluation and Assessment Tools

Part of the selection process is determining the skills and competencies of the prospective candidate. There is considerable discussion in the human resource and education literature on evaluation and assessment tools and mechanisms, including current competencies assessment and prior learning assessment and recognition (PLAR).

Clearly, there is some similarity in determining the skills and competencies needed for the position and determining those possessed by the prospective employee. This is particularly the case when the qualifications system is utilized as the mechanism to determine skills and competencies. This section will first discuss the qualifications system and then follow some of the discussion on some of the other assessment tools, such as competencies based assessments and prior learning assessments. Often these latter approaches were designed for other purposes. For example, PLAR is often used to assess prospective students, but the same basic methods used in those instances can be applied in whole or in part to assessing job candidates. Some of the assessment methods are time consuming for both the candidate and the assessor, so they may not be cost effective, particularly for small and medium sized enterprises and organizations that lack a significant human resource function.

Qualifications

As Coles and Werquin (2005) point out, the qualification is extremely important to employers. It is a means for employers to signal what they seek in terms of skills and it is also a means to filter the supply of skills provided by candidates during recruitment. The nature of the signalling function provided by qualifications is much debated and varies across countries, regions, labour market and type of qualifications. Nevertheless, the evidence suggests that the returns to employers from utilizing the qualification system have been consistently strong.

In general, studies that examine the recruitment process suggest that qualifications are used primarily as a screening mechanism (prior to interview) and main tool of discrimination between potential recruits. This is particularly the case for new entrants to the labour market. Keating et al. (2005) report that employers' understanding of (and reliance on) qualifications is relatively subjective. Qualifications play a secondary role after work experience in selection because they are seen as weaker signals than experience for immediate competence. Job tryouts can be used to facilitate recruitment and assess skills and competencies of candidates.

As discussed by McDonald et al. (1995), under a competency-based assessment system, assessors make judgments based on evidence gathered from a variety of sources about whether an individual meets a standard or a set of criteria. Competence cannot be observed directly, but it can be inferred from performance. Thus assessors need to consider the sorts of performances that will enable them to gather sufficient evidence to make sound judgments about an individual's competence. Utilization of competency assessments can help to broaden the available workforce and ease potential labour market shortages.

Prior Learning Assessment and Recognition

Underlying Prior Learning Assessment and Recognition (PLAR) is the philosophy that all learning is valuable. There are a number of competing definitions and approaches to prior learning assessment and recognition, which is also known as "prior learning assessment" and "recognition of prior learning" and "prior learning assessment recognition". Wong (1996) indicates five common underlying assumptions have been identified:

- 1. Learning occurs across the lifespan.
- 2. Learning takes place in various contexts, including formal and non-formal.
- 3. Formal learning is not necessarily of greater significance than learning gained through other contexts.
- 4. Formal learning objectives can be used to reliably assess learning gained through other contexts.
- 5. Regardless of the learning context, when learning is equivalent to formal learning it should be recognized as so.

The methods of assessment being used in Canada to establish prior learning included challenge testing (the most common method), demonstration of skills, portfolio assessment, military programme evaluation and workplace training programme evaluation (the least common method).⁸ Presently PLAR is primarily used to demonstrate academic competence, but there are indications that it is being used to show evidence of professional competence as well.⁹

As discussed by Dyson and Keating (2005) PLAR is not used extensively in workplaces in Canada. However, it is gaining momentum as organizations develop competency standards and look for assessment practices that meet workplace needs. Manitoba is presently leading the way in workplace PLAR. The Manitoba government has committed to the implementation of PLAR. A review of the implementation of this framework reported that the development of a Workplace Prior Learning Assessment and Recognition Committee (WPLAR), a partnership between business, labour and government, supported and coordinated the implementation of PLA in the workplace. Projects supported by WPLAR led to the development of enterprise competency standards, the development of online assessment tools, the development of workplace passports and the implementation of Prior Learning assessment activities in workplaces. The Manitoba Report provides a useful analysis of the key requirements for the successful implementation of PLA in the workplace in Canada.¹⁰

Prior learning assessment can work with current competency assessments to broaden the available workforce and ease short-term labour market shortages. If the skills and competencies are assessed correctly, then this would be a mecha-

⁸ Dyson and Keating (2005).

⁹ Michelson(1997, 1999).

¹⁰ Dyson and Keating (2005).

nism by which both the quantity and quality of the workforce could be improved. If the utilization of CCA and/or PLAR results in lower educational standards, there could be a distinct trade off between quality and quantity. Since all provinces have regulations concerning the educational requirements of staff this process can only be done in conjunction with or by governments.

Training and Retaining Workers

If a new hire is deficient in the knowledge and skills required to perform the job, then training will be needed to bring their knowledge and skills up to the minimum level required for the position. Hires that have been out of the labour market may also need retraining, since human capital can atrophy. As discussed by de Grip (2006), several studies indicate that all kinds of human capital obsolescence occur in practice. Obsolescence of human capital might lower the labour market participation and productivity of workers with obsolete skills (Van Loo et al., 2001). In the ECEC sector, should an exemption of the educational requirements be permitted because qualified workers were not found, provinces tend to have explicit requirements for organizations to provide education plans that illustrate how workers will be trained to meet regulatory standards. Some provinces also encourage training of existing employees to improve educational qualifications.

Notably, Harhoff and Kane (1997) show that organizations are more willing to offer employer-sponsored training when there are only a few employers geographically around to poach their apprentices. The geographic scope of a particular position depends on the attributes of that position and the prospective employees. The labour market for occupations with lower educational qualifications tends to be more local in scope than the labour market for higher level education. Part of the reason for this result is because the pool of available labour is smaller for more highly educated workers in a finite area. Therefore employers must draw from a larger geographic area to find a pool of available workers sufficiently large. Another reason is that the wage for more highly educated workers tend to be higher so the employer can justify the expense of a broader geographic search to find the employee. Moreover highly educated people are shown to be more willing to move than lower educated workers.

The ECEC labour market seems to lie in the middle between low and high educational requirements. For those Canadian jurisdictions with training requirements, the minimum education level is typically at the college level, which is below the university level, but above high school. If employers only look in the local area because of a fear of poaching, then the above research suggests employers will be looking in an area that is geographically too small to reach the needed pool of potential ECEC workers. Some key informants, however, suggest that most people are obtained from the local labour market because low wages make commuting uneconomic.

If employers only look locally despite it being suboptimal because of the fear of poaching and workers only look locally because of the cost of commuting, the result will be a suboptimal outcome in terms of finding employees with the needed skills. The implication is that if policy or some other mechanism can effectively broaden the search area for employers and employees then there would potentially be an improvement in the outcome for employers, employees and society as a whole. For example, if there was a central job registry on an internet site, then employers would be advertising the job in a larger geographic area. And job seekers would apply to the jobs that were the most economically advantageous. Another implication of the above analysis is that policy measures that reduce the cost of commuting could have a disproportion-ate impact on the available supply of ECEC workers because the fixed cost of commuting are proportionately higher as a share of total income than for occupations with higher wages.

Arthur (1992, 1994) found that human resource management practices focused on enhancing employee commitment (e.g. decentralized decision-making, comprehensive training, salaried compensation, and employee participation) were related to higher performance. Conversely, he found that human resource practices that focused on control, efficiency and the reduction of employee skills and discretion were associated with increased turnover and poorer performance. Similarly, in a study of high performance work practices Huselid (1995) found that investments in human resource management activities such as incentive compensation, selective staffing techniques and employee participation resulted in lower

turnover, greater productivity and increased organizational performance through their impact on employee skill development and motivation.

Empirical study has examined the determinants of both individual employees' departures and aggregate organizational turnover. Arnold and Feldman (1982), Baysinger and Mobley (1983), and Cotton and Tuttle (1986) concluded that the following factors were predictive of employees' leaving:

- perceptions of job security;
- the presence of a union;
- compensation level;
- job satisfaction;
- organizational tenure;
- demographic variables such as age, gender, education and number of dependents;
- organizational commitment;
- whether a job meets an individual's expectations; and
- the expressed intention to search for another job.

Sheridan (1992) found that perceptions of organizational culture influenced turnover, while McEvoy and Cascio (1985) showed that job enrichment interventions and realistic job previews were moderately effective in reducing turnover.¹¹

B.C. employers surveyed by the Social Planning and Research Council Of British Columbia (SPARC) (2008) said they have to make their work environments as positive and supportive as possible to attract workers to their organizations. They said they do this by providing opportunities for socializing, offering strong mentorship programs, creating time for debriefing, providing support and supervision, and creating opportunities for staff recognition.

Sels et al. (2002) indicate that empirical studies have documented the relationship between systems of human resource policies and practices and firm performance, which indicate that the primary impact of high performance work systems on productivity is through its influence on employee retention. They also demonstrate that intensive human resource management can offer surplus value for smaller organizations. This effect is probably explained by the positive contribution made by human resource management intensity on some operational performance outcome such as a lower level of disputes, better quality and/or more innovation.

Huang (2001) found that the optimal human resource management practices in Taiwan for small and medium sized enterprises are similar to the most effective practices for managing people raised by Pfeffer (1994), and the high-performance work practices of Huselid (1995) in the U.S., and the "high-commitment" HR practices proposed by MacDuffie (1995). This commonality suggests that these practices might represent a set of common best practices for business regardless of size and economic circumstance (see Table 1 for a list of Pfeffer's best practices).

¹¹ Huselid (1995) indicates that human resource management practices and employee turnover influence productivity.

Table 1: Human Resource Management Best Practices
1. Employment security
2. Selectivity in recruiting
3. High wages
4. Incentive pay
5. Employee ownership
6. Information sharing
7. Participation and empowerment
8. Self-managed teams
9. Training and skill development
10. Cross-utilization and cross-training
11. Symbolic egalitarianism
12. Wage compression
13. Promotion from within
14. Long-term perspective
15. Monitoring of practices
Source: Pfeffer (1994)

Small and Medium Sized Enterprises (SME/SMOs)

Many employers in the ECEC sector are small enterprises or organizations. This suggests that it is useful to examine the research that explicitly focuses on small and medium sized enterprises and organizations (SME/SMOs).

Research indicates that recruiting, motivating and retaining employees is one of the biggest problems for small organizations (Hornsby and Kuratko 1990, Mathis and Jackson 1991, Gatewood and Field 1987, Verser 1987). Hess reported that small firms ranked personnel management as the second most important management activity (next to general management). Researchers also report that small firms lack training in formal personnel management practices and they do not consider the use of generally accepted human resource management practices as essential for improving productivity (Amba-Rao and Pendse 1985, McEvoy 1984). The inadequate and inefficient management of human resources in firms have often resulted in low productivity, and high dissatisfaction and turnover among the employees (Mathis and Jackson 1991). One study found human resource management (HRM) practices to be the leading cause of small firms' failures (McEvoy 1984).¹²

Amba-Rao and Pendse (1985) found that small business compensation and maintenance practices lacked a systematic and rational approach. Verser (1987) examined perceptions of personnel problems and found that owners often dealt with subordinates in an arbitrary fashion and did not perceive this behaviour as contributing to low employee morale or productivity. A study of 347 U.S. mid-western firms identified selection and retention of a quality workforce as the most important human resource management issue for small firms (Hornsby and Kuratko (1990). Also, Hornsby and Kuratko (1990) indicate that human resource management practices of small firms may be different from large ones either because of different workforce requirements and/or a lack of understanding of human resource management issues by small business owners. Human resource management managers of both types of organizations preferred to fill vacancies from within the firm and used job posting and bidding extensively. While one-on-one interviews and written tests were popular

¹² Deshpande and Dolhar (1994).

among both large and small firms, small firms made more extensive use of job tryouts. Some empirical work examined the aspects of human resource management in Canadian small business. Ng and Maki (1993) used a sample of Canadian firms and found that the main difference between large and small firms lies in recruitment and job evaluation procedures.

Williamson, Cable and Aldrich (2002) examine how small businesses recruit employees to meet the labour demands of organizational growth and routine attrition. They illustrated how the initiation of brand-marketing, strategic isomorphism, and inter-organizational networking strategies may allow small organizations to overcome recruitment barriers.

For the ECEC sector, SPARC (2008) found that SMOs in BC had much larger recruitment and retention challenges than larger organizations that had 30 or more employees.

SECTION 3: RECRUITMENT AND RETENTION CHALLENGES AND STRATEGIES IN EARLY CHILDHOOD EDUCATION AND CARE

Recruitment and Retention Challenges - Descriptive Analysis

The section investigates recruitment and retention challenges in six areas: Centre characteristics, benefits/funding, training/ education/professional development, working conditions, labour mobility and diversity. See Table A1 in Appendix I for a detailed breakdown of all the discussed recruitment and retention challenges in the literature.

Centre Characteristics

Quality of care, auspice and unionization all affect recruitment and retention. Newly educated early childhood educators (ECEs) are often concerned about child care quality which can be a reason why they do not seek employment in child care centres upon graduation (Beach et al. (2004)). Similarly, for the U.S., Whitebook and Sakai (2003) observe that highly trained staff were more likely to stay if the highly trained staff they worked with also stayed, which suggests that quality begets quality and vice versa. Non-profit status in itself does not improve employee retention but the higher wages associated with non-profit status do reduce turnover rates (Cleveland and Hyatt (2000)).

According to Cleveland and Hyatt (2000), unionization has an ambiguous effect on retention. While union status increases wages which reduces turnover, union status in itself actually increases turnover. Cleveland and Hyatt (2000) believe this is due to unions providing information on options outside of early childhood education and care. Doherty and Forer (2005) find that unionization is associated with lower recruitment difficulties. The Social Planning and Research Council Of British Columbia (SPARC) (2008) find that full-time unionized staff have quite low turnover in B.C., but that casual staff have very high turnover rates. They also found that turnover was higher in rural areas, and that small organizations had much higher turnover rates than larger organizations with staff of 30 or more.

Benefits/Funding

Monetary and non-monetary benefits are important factors and are affected by the centre's budgeting priorities and public funding. ECEC workers receive lower wages than their peers with a similar level of qualifications. Low financial benefits result in increased recruitment and retention difficulties as workers move away from ECEC. Cleveland and Hyatt (2000) find that higher wages decrease ECEC worker turnover. Low wages are related to public funding levels because wages represent around 80% of total child care centre costs. Low public funding levels therefore leads child care centres to make a tough choice between keeping parent fees low by paying low wages and raising parents fees to increase worker wages (Beach et al. (2004), Malatest et al. (2009)). According to key informants this means that centres run by a parent board tend to pay lower wages to keep child care fees low. The percentage of the centre's budget devoted to wages matters; since a rise in this percentage would increase worker wages all other thing equal (Doherty and Forer (2005)). Increasing centre benefits that improve working conditions would reduce recruitment and retention challenges, but would cost money (Doherty and Forer (2005)). Monetary benefits are important but hard to increase due to current funding, while non-monetary benefits are also important and may be easier to increase (Malatest et al. (2009)).

Training/Education/Professional Development

In order to improve the quality of early childhood education and care, it is important to hire the right workers and allow employed workers greater access to educational programs. There is some concern among experts in the area about the quality of recent ECE graduates, although most experts indicate that the quality of ECE graduates was good enough and were more concerned about the education of employers/supervisors (Malatest et al. (2009)). There is general agreement among the experts that employers/ supervisors should have a theoretical ECE education degree as well as education in leadership skills. Many current employers/ supervisors do not have these educational qualifications and this may adversely affect recruitment and retention efforts (Malatest et al. (2009), Beach and Flanagan (2007)). Similarly, there are workers who have the necessary educational requirements, but not the necessary personal attitudes/aptitudes to be successful in early childhood education and care (Beach and Flanagan (2007)).

There is a general lack of incentives for workers to pursue professional development, because the additional rewards from undergoing this training do not match the training costs and effort (Malatest et al. (2009)). There are also physical barriers, such as long working hours and distance to the educational facility which could discourage workers from pursuing professional development (Malatest et al. (2009), Doherty and Forer (2005)).

Notably, it was found that workers with an education specific to early childhood education and care are less likely to leave their current ECEC job (Cleveland and Hyatt (2000)).

Management/Working Conditions

Perceived lack of respect for early childhood education and care, job insecurity, health concerns, rigid work hours and strained work relations all negatively affect recruitment and retention efforts. Lack of recognition/respect for the ECEC field poses challenges for recruitment and retention, as the perceived low status of the job encourages qualified workers to leave the sector, and discourages qualified graduates from entering the sector (Beach et al. (2004), Malatest et al. (2009), Doherty and Forer (2005)).

Even though the ECEC sector is generally thought of as a low unemployment sector, changes in the number of children enrolled may lead to short-term lay-offs, fueling a sense of job insecurity in the sector (Beach et al. (2004), Doherty and Forer (2005)). Staff health, well-being and burnout is a key challenge for recruitment and retention and has been shown by Doherty and Forer to be the main reason why workers decide to leave ECEC (Malatest et al. (2009), Doherty and Forer (2005)). Supervisor health, well-being and burnout harms recruitment and retention as well, since these supervisors will be less able to manage the centre and more likely to leave (Doherty and Forer (2005)). Employee-employee and employer-employee relations play an important role in determining whether the work environment will be pleasant (improving recruitment and retention) or unpleasant (harming recruitment and retention) (Doherty and Forer (2005)). According to Beach et al. (2004), the number of hours worked in a day/week/year plays a vital role in employee satisfaction as too many hours will cause stress, burnout, etc.

The Social Planning and Research Council Of British Columbia (SPARC) (2008) found for BC that when staff are working overtime to make up for staff shortages and to fill the gaps of untrained workers, their work-life balance is compromised, which leads to higher stress and burnout. Half of the employers interviewed reported that their staff are experiencing higher stress and burnout and over a quarter identified stress or burnout as one of the main reasons for staff leaving in the past year. In the U.S., Whitebook et al. (2001) find that daily occupational stress and the burnout that follows impacts a caregiver's commitment to remain in the classroom and the ECEC or teaching profession. They indicate that there are many sources of stress in the ECEC environment, such as organizational structure, and interactions with colleagues and children. For the U.K., Rolfe (2005) reports that 'lack of respect' from management contributes to high levels of stress, resulting in 'burnout' and turnover. Work flexibility is a key issue, as this will reduce stress, since the workers will not have to constantly juggle work commitments, family commitments, etc. (Malatest et al. (2009)).

Labour Mobility

Recruitment, retention and career path perception are all interrelated. Currently, relatively few ECE graduates plan to stay in ECEC. In a recent study by Beach and Flanagan (2007), only 48% of ECE students planned to go into ECEC and only 25% wanted to stay in ECEC for more than five years. Education in ECEC is thought by many graduates to be a stepping stone into the education sector. In the same study, 11% of graduates wanted to go into the education sector immediately, while 21% of graduates wanted to be in the education sector in five years time (Beach et al. (2004), Malatest et al. (2009), Doherty and Forer (2005)). There is a general perception among current ECEC workers and recent graduates that ECEC only offers a limited career path (Beach et al. (2004), Doherty and Forer (2005)).

Staff who have been working a long time at a centre are more likely to stay (Doherty and Forer (2005)). As in other literature, child care centres with high turnover tend to experience more recruitment problems (Doherty and Forer (2005)).

Turnover is also affected by the percentage of staff hired who left their previous ECEC job. The higher this percentage, the higher the turnover (Doherty and Forer (2005)). Centres with directors who intend to leave within a year also experience higher turnover among staff (Doherty and Forer (2005)).

Diversity

The increasing diversity in society and the resulting diversity requirements pose new challenges to the ECEC sector. The diversity of children in child care centres (children with disabilities, children with special needs and children of differing cultural backgrounds) is increasing. The task of providing these children with appropriate care is putting additional pressure on ECEC workers (Beach et al. (2004), Malatest et al. (2009), Beach and Flanagan (2007)). The ECEC workforce is also becoming more diverse. This provides opportunities for sharing a wider variety of experience, yet it also poses the challenge of integrating these new staff into the present system (Malatest et al. (2009)). Aboriginal child care centres have the additional requirement of providing culturally appropriate care which poses even more challenges for these centres (Malatest et al. (2009)).

Recruitment and Retention Strategies – Descriptive Analysis

A number of reports have been written that explore strategies to address recruitment and retention challenges in the ECEC sector. These strategies tend to fall in five main areas:

- Cooperation/Collaboration
- Benefits/Funding
- Training/Education
- Workplace Practices
- Tools/Information

Some recommendations found in the literature tended to cut across several of these categories. See Table A1.2 in Appendix I for a breakdown of recruitment and retention strategies discussed in the literature. Often these strategies involve a systemic change or a major change in public funding levels and wage levels that lie outside the scope of this project. For completeness, these approaches will be included below, but will not form the basis of this project's recommendations, which will primarily focus on changes to non-wage benefits within the existing system.

Cooperation/Collaboration

According to Beach et al. (2004), cooperation and collaboration within early childhood education and care and between early childhood education and care and other sectors is crucial to promoting early childhood education and care, aiding the professionalization of the sector and ensuring that best practices are used. To promote early childhood education and care's key role in society, it is important to build strong partnerships with universities/colleges, government official and researchers. To increase the professionalization of the early childhood educator occupation, it is important to build strong partnerships with kindergartens so that ECEC workers will eventually be able to work in kindergarten and kindergarten workers will be able to work in early childhood education and care (Beach and Flanagan (2007)).

Individual employers/supervisors may have accumulated a gold mine of innovative recruitment and retention strategies. Therefore it is important to increase the sharing of knowledge between employers/supervisors so that these innovative practices can be disseminated across the sector (Malatest et al. (2009)). Cooperation could also reduce the costs of human resource management if they are shared over several centres.

Early childhood education and care professional organizations, unions and advocacy groups help to promote the early childhood education and care sector and increase wages. According to Beach et al. (2004), Doherty and Forer (2005), and Doherty et al. (2003) it is therefore important to encourage the growth of these groups. Conducting a public awareness,

information and promotion campaign could help reduce the perceived low status associated with early childhood education and care and may lead to additional resources being allocated to the early childhood education and care sector (Beach et al. (2004), Malatest et al. (2009), Doherty and Forer (2005), Doherty et al. (2003)). And Don Gallant and Associates (2007) found that the fact that the general public did not see early childhood education and care as a profession had a negative impact on recruitment, so moves to shift public perceptions of ECEC as a profession could improve recruitment rates. Promoting the sector may also lessen the practice by high school and employment counsellors of diverting potentially strong early childhood education and care worker candidates away from early childhood education and care, citing a lack of opportunities (Beach and Flanagan (2007).

Benefits/Funding

Increased funding would dramatically reduce recruitment and retention challenges. This increased funding could be used to: Increase the pay/benefits of current ECEC workers to encourage them to remain in early childhood education and care and increase the financial aid to ECE education programs, allowing them to accept more applicants and/or provide more financial aid to current students (Beach et al. (2004), Malatest et al. (2009)). With enough funding, a universal child care system could be implemented, which could solve the recruitment and retention challenges by providing workers with a well-respected, fairly compensated and high quality job (Malatest et al. (2009)). Whitebook et al. (2001) indicate that compensation incentives leading to immediate financial gain for early childhood education and care workers remain the most important vehicle for stabilizing the workforce and reducing turnover. Centres that pay better wages experience less teaching staff turnover. Creating wages that are competitive enough to attract and retain highly skilled teachers and directors reduces turnover rates and the costs associated with turnover, such as advertising, recruiting, and screening job candidates.

Beyond wages, Whitebook et al. (2001) identify a number of non-wage inducements to improve recruitment and retention, specifically: Retention allowances, recruitment bonuses and relocation bonuses to augment compensation. Allowances and bonuses can be an effective means to temporarily increase compensation when wage rates and/or job levels and position classifications cannot be changed. They also identify financial awards and programs. For example, performance and productivity-based awards such as cash awards, honourific awards, time-off awards, within-grade promotions, and other recognition devices can contribute to improving employee performance, strengthening morale, increasing productivity, and promoting creativity. They also identify personalized benefit packages, benefits for part-time staff on a prorated basis, discretionary annual benefit funds and other benefit incentives.

Education and Training

It is important to make child care education relevant, accessible, portable and of high quality. To procure the best ECEC recruitment and retention strategies, it would be helpful for universities/colleges to research and develop ECEC specific human resource management curricula (Malatest et al. (2009)). To counteract the current lack of leadership specific ECEC tools, leadership specific programs and curricula should be developed (Malatest et al. (2009)). To increase the access to ECE training, alternate modes/formats of ECE training must be developed, for example, holding training sessions at times convenient for current workers (Malatest et al. (2009)). Distance education holds a lot of potential.

All employers in the SPARC survey mentioned the importance of encouraging staff to pursue professional development opportunities. Some organizations said that they provide tuition reimbursement to help staff access education. Professional development is not just a means of broadening the pool of potential employees for recruitment; it is also helpful for job satisfaction, especially when there are limited opportunities for upward mobility. Connected to the idea of professional development, some employers also pointed out that having a good internal training program is important for retention, as it allows employees to get started on the right foot. Schwarz et al. (2005) indicates that among the incentives that are strongly endorsed in the literature are those that promote and prioritize professional development, an essential component of ensuring quality early childhood education and care. Investing in professional development provides two important benefits: not only does it improve the skill and qualifications of early childhood education and care workers,

involvement in professional activities also increases caregiver satisfaction with the work itself (Jorde-Bloom, 1988). Thus, incentives that emphasize professional development may indirectly help reduce turnover and improve program stability. Practices that promote professional development include: Establishing career paths whereby training and education allow participants to earn credentials or degrees, providing opportunities for staff to receive additional training and education, and facilitating their participation, providing professional development experiences that clearly link theory and practice, involving staff in the planning and design of their professional development plan, using training and mentoring programs to recruit and train new caregivers, and to retain experienced workers who participate as mentors and may or may not receive cash awards for their participation.

Some of the literature suggests that limited training and career development funds are best spent when linked to salary enhancement and when providing concrete opportunities for career mobility (Bellm, Burton, Shukla, & Whitebook, 1997). Practices like these have been found to reduce turnover. When the link between compensation and career development is absent, the investment that centres make in training caregivers is lost, as personnel leave the field for better opportunities elsewhere (Whitebook et al., 1998). Recommendations in this area include: Provide access to training opportunities directly linked to financial rewards (such as increased compensation) as well as professional advancement (Bellm et al., 1997; Johnson & McCracken, 1994; Whitebook et al., 1998). Establish career ladders that delineate incremental increases in salary based upon performance and participation in professional development activities (Johnson & McCracken, 1994). When linking compensation with career development, avoid imposing a career trajectory that requires teachers to give up their direct work with children. Advancement in early childhood programs has often required teachers to forfeit their direct work with children when they would otherwise prefer not to do so (Johnson & McCracken, 1994).¹³

Stress induced burnout is a key recruitment and retention challenge and therefore it would be helpful to include stress management as an important component of the ECE education curricula (Doherty and Forer (2005)). Due to increasing labour mobility, it is important to make education credits portable and transferable among educational institutions and provinces, so that the current education process of ECEs is not further hampered (Beach et al. (2004), Malatest et al. (2009)). It is important to ensure that the ECE education is of high quality and therefore efforts must be made to include more PhDs among the ECE education staff (Beach and Flanagan (2007).

Increased and better funded training, particularly management training, would address many recruitment and retention challenges. Formal training opportunities give workers an opportunity to improve their skills and make them feel appreciated and therefore increasing the opportunities for formal training will reduce the recruitment and retention challenges (Beach et al. (2004)). Giving employers/supervisors better HR skills through training will directly lower recruitment and retention challenges (Beach et al. (2004), Malatest et al. (2009), Doherty and Forer (2005)). Additional training/education requirements for managers would enhance the reputation of the early childhood education and care sector and will increase the job satisfaction of ECEC workers (Beach and Flanagan (2007)). Additional training requirements for early childhood education and care staff and managers would be more effective if these additional training requirements were accompanied by additional funding (Beach and Flanagan (2007)).

Workplace and Management Practices

Implementing best practices, offering mentoring opportunities and empowering employees in the workplace would alleviate some recruitment and retention challenges. Innovative strategies that improve work environment and job satisfaction will automatically reduce recruitment and retention challenges (Beach et al. (2004), Doherty and Forer (2005)). Taking initiatives to implement a culture of professionalism will improve the reputation of the early childhood education and care sector and thereby ease the recruitment and retention challenges (Malatest et al. (2009)). Mentoring has been mentioned as one of the key strategies for making workers feel less overwhelmed and more appreciated. Key target groups for mentoring are: Newly educated ECEs and workers requiring additional support (Beach and Flanagan (2007), Doherty and

¹³ Schwarz et al. (2005).

Forer (2005)). Due to funding and other restrictions, there can only be so many supervisors. Therefore great effort should be placed on investigating possibilities for horizontal promotions. This will make ECEC workers feel they are making progress and instil a new sense of feeling that there are opportunities in the sector (Doherty and Forer (2005)). A strategy for reducing job related stress is to make absolutely clear what the job entails. This can be achieved through clearly written job descriptions, staff manuals and performance appraisals (Doherty and Forer (2005)). Another way to make workers feel appreciated is to give them more autonomy in the decision making process. This will make workers feel more like part of the centre and consequently reducerecruitment and retention challenges (Doherty and Forer (2005)).

The Best Start Expert Panel on Quality and Human Resources (2007) also recommend developing mentorship initiatives for new graduates because new graduates and practitioners in training are more likely to succeed and stay in the field when they receive mentoring from skilled leaders who help them make the transition to the workforce. Increasing both the number of leaders in each setting, and their supervision, mentoring, and management skills will help create a more supportive environment for new graduates and students. In addition, early learning and care programs must develop effective mentorship programs, and the capacity/expertise to support apprenticeship training.

Whitebook et al. (2001) states that good communication, such as regular staff meetings, can increase job satisfaction and reduce job stress. The Social Planning and Research Council Of British Columbia (SPARC) (2008) also reported that employers said that having good internal communication practices is essential. Good communications helps employers know the needs of their staff.

SPARC (2008) found that flexibility is helpful in both the recruitment process and employee retention. Employers suggested many ways to make the work flexible and respect the fact that the sector is female dominated and that women are often the primary caregivers for their children. For example, employers try to make start and finish times flexible to allow employees who are parents to be in sync with their children's schedules. Employers talked about flexibility in scheduling as being key to allowing a work-life balance for staff and is essential to avoiding burnout, and to prevent high turnover rates. This also helps to encourage loyalty to the organization. The Best Start Expert Panel on Quality and Human Resources (2007) recommended that working conditions be improved by:

- providing time for program planning;
- providing appropriate space for and give practitioners scheduled breaks away from the children;
- providing paid time for practitioners to take courses or attend professional development workshops;
- offering more attractive working hours;
- providing recognition (e.g., salary increases, more responsibility, titles or designations) for practitioners who increase their credentials; and
- providing access to professional resources on site.

Tools/Information

Creating human resource information and strategy tools and regulations specific to ECEC would alleviate a lack of knowledge in the sector. Detailed retention strategies could be developed for each potential target group (high school graduates, mature workers etc.) (Beach et al. (2004)). Developing a research agenda on the current state of early childhood education and care would help give more of an idea as to where these efforts should be focussed.

Policy makers should focus on making policies and regulations specifically designed to improve conditions at child care centres and therefore help recruitment and retention efforts. Improving the quality of human resource management practices by requiring directors or administrators to have a minimum level of human resource training or professional development in order to be licensed would be a good initiative (Malatest et al. (2009)). Human resource specific tools should

be gathered, developed and disseminated to groups most likely to benefit from the information in these tools (Malatest et al. (2009)). Distribution of retention tools should be specifically targeted towards employers/managers (Malatest et al. (2009)). Creating a general professional profile to disseminate by occupation type (ECE, Early childhood education assistant (ECE&A) and supervisor) would provide workers in the sector with an increased sense of clarity and professionalism (Beach and Flanagan (2007)).

Recruitment and Retention Challenges and Strategies – Quantitative Analysis

This section looks at quantitative evidence to measure the scope of the recruitment and retention challenges and the effectiveness of recruitment and retention strategies. First the census data is analyzed to place the recruitment and retention challenges into context. The next two sections focus on the results of research that examined two detailed datasets for the ECEC sector –the "Caring for a Living" and the "You Bet I Care" data. In the last section, two very recent child care provider data sources: 2007 City of Toronto data and 2008 *Supporting Employers Project* data are examined. A summary description of the regression results for these data will be provided.

Current Canadian Recruitment and Retention Challenges

In order to understand the magnitude of the recruitment and retention challenges faced by the Canadian early childhood education and care sector it is helpful to put them into context. Therefore it is helpful to first examine the available data. Census data on the number of people in the occupation Early Childhood Educators and Assistants (ECE&As, NOC 4214 and NOC-S E217) in 2006 show 163,580 employed and 170,345 in the labour force. Furthermore, using data from the labour force survey that shows reasons why the non-employed left their previous job an indicator of the separation rate from employment to non-employment can be calculated. When this is done, this measure of the separation rate for women in all occupations (data for the child care occupation were not available) was 15.8% on average from 1996 to 2006, and was 14.6% in 1998. In comparison, Doherty et al. (2000) found that the turnover rate was 21.7% in 1998 for the child care sector across Canada, which is roughly 50% higher than the turnover rate estimated using the above data for all occupations. By assuming that the ratio between the child care turnover rate and the estimated aggregate separation rate remains constant for each age cohort, an indicator of the turnover rate can be calculated for the child care sector.

Using the turnover estimate from Doherty et al. (2000) for 1998 (21.7%) with the employment estimate in 2006 from the census, the number of people who are left their job in 2006 as a whole was 35,500. If the separation rate was the same as the aggregate separation rate for women in 1998 (14.6%) the number of people leaving would be 24,000. This is a difference of over 11,000 workers. These estimates suggest that the child care sector faces a huge retention challenge. The recruitment of workers can also be estimated using these results and a few extra calculations.

In order to estimate the inflow of workers into the ECE&A occupation, the above estimates were combined with labour force data for Canada from the 1996, 2001 and 2006 censuses in order to first determine the outflows from each age cohort that would occur based on the above separation calculations. Since the actual level of the ECE&A labour force increased over this period, clearly the gross inflow of recruits (new and returning) more than offset the outflow caused by separations. The implicit inflow rate of new workers can then be estimated by using the separation estimate discussed above and adjusting inflow rates so that the total level of labour force by age cohort reaches the levels provided by the census for 2001 and 2006. This is done by using a basic stock-flow model that includes the level of the labour force in the previous period plus inflows less outflows. In this simple exercise no attempt was made to include deaths and migration explicitly. When this is done the gross inflow rates can be shown to be in excess of that for the labour market as a whole (see figure below) and that inflows relative to the occupational labour force has increased in the period between 2001 to 2006 compared with the earlier period from 1996 to 2001.

These results suggest that retention and not recruitment is the predominant problem for the ECEC sector. While these estimates indicate that general recruitment is not a problem, they do not shed any light on if the recruitment of people with ECE qualifications is a problem. Unfortunately, the classification system used to categorize fields of study was changed

for the 2006 census, which makes it impossible to calculate precisely the inflow rates for qualified workers between the census periods. There is not a perfect concordance between the Classification of Instructional Programs (CIP) categories and the Major Fields of Study (MFS) classification that was used for the earlier census years, so there is not an easy way of determining with the census data if the gross inflow of people with ECE qualifications has increased or decreased. It is not clear if a detailed examination of the data may be able to construct a plausible comparison that could provide information on this matter. Certainly, it would be possible to do this calculation looking at college level education in total. But many college educated ECEC workers do not have an ECE designation, so this would an imprecise estimate.



Inflow rate relative to Occupational LF, Ratio

Caring for a Living Study

Cleveland and Hyatt (2000) analyse wage returns to education, experience and centre characteristics using data from the 1991 caring for a living study (see Table 2). This gives an idea of what the child care compensation structure looks like, so that efforts to improve recruitment and retention can focus on how to redesign the compensation structure. They find that education and experience are both rewarded in the child care labour market. This, however, does not mean that education and experience are rewarded enough to maintain these educated workers in the early childhood education and care labour force. Interestingly, experience is not rewarded in the first three years, perhaps to give these workers an incentive to stay at the centre longer. They find that union and non-profit status both results in a wage markup of 10-15%.

Table 2: Wage Returns To Education/Experience/Centre Characteristics					
Education					
Some college/university	+7%				
One-year certificate	+12%				
Two-year certificate	+21%				
College diplomas	+24%				
University certificate	+28%				
Experience					
0-3 years	ns				
4-5 year	+6%				
6+ years	+11%				
For each additional year	+1%				
Centre characteristics					
Union	+10-15%				
Non-profit	+13%				
Source: Cleveland and Hyatt (2000).					

You Bet I Care (YBIC) Study

Doherty and Forer (2005) use data from the YBIC study, conducted in 1998, to analyse which predictors/variables positively and negatively affect centre recruitment and retention (see Table 3) on page 28. The predictors' contribution to the goodness of fit of the model is used to calculate these predictors' importance score. In the table, high, medium and low importance scores are noted by three stars (***), two stars (**) and one star (*) respectively.

The most important predictor of intention to leave is staff burnout. The higher the staff burnout, the more likely the individual worker is to leave his/her centre and the child care field in general. Two other predictors are important to the intention to leave the child care field. The lower the "positive feelings of child care as a career" and the higher the feeling that "higher status or pay is only possible if they leave the field" the more likely the worker is to leave the field. It seems like in this case, non-monetary benefits may be more important than monetary benefits in the workers decision to leave their jobs.

Table 3: Variables That Affect Recruitment And Retention										
	Staff level outcomes		Centre level outcomes							
Effect of an increase in:	Intent to leave centre	Intent to leave field	Intent to leave centre	Intent to leave field	Centre turnover	Retention difficulties	Recruitment difficulties			
Indicators of staff burnout	(+)***	(+)***	(+)***	(+)***	(+)*	(+)*				
Length of time working at the centre	(-)*		(-)**	(-)*	(-)***	(-)**	(-)*			
Centre turnover rate						(+)***	(+)***			
ECE specific staff education					(-)*	(-)**	(-)***			
Positive feelings about child care as a career		(-)**		(-)***						
Higher status or pay only possible if leave field		(+)**		(+)**						
Indicators of director burnout					(+)*	(+)*	(+)**			
Staff wages		(-)*				(-)*	(-)**			
Perceived job security at centre	(-)**		(-)*							
Auspice			(-)*	(-)*						
Perceptions about promotion within the centre	(-)*	(-)*		(-)*						
Perceptions of respect				(-)*						
Centre benefits that improve working conditions					(-)*					
Staff satisfaction with supervisor			(-)*							
Feelings about pay, benefits, and promotion	(-)*									
Centre budget devoted to wages and benefits						(-)*				
Percentage of staff engaged in recent PD					(-)*					
Unionized staff							(-)*			
Centre has extended hours					(+)*					
Supportive, collegial relations among staff				(-)*						
Director perceptions of staff-director relations						(-)*				
% staff resigning from a previous child care job					(+)*					
Director intends to leave centre within one year				(+)*						

They find that retention difficulties can be reduced by employing workers with an ECE specific education. This is probably because these workers have already made an educational commitment toward early childhood education and care. Having employed workers with an ECE specific education reduces recruitment difficulties as well. Centre turnover rates are a prime cause of recruitment difficulties due to the high need to find replacements. Recruitment problems can also be reduced by putting effort into helping combat director burnout and by paying higher wages.

Summary of Regression Results

Regression analysis was conducted on two datasets: City of Toronto 2007 data and the *Supporting Employers Project* data for 2008 (see Appendix II and III). For the City of Toronto dataset a variety of the variables were tried in order to replicate the factors that the research described above found to be important for recruitment, retention or job satisfaction. Where possible the results were differentiated between ECEs, ECEAs and supervisors.

Auspice, priority areas, high need areas and multi-location centres were each examined through the use of dummy variables. Child care centre quality was examined by averaging City of Toronto quality data. To examine staff burnout via hours of work effects, the number of average annual hours was examined. This was later changed to differentiate between the number of days the centre was open and average daily hours. Supervisor burnout was examined by looking at the average annual hours of supervisors. Labour compensation was examined by including the share of total costs devoted to salaries, the ratio between benefits and salaries and the average hourly wage of the specific ECEC workers. Training was included by using training as a share of the total budget. And grants per worker were examined. Workplace size was included using a variety of measures such as number of total hours, number of ECE&A workers and the number of child care spaces. In the end, the number of child care spaces was the variable that was included in the analysis. Unequal pay was measured by calculating the standard deviation in centre hourly pay. Flexibility was proxied by using the standard deviation in centre average annual hours worked. Fixed term contract effects were proxied by using the percent of the total costs used for casual employment.

The *Supporting Employers* data were collected via a survey and reported in Malatest et al. (2009). The analysis used variables that flag recruitment and retention challenges and strategies. The retention related variable was turnover which is an objective measure that is split into qualified and unqualified turnover for ECE&As combined. Questions on recruitment and retention challenges and strategies were used including: Reasons for qualified turnover, reasons for unqualified turnover, screening methods used and which training programs would be most beneficial. One qualified turnover reason that did not get any affirmative answers and had to be dropped was: "Job did not meet their expectations". Employment of an HR person was also dropped from the regressions.

Some of the results of these analyses supported the literature review discussed above, while other results were in conflict. The results indicate that there can be significant differences among ECEAs, ECEs and supervisors in their reaction to factors and that there are often variations in the response of employees in different types of centres, such as higher wage versus lower wage centres.

In general, the regression analysis found that non-profit centres had higher retention of workers than for-profit centres, but nonprofit status did not affect recruitment. Pay and benefits were found to generally positively impact retention. It was found that higher pay and benefits contributed to longer tenure among employees. And the desire of existing staff for more pay and benefits by qualified staff and supervisors was associated with higher retention difficulties by employers. The relationship between pay and retention appears to be fairly complex.

The literature suggests that wage compression is a positive attribute. This would suggest that a larger spread in wages between supervisors and child care providers or among ECEC staff could result in increased turnover and reduced retention. Other literature suggests that workers become dissatisfied if wages differences are thought to be unfair. The evidence from the regression analysis illustrates that the difference between supervisor's wages and those for ECEs and ECEAs had a positive relationship with tenure of these two groups of employees. This suggests that the higher pay of supervisors was generally viewed to be "fair" and perhaps acted as an incentive to remain. For all ECE&A employees combined, there is little evidence that more wage dispersion had a negative impact on tenure. Indeed, a larger dispersion of ECE&A wages was positively associated with tenure for the whole ECE&A group. For ECEAs in low wage centres, however, a larger degree of wage variability was associated with lower average tenure, but these effects were not found for ECEs. These results suggest that there are complex differences in how employees respond to labour compensation levels and variations in compensation among employees.

Higher quality centres had better retention than centres with generally lower quality levels. This effect appeared to be more important for ECEs than ECEAs, which suggests that there could be a virtuous circle whereby quality encourages better quality or a vicious circle whereby poorer quality contributes to a further deterioration in quality. It seems that more flexible work arrangements tend to improve retention. It also appears that the ages of the children being cared for generally only has a limited impact on recruitment difficulties except for the youngest child age cohort, which increases recruitment difficulties, but not retention problems. This divergence could be because of self selection effects, whereby those who do not want to care for the youngest age group do not go into centres with a large number of these spaces, and therefore they do not quit later.

The general literature on job satisfaction suggests that job satisfaction decreases as the size of the employer increases. In contrast, our analysis shows that a rise in the number of spaces in the centre was positively associated with tenure. This might be because all of the centres tend to be relatively small, so the disincentives associated with working in large companies found in the general literature, do not apply to the ECEC sector. The size variable used in our analysis was the number of child care spaces, although the same general effects were found for total hours or number of ECEAs. There could be positive benefits to having more child care spaces and therefore workers, which provide benefits in terms of work flexibility as well as horizontal and vertical mobility. It is possible that larger centres also offer more job security than smaller centres.

In contrast, it was found that working in a multi-location centre was negatively associated with longer tenure. The difference between these relationships suggests that employer size is a complex relationship that provides positive as well as negative aspects for labour tenure, but that once the operation expands to many locations some positive attribute is lost or negative attributes start to dominate.

Based on the analysis of these two datasets, it is not clear that more work hours is a driving factor behind higher turnover. Job tenure increased with the average number of hours worked in the centre. The stated desire for fewer work hours was generally associated with lower retention problems and more work hours was associated with longer tenure.

Importantly, in many cases ECEs and ECEAs had distinct differences in their relationship to the same factors. For example, it was found that the proxy of workplace flexibility was associated with a higher retention of ECEAs rather than ECEs. ECEAs and ECEs also respond to different aspects of hours worked. For ECEAs, more daily hours of work were associated with higher retention, while for ECEs more days in operation were more closely associated with longer tenure.

As expected, the percentage of vacant spaces, which may reflect a lack of quality or job security, had a negative effect on job tenure. The number of subsidized spaces and working in a priority area had a positive impact on tenure, which could be a reflection of the labour donation hypothesis.

In a number of cases the results showed the opposite sign as to what was expected. For example, higher spending on training was associated with lower retention. It is possible that reverse causality was the culprit. This could be because a higher turnover rate leads to an increase in untrained employees, who must be trained to bring their skills up to standard. Therefore, training is a reflection of higher past turnover, and not a contributing factor to future turnover. Similarly, higher spending on administration is associated with lower worker retention. This again could be a reflection of higher past turnover since higher turnover leads to an increase in general administration costs to recruit new employees. It was also found that higher administration costs in multi-location centres sometimes contributed to an improvement in tenure. It is therefore possible that administration is more important for multi-location centres in order to offset the diminishing of some positive attribute or increase in some negative attribute that seems to occur in multi-centre operations.

SECTION 4: RECRUITMENT AND RETENTION INITIATIVES

Public policy has a direct impact on the recruitment and retention of ECEC workers. All provinces and territories have policies and programs that indirectly impact recruitment and retention and there are a number of innovated policies and programs that directly impact recruitment and retention (see Appendix IV). Given that many of these policies have only recently been rolled out, it is less clear which are the most effective at influencing either recruitment or retention. Obviously, it would be very helpful to be able to systematically examine the effectiveness of the various policy and program initiatives that have been used in the past few years as recruitment and retention problems became acute.

Policies can be separated into:

- direct funding measures that influence the demand for workers;
- direct funding measures that influence the supply of workers;
- measures that influence education;
- equivalency assessment that broadens the pool of workers;
- recognition that improves non-monetary benefits of workers; and
- direct recruitment and retention policies.

Clearly funding programs can directly impact the demand for or supply of ECEC workers. Most of the government funding programs are focused on expanding the quantity of services. The most common funding program is a subsidy to help lower income parents afford child care. This program will directly increase the demand for ECEC services and therefore increase the demand for ECEC workers. An expansion in the demand for workers will make recruitment challenges greater, since there will be a need for more workers. Only if child care fees and wages rise, drawing people into the ECEC field, would a policy of expanding demand alone eventually reduce recruitment and retention problems.

As indicated in the *Literature Review of the ECEC Labour Market* some of the rise in demand seems to be met by reducing educational standards. Since ECE educated workers tend to have a higher commitment to the workforce than non-ECE educated workers the result is a higher turnover rate. Therefore a government funded expansion in demand, without a corresponding program to increase supply of workers will lead to both current recruitment problems and future retention problems.

According to key informant interviews, Quebec has a relatively low turnover rate. They have relatively high wages and common compensation scales across the sector, which reduces job hopping. The use of common compensation scales is a practice that likely would not work very well without the relatively high level of wages, since workers would simply leave the occupation altogether.

One initiative that could indirectly help reduce recruitment and retention challenges is the approach of government working with child care boards to develop and pilot new models of governance. For example, the hub model is designed to increase the human resources capacity of a group in ECEC centres by centralizing the human resources management and enabling programs to share administrative costs and expertise. The hub model is designed to increase the human resources capacity of a group of ECEC centres by centralizing the human resources capacity of a group of ECEC centres by centralizing the human resources management. This will reduce administrative costs and improving human resource management practices, both of which could benefit recruitment and retention. Notably, given the negative effects of multi-location centres as previously discussed, there must be an improvement in human resource management practices in the larger entity otherwise this type of initiative may have the opposite effect than expected.

The use of Prior Learning and Assessment and Recognition (PLAR) is an approach that can broaden the supply of ECEC workers and also maintain the quality of the workers. In most provinces PLAR is used to examine academic qualifications. Manitoba's PLAR approach is innovative and goes beyond usual practice using PLAR from a workplace perspective. The Manitoba Government

specifically identifies new Canadians as a target group, which means there must be a mechanism to recognize foreign credentials. This initiative combined with the workplace PLAR could potentially increase the number of potential recruits substantially. If PLAR or foreign credential recognition results in lower quality ECEC workers, however, the effect could essentially cause a trade off between quantity and quality.

Another innovative practice is the recruitment of former ECEC workers who have left the labour market. Since people who have worked in the ECEC sector would know about the job and its net benefits, this approach should reduce future retention problems compared to recruiting people who have not worked in the ECEC sector. Furthermore, by recruiting among those who have left the labour market there would be a potentially larger group to select from than simply looking at recent graduates. Since it is difficult to entice workers who have left the labour market to return, except those who have left temporarily, these initiatives should be monitored to determine their success rate and cost effectiveness.

A potential useful means of encouraging recruitment and retention in the early childhood education and care sector is the provision of or improvement in a pension plan. A pension could encourage workers to remain in the profession in order to vest their pension plan or to maximize future benefits. A pension plan would encourage those who plan to stay in the sector over a longer period to enter the profession. This should help to lower future retention problems. Improving pensions, however, are likely not as effective at reducing current recruitment problems as an increase in wages that costs the same in net present value terms. The latter would also apply to those who plan to stay in the sector only a short time, while the former would encourage those who plan to stay a longer time.

A number of funding programs seek to encourage ECE training. An increase in the pool of people with ECE training will reduce recruitment problems, and should also reduce future retention problems. One type of innovative program that governments have introduced in this area are student loan forgiveness programs. These programs forgive student loans for ECE graduates who commit to work in the ECEC sector. This type of program would encourage retention since the longer a person is in the job the more likely they are to remain. Also, the program will have the effect of potentially boosting the quality of ECEC services. Improved quality of ECEC services could attract ECE graduates to the field. Similarly, education based wage supplements would also tend to encourage ECE trained workers to enter and stay in the field. This is another innovative strategy that combines an improvement in the quantity as well as the quality of workers available to work in the sector.

Policies that reduce the current cost of education will also tend to reduce challenges in recruitment and retention. A number of provinces have bursaries and grants to encourage education. Requiring students to work in the sector after graduation is an innovative approach that could provide significant benefits by increasing the potential supply of workers and should also help reduce future retention problems. Since there can be particularly acute workforce shortages in some rural areas, programs that provide distance education are potentially helpful. A number of provinces have introduced internet based education programs, which is an innovative and cost effective way of providing education, especially to students in rural and remote areas of the country.

Another method to improve recruitment and retention is to provide training that permits students to work in the sector during the summer. This program should provide a number of potential benefits. First, it permits full-time staff to have time off during the summer, which would reduce burnout and therefore turnover problems. By providing students with experience in the early child-hood education and care sector they will have a better idea of what the job entails and therefore can make an informed choice about selecting this profession. This could reduce future retention issues since knowledge of the job is found to reduce turnover.

One technique that a few provinces have initiated is to provide financial support to current staff to enrol in college-level ECE courses. One province also compensates centres that need to hire substitute staff while permanent staff members are taking courses. This initiative has increased the proportion of trained people in the province, which should reduce both recruitment and retention problems.

Other innovative approaches are the funding of training for directors and in one province directors of ECEC organizations support each other to develop leadership skills through a mentoring program. Since human resource management can have a significant im-

pact on recruitment and retention, and the turnover of directors can have an adverse effect on staff, these programs could improve recruitment and retention challenges via a number of channels.

The use of awards or other mechanism to boost recognition and other non-monetary benefits is an innovative strategy that could reduce retention problems.

Some provinces have used education campaigns to increase the awareness of the early childhood education and care sector. It is not clear if these campaigns have a direct effect on recruitment or retention and the magnitude of the effect if there is one. Some provinces have rolled out multi-faceted recruitment and retention programs, which are more innovative than a single dimension approach. It is likely that education campaigns in combination with other initiatives would have a greater effect than information campaigns alone since information alone may or may not change behaviour in the desired manner. Furthermore, a general increase in ECE enrolment rates may not be a cost effective method of reducing recruitment and retention challenges since half of all students do not go into the ECEC sector.

SECTION 5: CONCLUSIONS OF RESEARCH AND RECOMMENDATIONS

The early childhood education and care sector faces significant labour market shortages for trained ECE staff for several reasons:

- The employment level for ECEC workers is rising more quickly than for other occupations in general, which means that expansion demand is larger than for other occupations. Furthermore, the turnover rate of ECEC workers is much higher than for most other occupations, which means that replacement demand is much higher than other occupations. The combination of these two factors means that recruitment demand in the ECEC sector is much larger than for other occupations.
- Provincial regulations regarding staff-to-child ratios mean that there is a relatively fixed number of workers required relative to the services provided. This direct linkage between demand for services and workers means that employers cannot adapt to workforce shortages via labour productivity changes. The implication of this effect is that workforce shortages facing the ECEC sector are likely to occur more often than in other sectors and are likely to persist longer.
- ECEC workers tend to have higher levels of education than workers in general and more highly educated workers have much lower unemployment rates than the workforce as a whole. Furthermore, the unemployment rate for ECEC workers is generally lower than for workers in other occupations at similar levels of schooling. This means that workforce shortage rates tend to be relatively larger than for other sectors.
- Since ECE related occupations require a college diploma, it takes longer for workers needed to emerge from the education system than for occupations that require lower levels of education. This means that workforce shortages for ECE trained workers will persist longer than for sectors that employ less qualified workers.
- Parents may have a hard time assessing the quality of ECEC services due to lack of information and therefore can be unwilling to pay for better quality care. Parents are also very price sensitive, so a rise in wages fed through to price increases reduces demand significantly. The combination of these factors means that there is downward pressure on ECEC worker wages, which also limits the incentive for people to enter or stay in the occupation.
- The focus of the sector tends to be on quantity, not quality. The implication is that when there is a shortage of ECE trained staff, an educational exemption may be provided by government which acts as a release valve so that wages do not increase. As a consequence of the stagnation in wages ECE trained people do not move to the ECEC workforce from other occupations or from outside the labour force. In addition, people are not encouraged to take ECE training or if they do take training they are not encouraged to stay in the ECEC workforce.
- The implication of these various factors is that workforce shortages facing the ECEC sector are likely to occur more often than in other sectors. They are also more likely to persist without action that addresses the underlying factors causing the shortages. Furthermore, there will be a rising tide of retirements throughout the labour force as the baby boom generation ages, which will impact the ECEC workforce directly and indirectly. Therefore, even though the business cycle suggests there will be a period of lower workforce shortages and therefore less recruitment and retention problems, this will prove to be a relatively short-term respite. In the medium term and long term recruitment and retention problems will intensify once more

The evidence provided in this report demonstrates clearly that the primary challenge facing the sector is retention. The problem of recruitment is directly related to the retention challenge, primarily because employers are spending a considerable amount of administrative time recruiting new employees to replace those who have left. Recruitment challenges are primarily caused by staff turnover, with close to nine of every ten new recruits being required to replace existing staff. Given the size of staff turnover, employers must constantly search for new recruits in order to maintain services, let alone to expand the delivery of ECEC services. Therefore the recruitment challenge occurs as a result of the retention problem.

The ECEC sector is remarkably good at recruiting people. The information provided in the *Supporting Employers Project* research by Malatest et al. (2009) illustrates that employers are using many of the recruitment approaches suggested in the literature. An analysis of census data illustrates that the net inflows into the sector are well above the average for all occupations. Deficiencies in the available census data, however, make it impossible to determine if the right people are being recruited. Given the concerns expressed during key informant interviews about recruitment difficulties, the analysis provided to determine if current workforce shortages exist, and the rise in educational exemptions during periods of strong demand, it appears that the primary retention and recruitment challenge is for ECE trained workers.

The above combination of factors suggests that the primary focus should be on stemming the outflow of employees, particularly trained employees. Reducing the outflow of trained ECEs will have the effect of reducing the amount of time spent on recruiting new employees, improving the quality of ECEC services and helping to improve the working conditions for those who remain. In order to improve employee retention it is helpful to focus on the factors that are found to affect employee quit rates.

Quit rates are influenced by both financial and non-financial benefits. Therefore, retention can be improved by increasing either financial or non-financial benefits. One way to increase non-financial benefits of a job is to improve job satisfaction. Improvements in job satisfaction can be more cost effective than changes in monetary benefits.

Research has typically found that, consistent with economic theory, pay is positively related to job satisfaction. Hours worked has been generally found to be negatively related to job satisfaction, but there are some cases in the ECEC sector of the opposite. It has also been found that as wages rise, the quit rate falls and the importance of non-wage factors diminishes. At low wage levels there is a very large dispersion in quit rates that seems to be related to job satisfaction. For the ECEC sector, non-wage factors have been found to be much more important than for other sectors. Changing job satisfaction from the lowest to the highest rating could lower the quit rates dramatically, perhaps by over 20%, and be the equivalent to a huge increase in pay. Other important contributing factors are individual traits, such as age and gender, and some features characterising the individual's job satisfaction, whereas public sector employment, clerical jobs, workplace size, age and being a male has the opposite effect. For women, monetary factors matter less, but working conditions and a higher degree of flexibility matter more.

For the ECEC sector, there is evidence that the quality of work life is important to job satisfaction. For example, collegiality among co-workers, supervisor support, the decision-making structure, professional growth opportunities, goal consensus, communication, and general working conditions. Stress and burnout are commonly identified as a negative attributes of the workplace, while flexibility is a positive attribute. The literature on the ECEC sector shows that poor human resource management practices can increase stress, burnout and turnover.

The literature on job satisfaction indicates that human resource management practices can influence workers overall job satisfaction and their satisfaction with pay. This suggests that employers should examine Pfeffer's list of best practices to see if there are ways to improve the work environment and reduce turnover. Research shows that satisfaction with pay is higher where performance-related pay and seniority-based reward systems are in place. On-going learning, job autonomy and working in teams have positive effects on job satisfaction. Giving workers a 'voice' through employee involvement has a positive effect on job satisfaction. Managers who hold regular meetings with employees to enable them to express their views about work have a substantial effect in raising job satisfaction.

Close supervision of work is disliked, but workers prefer some assessment of their performance, suggesting that some monitoring is desirable. A pay structure that is perceived to be unequal is associated with a substantial reduction overall job satisfaction and their satisfaction with pay. The use of fixed-term contracts is associated with lower reported job satisfaction levels. Satisfaction levels appear to differ little between employees working part- and full-time.
Even if the turnover rate is reduced to levels in other occupations, many people will continue to leave the ECEC sector. Therefore it is important to also improve recruitment of employees as well. An analysis of the ECEC labour market (see *Literature Review of the ECEC Labour Market* report) suggests that the the ECEC labour supply is very responsive to changes in the net benefits of working. The implication is that small changes in net benefits could lead to a relatively large increase in the labour supply. A rise in either wages or non-wage financial benefits would bring more people back into the labour market. An increase in non-financial benefits would also increase the supply of workers. Recognition of ECEC as a profession and/or personal recognition would improve non-financial benefits. Better human resource management practices could also improve the non-financial benefits.

Financial and non-financial costs of working must also be taken into consideration when enticing workers into the ECEC sector. Financial costs include payroll taxes, income taxes less deductions, work related costs (i.e transportation) and potential child care costs, clothing and food. A reduction in any of these financial costs would potential have a large positive impact on the ECEC labour supply. Human resource management practices could also lessen non-financial costs, such as a lack of information.

Of particular concern is human resource management related to recruitment and retention. When examining recruitment and retention practices for the ECEC sector it is important to keep in mind that there are essentially two primary goals for the ECEC concerning quantity and quality of services provided. These goals can be aligned in some instances, but also pull in opposite directions in other instances.

The job assessment will have a direct impact on the quality versus quantity trade off. For example, not finding qualified workers will impact the quantity of child care provided. If during a tight labour market organizations reconsider the needed skills and competencies for a particular position and determine that the position does not require a higher level qualification, there would be potentially a larger pool of available workers. Hiring workers with lower educational attainment could impact the quality of ECEC provided, however.

The first decision facing recruiters is whether to recruit internally from those already employed by the organization, or to recruit from the external labour market. Most studies suggest that employers should use the internal labour market before searching for external candidates. The decision to access the internal labour market brings with it a number of distinct advantages.

The source of recruits is significantly linked to differences in employee performance, turnover, satisfaction and organizational commitment. Two of the three top ranked sources were employee referrals and college recruiting. Certainly, these recruitment approaches could be followed by the ECEC sector.

Traditionally used selection techniques such as the interview, the application form and the reference continued to be popular, despite their reported lack of reliability and validity, while only a small number of organizations report their use of more sophisticated selection tools such as assessment centres and psychological testing. Given limited resources it is likely that organizations in the ECEC sector would continue to rely on traditional selection techniques.

Part of the selection process is determining the skills and competencies of the prospective candidate. There is considerable discussion in the human resource and education literature on evaluation and assessment tools and mechanisms, including current competencies assessment and prior learning assessment and recognition. PLAR can work with current competency assessments to broaden the available workforce and ease short-term labour market shortages. If the skills and competencies are assessed correctly, then this would be a mechanism by which both the quantity and quality of the workforce could be improved. Since all provinces have regulations concerning the educational requirements of staff this process can only be done in conjunction with or by governments.

If a new hire is deficient in the knowledge and skills required to perform the job, then training will be needed to bring their knowledge and skills up to the minimum level required for the position. New hires that have been out of the labour market may also need retraining, since human capital can atrophy. In the ECEC sector, provinces tend to have explicit requirements for organizations to provide education plans that illustrate how workers will be trained to bring them up to regulatory standards should an exemption for educational requirements be permitted because qualified workers were not found. Some provinces also encourage training of existing staff to improve educational qualifications.

The labour market for occupations with lower educational qualifications tends to be more local in scope than the labour market for higher level education. Part of the reason for this is because the pool of available labour is smaller for more highly educated workers. Therefore employers must draw from a larger geographic area to find available workers. The ECEC labour market seems to lie in the middle. The education level is typified by college education, which is below the university level, but above high school. If employers only look in the local area because of a fear of poaching, then the research suggests employers will be looking for ECEC workers in an area that is geographically too small to reach the needed pool of potential workers. Some key informants, however, suggest that most people are obtained from the local labour market because low wages make commuting uneconomic for most workers. This combination of factors suggests that ECEC employers are searching for workers in a suboptimal area.

Recommended Strategies from Human Resource Management Practices

Since the early childhood education and care sector is comprised primarily of small providers, the literature on human resource management in small and medium sized enterprises and organizations is relevant. This literature sshows that small organizations generally have less well developed human resource management practices than larger operations. Therefore, it is possible that improvements in human resource management of early childhood education and care providers could have a disproportionate impact on job satisfaction and quit rates. It is therefore possible that the CCHRSC could contribute to the improvement in human resource management practices in the early childhood education and care sector, which would improve job satisfaction and employee retention. Therefore a primary recommendation is for the CCHRSC (or for employers) to help improve human resource management practices that will lead to improvements in job satisfaction. This is likely to have a larger impact on ECE quit rates, and therefore to improve both quantity and quality.

Employers should examine Pfeffer's list of best practices to see if there are ways to improve the work environment, reduce turnover and improve recruitment. Working conditions and therefore job satisfaction can be improved by:

- Providing time for program planning.
- Providing appropriate space for and give practitioners scheduled breaks away from the children.
- Providing paid time for practitioners to take courses or attend professional development workshops.
- Offering more attractive working hours.
- Providing recognition (e.g., salary increases, more responsibility, titles or designations) for practitioners who increase their credentials.
- Providing access to professional resources on site.

For example, workplace flexibility is helpful in improving job satisfaction by making start and finish times flexible to allow employees who are parents to be in sync with their children's schedules. And good internal communication practices are essential.

Practices that promote professional development include the following:

• Establishing career paths whereby training and education allow participants to earn credentials or degrees.

- Providing opportunities for staff to receive additional training and education, and facilitating their participation.
- Providing professional development experiences that clearly link theory and practice.
- Involving staff in the planning and design of their professional development plan.
- Providing employees with the time to attend training during work hours, and providing tuition support.
- Using training and mentoring programs to recruit and train new ECEC workers as well as to retain experienced workers who participate as mentors and may or may not receive cash awards for their participation.

The CCHRSC or provincial governments or early childhood education and care associations could provide a central job registry on the internet. Then employers would be advertising the job in a larger geographic area and job seekers would apply to the jobs that were the most economically advantageous. This approach could draw potential workers into the ECEC sector who would otherwise work in another sector and would likely affect the overall quantity of workers available.

Non-work to work transitions might provide a possible remedy for the ECEC sector given the number of people with ECE education that have dropped out of the labour market. Since during periods of rising unemployment, there could be a reduction in reservation wages because of changes in family circumstances, there is the possibility that a number of people who have dropped out of the labour market will re-enter. The biggest human resource management issue for recruits with an ECE education would be to ensure that their skills and training are up to industry standards and have not atrophied due to lack of use.

There might be some cases of recently unemployed workers-to-ECEC transitions that occurred during periods of recession as workers in other industries lose their jobs. Given the large number of people with ECE qualifications that are employed in other industries there could be an increasing pool of potential candidates. However, these workers may be only a temporary source given that once the economy improves some workers will move to higher paying positions.

Pay scales that do not differentiate between ECE trained and untrained staff, could be viewed by ECE trained staff as "unfair" and therefore encourage turnover of ECE trained staff. This would directly lower the quantity and quality of the workforce. Research conducted for this project using the Toronto data illustrate illustrate that pay differences between different levels of staff can encourage retention because differential pay scales can act as an incentive to remain in ECEC and work towards the higher level.

In-kind transfers from employers that could reduce work related costs would also have a positive impact on labour supply and retention. For example, if employers could offer women on maternity leave who dropped out of the ECEC labour market free or reduced price ECEC (in kind transfer) there would be lower costs of working.

Beyond changes in wages there are a number of non-wage financial benefits that could be changed to encourage recruitment and retention, specifically: retention allowances, recruitment or referral bonuses, relocation bonuses, performance and productivity-based awards such as cash awards, honourific awards, time-off awards, within-grade promotions, and other recognition devices. Personalized benefit packages, benefits for part-time staff on a pro-rated basis, discretionary annual benefit funds and other benefit incentives. Availability of pension benefits could also improve recruitment and retention.

Recommended Strategies from Analyzed Datasets

From our regression analysis non-profit status improves retention. Therefore we would recommend policies that would increase the number of non-profit child care centres. Alternatively determining what attributes non-profit centres provide that improve retention would be beneficial so that general regulations or business practices could be adjusted to imitate this effect.

Given the negative impact from multi-location centres, it appears that these particular employers must improve human resource management practices in order to reduce turnover, since a rise in resources devoted to administration led to gains in employee retention.

In the data examined, staff burnout does not appear to result from too many hours worked, so there may be an issue with the flexibility of hours worked or working conditions. We would recommend policies and practices that improve general working conditions, such as increased workplace flexibility. More flexible work arrangements seem to improve retention.

Workplace remuneration schemes need to be viewed as being fair. Arbitrary or unequal treatment of employees can contribute to increased turnover. These effects seem more acute for ECEAs in low wage centres.

Higher quality centres had better retention than centres with generally lower quality levels. This effect appeared to be more important for ECEs than ECEAs. This suggests that governments could assess the quality of child care services provided at child care centres and make the information publicly available.

Size of the child care operation was positively associated with longer tenure. In contrast, it was found that working in a multilocation centre was negatively associated with longer tenure.

Recommended Strategies from Provinces/Territories

In this section we have combined what we believe to be the best strategies from the provinces and territories and added modification of these strategies mentioned by the expert panel in the CCHRSC's *Labour Market Information Research Agenda* (*LMIRA*) *Project* and *Supporting Employers Project*. These strategies are grouped below. These strategies are grouped below.

Information

Making information available to parents on the quality of child care services provided by child care centres could increase the use of the quality child care services because it will remove the problems associated with asymmetric information and moral hazard. Improving parents' access to information about quality would have the effect of increasing the demand for higher quality ECEC services, and would also provide an incentive for employers to differentiate their services from other centres on the basis of quality. This would mean that price and location are not the only attributes that parents take into consideration. A rise in the demand for quality ECEC services would increase the demand for ECE trained staff. If ECE trained staff become a valuable resource for employers then there is an incentive to employers to improve wages, professional development and general working conditions, which are shown to boost job satisfaction and would reduce quit rates.

Several tool kits have been developed by provincial/territorial governments and early childhood education and care organizations which should improve expertise in the sector. Also, getting better data in the ECEC sector is recommended so that current and future workforce shortages can be better localized and identified.

Providing information to educational institutions, guidance counsellors, and secondary and postsecondary students about the benefits of working in the ECEC sector could encourage ECE enrolment and potential entrants to the ECEC workforce.

Recognition

Recognition is a cost-effective method of improving job satisfaction. Many provinces and territories have implemented child care appreciation days, awards and certificates which are laudable. Recognition of individual child care centres could also be an effective and straightforward way to acknowledge good work environments.

Work Environment

Identification of centre based quality should have a positive impact on the work environment, since better quality services would be positively associated with better work environments. Therefore, the provision of information on the quality of child care centres would increase the incentive to employers to improve the environment for children and workers.

The work environment can be improved through more flexible work hours. Flexible work hours could include full-day and part-year work, or part-day and full-year work, organized vacation relief, or organized sick day relief. Relief programs could be organized over several child care centres in order to maximize the benefits at lower costs.

The work environment should be improved if workers could be relieved on specific days each year for professional development purposes. This could be government funded or employer funded professional development. It may be helpful to coordinate these professional development days with professional development days in the education system, since this alignment would reinforce the understanding among parents that the ECEC sector provides professional educational services, which may add to the recognition of the sector.

Incentives

Many provinces currently operate incentive plans. One promising approach is to establish an ECEC pension as this encourages workers to stay in the sector and first invest in and then to improve their pension. Another scheme is to offer workers who left ECEC monetary incentives to return back to the ECEC field. This initiative would have a large pool of potential candidates, but may also encourage workers to leave the field in order to get the bonus. Other incentive schemes such as loan forgiveness and apprenticeships try to increase the length of time ECE trained workers spend in the ECEC sector should be encouraged. Another innovative incentive scheme would be to link professional development towards a professional credit.

Government funding, such as wage supplements, that are paid out at the same rate regardless of ECE training level can have the undesired effect of encouraging the hiring of more untrained staff. This is because the supplement would typically be a larger share of the untrained workers' potential wage.

Policy measures that reduce the cost of commuting could have a disproportionate impact on the available supply of ECEC workers as this would reduce a fixed cost of working and therefore increase the net benefit.

Financial and non-financial costs of working must also be taken into consideration when enticing workers into the ECEC sector. Financial costs includes payroll taxes, income taxes less deductions, work related costs (i.e transportation) and potential child care costs, clothing and food. Payroll taxes tend to be regressive insofar as they are at the same percentage of income up to a maximum income, usually around \$40,000. This maximum level of income is in excess of what is earned by ECEC workers and therefore they are subject to the full payroll tax rate. Policy that lowers any of the payroll taxes would have a disproportionately favourable impact on the net benefits of working in the ECEC sector. Any increase in the basic exemption, increase in the threshold for the lowest income tax bracket, or decline in the lowest tax rate would also have a disproportionate large impact on the net benefits of working in ECEC. Reductions in the cost of working would also have a positive impact on the supply of ECEC workers. For example, increased public transit subsidizes or increased transit deduction would likely have a positive effect on the ECEC labour supply. Increases in child care cost subsidies would also likely have a positive impact on the ECEC labour supply.

Campaign

Public education and promotion campaigns are methods of expanding the potential ECEC applicant pool. This is because many people may not be aware of the opportunities in ECEC. An increased inflow of people taking ECE training, however, will not in and of itself necessarily lead to an improvement in the flow into the sector or the retention of workers once in the sector. Therefore, these campaigns need to be supplemented with other changes in order to be fully effective.

The creation of the College of Early Childhood Educators in Ontario should elevate the professional nature of the ECEC occupation.

Education

Employees tend to prefer on going professional development and training for themselves and staff. Also, training is sometimes required to bring new recruits up to the standard required by the sector. To foster training, a number of initiatives have been developed by provinces and territories. Distance education is an effective way to increase the education of an ECEC workforce in relatively isolated places. With the advent of the internet, distance education is becoming more common and easily accessible. It would be helpful if governments, educational institutions and employers aid the development and utilization of comprehensive distance education programs for ECE training. These courses could be made available for those without experience in the ECEC sector or for additional training for ECEC workers or for refresher courses for those who wish to re-enter the workforce.

Several provinces/territories are moving or examining the possibility of moving part of the ECEC sector into the education sector. Once pre-school ECEC is integrated into the education system and publicly funded there may be a change in public perceptions about the status of the profession. This could improve recruitment and retention above and beyond the impact of any increase in wages that may result from public funding.

Job Trials

One way to increase the potential ECEC applicant pool is to give ECEs or potential ECE students an opportunity to experience working at a child care centre over the summer vacation. This would also allow the regular workers time for vacation or professional development. Providing bursaries for leaders in the sector may improve human resource management practices and encourage strong ECEs to see a future for themselves in the ECEC profession. Job "shadowing" could also introduce ECEC to potential applicants.

Cooperation

Cooperation among various child care centres could result in the employers sharing their best employee retention practices. Secondly, depending on the extent of the cooperation, it may allow experienced members from one centre to mentor workers at another centre. Thirdly, administrative functions and therefore costs could be shared by several child care centres. This might improve human resource management practices as well as lower costs. Given the evidence that multi-location centres have more retention challenges than single location centres, the positive impact from cooperation on administration costs and practices will be mitigated by diseconomies of multiple locations. Therefore great care must be taken to ensure that broad based cooperation, such as the hub model, actually improves the situation for individual workers.

Quality

One of the main ways to professionalize the ECEC sector is to improve the quality standards for child care programs. The City of Toronto has taken a step to achieving this by undertaking quality evaluations of participating child care centres. This would partly solve the information asymmetry between parents who cannot observe quality and ECEC workers who can, enabling the centres with high quality ratings to charge more for their services and thereby improve the wages of their workers.

Quality of ECEC services would likely be improved by an increase in the proportion of ECE trained workers. Funding that encourages ECE trained workers to enter and/or stay in the ECEC workforce could provide significant benefits. Examples of this type of program include loan forgiveness and educational wage supplements.

Another way to improve quality standards in child care centres is to provide centres with funding for health and safety renovations. This is done by at least one province/territory currently. This would help allay fears among parents about health hazards at the centres and improve the perception of quality at these centres.

The general evidence suggests that educational exemptions are harming the quality of ECEC services. Lower quality services will have a negative impact on children using ECEC. Since new ECE graduates and existing ECE trained staff are motivated by non-monetary factors, this change will have a negative impact on working conditions and therefore will increase recruitment and retention problems.

The more educational exemptions are provided and untrained workers are employed in the sector, the greater the chance that ECEC services will be perceived as babysitting services and not early childhood education and care, which would

harm the reputation of the sector. For a service like early childhood education and care reputation is important because if parents perceive the quality of ECEC services are less, there would be a reduction in the demand for services which would push the demand for these services farther away from what is socially optimal. The perceived reduction in the quality of these services would also reduce what parents are willing to pay for these services and could make demand more price senstive. If the reputation of the sector is tarnished, there is likely to be a reduction in the number of people with ECE training who would be willing to work in the sector, which would make *workforce shortages* of ECE trained workers worse. Therefore policy makers should either limit exemptions or at least investigate the impact of granting licensing exemptions on the quality of ECEC services and parents' perceptions of quality.

Prior Learning Recognition

Many provinces/territories have implemented academic PLAR systems to recognize credits from other provinces/territories. Manitoba is one province that has introduced workplace PLAR and is attempting to incorporate new Canadians into the system. The combination of academic and workplace PLAR with foreign credential recognition could significantly broaden the available pool of new workers.

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APPENDIX I: RECRUITMENT AND RETENTION CHALLENGES AND STRATEGIES

Table A1.1
Centre characteristics
Quality of child care
Auspice
Unionization
Benefits/funding
Low wages
Lack of public funding
Centre budget devoted to wages (%)
Centre benefits that improve working conditions
Job satisfaction
Training/education/professional development
Quality of ECE graduates
HR capacity of employers/supervisors
Personal attitudes/aptitudes of workers
Incentives to pursue professional development
Barriers to accessing professional development
Child care specific education
Work experience
Working conditions
Lack of recognition/respect
Job security
Staff health, well-being and burnout
Supervisor health, well-being and burnout
Supportive, collegial relations among staff
Staff satisfaction with supervisor
Director perception of staff-director relations
Working hours length
Extended hours at centre
Career flexibility
Labour mobility
Plans of ECE graduates
Opportunities in related child care jobs
Lack of opportunities in child care
Length of time at centre
Centre turnover rate
% of staff resigning from previous child care job
Director intends to leave centre within a year

Diversity
Increased job pressure with more diverse children
Workforce becoming increasingly diverse
Aboriginal cultural specific service
Table A1.2
Cooperation/collaboration
Partner with univ's/colleges, gov't and researchers
Greater collaboration with kindergarten
Help supervisors to share knowledge
Expand unions, prof. org's and advocacy groups
Conduct public awareness campaign
Conduct promotion campaign
Prevent diversion of strong ECEC candidates
Benefits/funding
Increased funding
Increased pay/benefits
Increased financial support for ECEC education
Create a universal child care program
Education modifications
Univ's/colleges develop ECEC specific HR curricula
Develop ECEC leadership specific programs
Develop alternate education modes/formats
Incl. stress management component in education
Make educational credits transferable
Hire more ECE teachers with a PhD
Training/education
Increase formal training opportunities
Enhance management training
Require additional training/educ. for managers
Higher well-funded training requirements
Workplace practices
Improve work environment and job satisfaction
Implement a culture of professionalism
Create mentoring opportunities
Mentoring for newly educated ECEs
Mentoring worker requiring extra support
Create horizontal promotion opportunities
Create job clarity in manuals and appraisals
Give workers more decision making opportunities

Diversity

Tools/information
Develop retention strategies for each target group
Develop research agenda for current situation
Policy maker should develop ECEC specific policies
Develop and dissemination HR specific tools
Provide managers/employers with retention tools
Create professional profile by child care occ. type

APPENDIX II: C4SE STUDY 1 - TORONTO DATA

The Toronto child care provider data is administrative data based on a sample of 644 child care providers. Due to missing data, and an elimination of child care centres that appear to have been started in the past five years, the sample was narrowed down to 429 providers. Unfortunately, there was missing data for all municipal centres, so the municipal centre observations had to be dropped. The Toronto dataset is very rich and contains good data on wages and hours by child care position, length of employment, quality of care and allocations of budget.

The focus of the analysis is on employee retention because there are no recruitment measures in the Toronto dataset. A variety of estimates were performed, some of which are presented below. Regressions were performed for all early childhood educators and assistants combined, as well as for ECEs and ECEAs separately. The dependent variable in each of these regressions was average tenure by child care centre. The tenure measure is defined as the average number of years the worker has been employed in the centre through 2007. Using tenure as the retention measure has the advantage that it can follow individuals' employment over many years (unlike turnover which is for one year). One disadvantage of using tenure as the measure of retention is of survivor bias. The attributes of those who remain in the centres might be quite different than those who left. This analysis does not illuminate why people leave ECEC employment, but could illustrate the common attributes of those who stayed. Average years of tenure also has the disadvantage that tenure rates will be shorter, all other things taken into account, for newly established centres than for more established centres. In order to reduce the potential bias from this effect the centres for which there were no employee tenure of greater than five years were eliminated. Five years was selected as the cut off point because the median tenure is four years for all the remaining centres. This may have the effect of eliminating centres that have a high degree of turnover and for which no employee has remained for the previous five years. There is no tenure data for supervisors, so unfortunately these employees were not examined.

A variety of variables were tried in the regression analysis in order to try to quantitatively identify the impact of various factors that were discussed in the literature as being important to retention. During the course of the analysis a number of variables were dropped or combined because they were found to be statistically insignificant. All of the variables that were tried were directly or indirectly identified by either the literature review in the previous sections and/or by key informants as being important to recruitment and retention. The basic model was developed using the combined data for ECEs and ECE Assistants. Once those factors that were significant were identified, the same equation was used for ECEs and ECEAs separately. This analysis showed that there seems to be a different dynamic at work for Assistants versus ECEs as the coefficients and measures of statistical significance varied between these groups using the same equation. This different dynamic was explored for ECEs and ECEAs by examining different additional terms, or by subdividing some terms, for example examining the impact of wages for centres that pay above average wages.

The resulting models and data used for our analysis are listed below.

 $T_{1} = \alpha + \beta_{1}N + \beta_{2}PA + \beta_{3}MF + \beta_{4}SP + \beta_{5}SUBSP + \beta_{6}VACSP + \beta_{7}Q + \beta_{8}S\% + \beta_{9}B\% + \beta_{10}T\% + \beta_{11}DO + \beta_{12}DAEHW + \beta_{13}AEW + \beta_{14}SH + \beta_{15}CAS\% + \beta_{16}Adm\% + \beta_{17}MF^{*}ADM\% + \epsilon_{1}$

 $T_{2} = \alpha + \beta_{1}N + \beta_{2}PA + \beta_{3}MF + \beta_{4}SP + \beta_{5}SUBSP + \beta_{6}VACSP + \beta_{7}Q + \beta_{8}S\% + \beta_{9}B\% + \beta_{10}T\% + \beta_{11}DO + \beta_{12}DAEHW + \beta_{13}AW + \beta_{14}SH + \beta_{15}CAS\% + \beta_{16}ADM\% + \beta_{17}STDH + \beta_{18}AW^{*}Lowage + \beta_{19}SW/AW + \varepsilon_{2}$

 $T_{3} = \alpha + \beta_{1}N + \beta_{2}PA + \beta_{3}MF + \beta_{4}SP + \beta_{5}SUBSP + \beta_{6}VACSP + \beta_{7}Q + \beta_{8}S\% + \beta_{9}B\% + \beta_{10}T\% + \beta_{11}DO + \beta_{12}DAHW + \beta_{13}EW + \beta_{14}SH + \beta_{15}CAS\% + \beta_{16}Adm\% + \beta_{17}MF^{*}ADM\% + \beta_{18}EW^{*}(1-Lowage + \beta_{19}SW/EW + \epsilon_{3})$

Where,	
Т	Years of tenure: (1) ECE&As, (2) ECEs, (3) ECEAs
α	Intercept
Ν	Auspice Dummy, N=1 if non-profit, N=0 if commercial
PA	Priority Area Dummy
MF	Multiple Locations Dummy
SP	Number of Child Care Spaces
SUBSP	% of Spaces Subsidized
VACSP	% of Spaces Vacancies
Q	Quality of Child Care Provider
S%	Salaries to Total Costs ratio
B%	Benefits to Salaries ratio
Τ%	Training to Total Costs ratio
DO	Days in Operation
DAHW	Average Daily Hours of ECE Assistants
DAEHW	Average Daily Hours of ECEs & Assistants
DEHW	Average Daily Hours of ECEs
AW	Wage of ECE Assistants
AEW	Wage of ECEs & Assistants
EW	Wage of ECEs
SW	Wage of Supervisors
ADM%	Administration Costs to Total Costs ratio
SH	Supervisor Hours ('000s)
CAS%	Cost of Casual Workers to Salaries ratio
MF*ADM%	Administration Costs to Total costs ratio multiplied by multiple location dummy
STDH	Standard deviation in hours worked in centre
SHL	Salaries: ratio of highest wage to lowest wage
Lowage	Dummy for Centres that have below average wages (1 for low wage, 0 for high wage)
3	Error term

Auspice was included in the regressions based on the literature that indicates that non-profit employers have higher wages, better working conditions and lower turnover than commercial centres. The regression results generally support the proposition that non-profit centres have a better record than commercial centres in retaining staff. Depending on the equation estimated, however, sometimes the dummy variable that identified non-profit centres was statistically insignificant. This occurred in the ECEA and ECE equations when additional terms were added to the regression. In particular this was the case when a variable that identified grants per worker hour was included in any of the regressions. This may be because there is a correlation of 0.6 between grants per worker and non-profit status. Regardless, the equation seems to be able to support the inclusion of only one of these variables in a significant manner. The analysis contained in this section includes the dummy for auspice.

The regression analysis generally found that the dummy variable that identified priority areas was statistically significant for the combined ECE&A equation, but this dummy variable was not significant for the individual ECE and ECEA equations. It is not clear why centres in the identified priority areas should have a higher average tenure than other centres. Perhaps extra resources are being used at these centres that are not captured in the variables included in the regression. It is also possible that workers who are in the priority areas perceive a greater recognition or receive greater non-monetary benefits for their work. In separate regressions not shown, it was also found that centres located in "high needs" areas did not experience lower tenure than centres in other areas that was statistically significant.

The original regression contained four different types of child care spaces—infant, toddler, preschool and after school care—but these were condensed into total spaces. Total spaces were included in the analysis in order represent the size of the centre since the literature indicates that people are less satisfied working for larger companies. Although given that the largest centre in the dataset used for the estimations is under 40 ECEs and assistants this hardly qualifies as "large" in the normal sense of the word. Indeed all the centres in the dataset would be classified as a small company under most classifications of company sizes. If all centres are small, then the larger centres might offer a greater degree of vertical and horizontal job mobility, which could improve flexibility. The regression results for all three equations show that larger centres have a higher average retention rate than smaller centres. This suggests that the latter interpretation is likely more correct in describing the child care sector, and therefore, child care centres generally have not exceeded the size at which point dissatisfaction escalates.

An important caveat with the above conclusion appears when examining the results for the dummy variable that illustrates the impact of multi-locations on tenure. It is found for the combined results and for ECEs that there is a shorter tenure on average than for centres with multiple locations that are of the same size and attributes of other centres in general. This suggests that perhaps human resource management is not as well developed to take care of the problems associated with multiple sites such as information sharing or there is a reduction in cross utilization of resources and cross training that would occur in single site centres. This issue will also be touch on later in this analysis.

Generally, it was found that a higher percentage of subsidized spaces increased the tenure of ECE&A workers on average. This could be the result of the funding of these spaces being perceived to be more secure than parent fees and therefore these spaces increase job security. It is also possible that more subsidizes spaces reflects the labour donation hypothesis at work, that is ECEC workers perceive a greater social good is providing care to children from families of reduced means. Notably, subsidized spaces appear to have a greater impact on ECEAs than ECEs.

A rise in vacant spaces should increase job insecurity because if enough spaces are vacant then fewer ECE&As would be required. More vacant spaces could also reflect poor quality of the ECEC services. Higher vacancy rates were found to be related to lower average tenure for the whole ECE&A group, but this term is statistically insignificant when they were divided into assistants and educators.

According to Beach et al. (2004) quality in child care centres affects recruitment. Therefore it is possible that quality also affects retention. In order to test this hypothesis, the quality measures that the city of Toronto records were averaged for each child care centre. It was found that for the whole ECEC&A group that centres providing higher quality services also had higher average retention. Notably, this effect is even more pronounced for ECEs than for Assistants, with ECEs exhibiting a higher coefficient on this term as well as a higher degree of statistical significance than for the ECEAs.

When proportionately more resources are devoted to labour compensation in general, it is found that there is higher average retention level for ECE&As. Higher overall salaries as a share of total costs is positively related to average tenure for ECE&As. Similarly, as the ratio of benefits to salaries rises, the average tenure for ECE&As rises. This could reflect a management philosophy, which could reflect better human resource management or working conditions. There is a positive correlation with auspice of 0.32, so this concept could be picking up some of that effect as well. Notably, these effects are found only in ECEs and not ECEAs.

Surprisingly, the fraction of revenue for training negatively affects tenure. The most likely explanation for this is that new workers require more training than experienced workers. Therefore, if there is turnover there will be a reduction in the average tenure in a centre and if the new employees is trained then training expenses goes up. Furthermore, new employees typically have a higher turnover rate than more established employees, so there could be an additional downward adjustment in the average tenure.

The literature suggests that burnout because of the stress caused by working too many hours is an important indicator of departure. However, in the initial regression results we found that contrary to the literature job tenure increased with the average number of hours worked in a child care centre. These results are similar to what Rolfe (2005) found for recruitment in the U.K. Perhaps, this is because good providers have more full-time workers or because stress and burnout are more complex processes

than what a simple measure of hours worked adequately captures. In order to understand this phenomena better, the total hours worked was subdivided into days of operation and average daily hours. This division showed that both of these contributors to average annual hours worked were associated with longer tenure for the combined ECEs and Assistants group. For assistants, the average daily hours worked was positively associated with tenure, but the number of days in operation was not statistically significant. In contrast, for ECEs the number of days in operation was positively associated with tenure, but average daily hours worked was not statistically significant. These results suggest that different attributes of hours worked may be important for ECEs versus ECEAs.

Higher wages for ECE&As are associated with higher average tenure at child care centres. This result is consistent with standard economics, which suggests that workers who are paid more will tend to remain on their jobs. Surprisingly, wages were not statistically significant for ECEs or ECEAs on their own, which is perplexing. There appears to be a divide in the reaction of ECEs and assistants centres that have higher versus lower than average wages. Higher wages for ECEs in centres with higher than average wages tends to increase the average tenure. In contrast, higher wages for assistants tends to rise with tenure for those employed in centres that have below average wages.

The literature on job satisfaction indicates that a wage difference that is thought to be unfair negatively impacts job satisfaction. This suggests that the greater the degree of difference between the lowest paid and the highest paid workers, the greater the potential degree of dissatisfaction. In contrast, if the spread between the highest paid and the lower paid workers is thought to be appropriate, then higher wages in more senior positions could act as an incentive to continue working in order to achieve the higher pay level later in their career. For ECEAs and ECEs these propositions were examined by taking the a ratio between the supervisor's hourly wage and the wage earned ECEAs and ECEs in those equations respectively. The results indicate that a higher wage difference is associated with higher average tenure. So this suggests that the higher wages paid to supervisors can be thought to be an incentive to workers to stay.

More hours worked daily by the supervisor negatively affects tenure among ECE&As. Notably, this effect is not statistically significant for ECEs or ECEAs alone. It is not clear why tenure would be affected for the combined group, but not for the underlying groups.

A higher share of the budget devoted to casual workers is related to a lower average tenure. This effect is evident for the combined ECE&A group, and for ECEs, but not for ECEAs. This result may reflect poor working conditions, and therefore a higher degree of workers booking off time sick and ultimately leaving the child care centre. The relationship, however, may be related to a situation of reverse causality whereby a person leaves and needs to be replaced temporarily until a permanent replacement can be found. Since ECEs are more difficult to replace than ECEAs because of their higher level of training, the significant association between the two could be the consequence.

A larger share of the budget devoted to administrative costs is associated with a lower average tenure for the combined group or for ECEs and ECEAs alone. This effect is contrary to what was expected, since better human resource management practices are expected to be associated with longer tenured employees. This relationship could be another situation of reverse causality whereby a higher departure rate causes more money to be devoted to administration in order to replace the workers who have left. Notably, for the combined group and ECEs a higher portion of the budget associated with administration in multi-location centres is associated with higher tenure. This suggests that administration might be even more important for mult-location facilities than for child care centres on average.

Independent Variables	Coefficient	SE	T-value	P-value
Intercept	-6.93	3.08	-2.25	0.025
Auspice	0.59	0.34	1.76	0.079
Priority area	0.56	0.29	1.96	0.051
Multiple locations	-2.6	0.47	-5.68	0.000
Spaces	0.012	0.00	2.95	0.003
%subsidized	0.859	0.40	2.15	0.032
%vacancies	-3.28	1.11	-2.95	0.003
Quality	0.67	0.36	1.87	0.062
%salaries	3.875	1.41	2.76	0.006
%benefits	5.520	3.01	1.83	0.067
%training	-81.01	30.27	-2.68	0.008
Days in operation	0.02	0.01	2.56	0.011
Daily Hours of ECE&As	0.34	0.13	2.71	0.007
Wage	0.112	0.05	2.30	0.022
Supervisor average daily hours	-0.20	0.07	-2.98	0.003
%casual workers	-3.8	1.48	-2.59	0.010
%admin costs	-12.16	3.80	-3.20	0.002
%admin costs for multiple locations	13.500	4.80	2.81	0.005
R-squared	0.306229	F-statist	с	10.67146
Adjusted R-squared	0.277533	S.E. of reg	ression	2.138863

Independent Variables	Coefficient	SE	T-value	P-value
Intercept	-67.6	23.64	-2.86	0.005
Auspice	3.55	2.73	1.30	0.193
Priority area	4.09	2.34	1.75	0.081
Multiple locations	-0.8	2.01	-0.40	0.688
Spaces	0.39	0.04	11.20	0.000
%subsidized	12.23	3.24	3.77	0.000
%vacancies	-4.19	8.90	-0.47	0.637
Quality	6.38	2.93	2.18	0.030
%salaries	-3.41	11.26	-0.30	0.762
%benefits	-34.2	23.90	-1.43	0.153
%training	-1114.9	242.20	-4.60	0.000
Days in operation	0.05	0.07	0.80	0.422
Daily Hours of ECEAs	3.29	0.68	4.88	0.000
Wage	0.339	0.40	0.85	0.396
Supervisor average daily hours	-0.24	0.51	-0.48	0.635
%casual workers	-0.8	11.85	-0.07	0.945
%admin costs	-67.31	24.55	-2.74	0.006
Standard deviation in hours worked	0.01	0.01	3.35	0.001
Wages in low wage centres	0.53	0.19	2.86	0.004
Supervisors to ECEA wage ratio	2.4800	1.30	1.90	0.058
R-squared	0.479524	F-statis	tic	19.8325
Adjusted R-squared	0.455345	S.E. of reg	ression	17.0716

Independent Variables	Coefficient	SE	T-value	P-value
Intercept	-131.	41.34	-3.19	0.002
Auspice	5.77	4.25	1.36	0.175
Priority area	3.51	3.66	0.96	0.337
Multiple locations	-18.	5.91	-3.18	0.002
Spaces	0.56	0.06	10.04	0.000
%subsidized	5.098	5.09	1.00	0.317
%vacancies	-16.7	14.06	-1.19	0.234
Quality	12.4	4.56	2.74	0.006
%salaries	34.77	17.84	1.95	0.052
%benefits	143.5	37.08	3.87	0.000
%training	-991.24	379.51	-2.61	0.009
Days in operation	0.25	0.11	2.28	0.023
Daily Hours of ECEs	0.91	1.65	0.55	0.581
Wage	-0.41	0.88	-0.47	0.635
Supervisor average daily hours	-0.98	0.85	-1.15	0.249
%causual workers	-60.	18.37	-3.32	0.001
%admin costs	-178.5	47.49	-3.76	0.000
%admin costs for multiple locations	103.60	60.25	1.72	0.086
Wages in high wage centres	0.4700	0.25	1.89	0.059
Supervisor to ECE wage	7.5401	4.43	1.70	0.090
R-squared	0.430596	F-statistic		16.2787
Adjusted R-squared	0.404145	S.E. of regre	ssion	26.69947

APPENDIX III: C₄SE STUDY 2 - SUPPORTING EMPLOYERS' DATA

The supporting employers' child care provider data was obtained from a survey conducted in 2008. The sample size is 987 and includes child care providers from all provinces and territories. Due to missing data the sample was narrowed to 912 providers. Table A3.1 shows the distribution of these providers by province and territory. However, even though there are data for each jurisdiction, there are only a handful of surveys for each territory, therefore the territorial results should be interpreted with caution.

The supporting employers' dataset contains variables that measure recruitment and retention and detailed questions examining recruitment and retention challenges and strategies. The retention related variable is turnover which is an objective measure that is split into qualified and unqualified turnover. However, due to the fact that the total number of ECE and ECEA staff for each centre have been lumped together, it is not possible to calculate turnover rates for ECEs and ECEAs separately. The recruitment measure is each child care provider's subjective opinion about their recruitment difficulty. It is divided up into ECE, ECEA, supervisor/director and other staff. However the recruitment measure is subjective, which makes comparing recruitment difficulties across centres less precise.

There is a gold mine of questions on recruitment and retention challenges and strategies: Reasons for qualified turnover, reasons for unqualified turnover, screening methods used and which training programs would be most beneficial. One qualified turnover reason that did not get any affirmative answers and had to be dropped was: "Job did not meet their expectations". It was also discovered during discussion with CCHRS staff that the question concerning the employment of an HR person was misinterpreted and therefore the answers to this question were invalid. This information was also dropped from the regressions.

Table A3.1 Distribution Of Providers Surveyed By Location							
Province/Territory	Percent of Total Surveys						
Newfoundland	1.3%						
Prince Edward Island	1.4%						
Nova Scotia	4.9%						
New Brunswick	2.3%						
Quebec	12.2%						
Ontario	31.6%						
Manitoba	7.7%						
Saskatchewan	3.3%						
Alberta	19.9%						
British Columbia	14.4%						
Yukon Territory	0.2%						
Northwest Territories	0.3%						
Nunavut	0.4%						

The supporting employers' dataset has more information on recruitment and retention challenges and strategies than the Toronto dataset, but less information on centre and staff variables that might affect recruitment and retention. Most troubling, there are no wage, budget or quality data. These variables were identified in the literature review as having an impact on recruitment and retention, so leaving them out decreases the explanatory power of the regressions. On the positive side this means that all the included variables can be justified either from the literature review or from the key informant interviews. The following equation will be used for our analysis:

$$\begin{split} Y_i &= \alpha + \beta_1 NL + \beta_2 PE + \beta_3 NS + \beta_4 NB + \beta_5 QC + \beta_6 MB + \beta_7 SK + \beta_8 AB + \beta_9 BC + \beta_{10} YT + \beta_{11} NT + \beta_{12} NU + \beta_{13} LOC + \beta_{14} S02 + \beta_{15} S35 + \beta_{16} S612 + \beta_{17} N + \gamma_j Q_j + \epsilon_i \end{split}$$

Where,								
$Y_i =$	Qualified turnover rate: (1) ECE&As, (2) Supervisors							
	Unqualified turnover rate: (3) ECE&As, (4) Supervisors							
	Recruitment difficulties: (5) ECEs, (6) ECEAs, (7) Supervisors, (8) All Staff							
NL, PE, NS,=	= Provincial dummy variables (Ontario is the base)							
S02 =	Number of spaces for zero to two year olds ('00s)							
S35 =	Number of spaces for three to five year olds ('00s)							
S612 =	Number of spaces for six to 12 year olds ('00s)							
N =	Auspice Dummy (0 for commercial, 1 for non-profit)							
Qj =	Questions for: (1) Reasons for qualified turnover, (2) Reasons for unqualified turnover,							
	(3) which training programs would be the most beneficial							
εi =	Error term							

Provincial averages for the eight variables used as dependent variables in the regression analysis are listed in Table A3.2. Qualified turnover accounts for a larger percentage of overall turnover than unqualified turnover in all provinces/territories except Nunavut. Qualified turnover among ECEs, ECEAs and supervisors is lower in Quebec and Ontario than in the western provinces as is unqualified turnover of ECE&As. Unqualified turnover for ECE&As is generally lower than qualified turnover. Unqualified supervisor turnover rates are low overall. Recruitment problems are most severe for ECEs and least severe for supervisors. Recruitment problems are lowest in New Brunswick and are higher in the Western province than in Quebec and Ontario. Turnover rates and recruitment problems are generally highly variable in the Atlantic Provinces and territories reflecting the relatively sparse number of surveys conducted in these areas.

Table A3.2													
Rates	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	YT	NT	NU
Qualified Turnover ECE&As	34%	142%	25%	22%	11%	14%	30%	30%	36%	34%	20%	67%	14%
Qualified Turnover Superv's	44%	35%	8%	0%	11%	6%	18%	15%	18%	25%	100%	0%	13%
Unqualified Turnover ECE&As	4%	108%	5%	9%	3%	3%	9%	5%	9%	6%	0%	0%	55%
Unqualified Turnover Superv's	4%	0%	0%	0%	5%	2%	2%	4%	5%	5%	0%	0%	75%
Recruitment Difficulties ECEs	50%	46%	53%	29%	43%	36%	55%	43%	52%	41%	50%	33%	50%
Recruitment Difficulties ECEAs	17%	15%	13%	5%	5%	10%	37%	20%	30%	27%	0%	33%	50%
Recruitment Difficulties Superv's	33%	0%	0%	0%	5%	3%	10%	0%	16%	8%	0%	0%	25%
Recruitment Difficulties Overall	58%	77%	60%	29%	51%	47%	62%	57%	64%	64%	50%	67%	50%

The regression results are summarized in Tables A3.3-A3.7. The results can be divided into three groups: Provinces/territories, provider characteristics and questions concerning recruitment, screening, training programs, qualified turnover and unqualified turnover. Each group will be gone over in turn. The regression results are set up so that Ontario is the baseline situation, so the situation in the other provinces and territories are compared with Ontario.

Atlantic Canada and Quebec have slightly more pronounced recruitment problems and higher turnover than Ontario. Child care providers in Newfoundland and Labrador have a harder time recruiting supervisors and a harder time retaining qualified supervisors. PEI has overall recruitment problems that are higher than for Ontario, but these recruitment problems are not significant for ECE&As and supervisors independently. PEI has the highest turnover of all provinces and territories among qualified ECE&As and

supervisors. PEI also has higher turnover rates for unqualified ECE&As. Nova Scotia has recruitment and retention challenges that are similar to Ontario, except that it is slightly harder to recruit ECEs. New Brunswick is similar to Ontario. Quebec is similar to Ontario.

The western provinces have more recruiting problems and higher turnover rates than Ontario. Manitoba's providers have higher recruitment problems for all groups: ECEs, ECEAs and supervisors. Surprisingly, the higher recruitment problems are not reflected in higher turnover rates. Saskatchewan is similar to Ontario, although turnover for qualified ECE&As is higher. Alberta has the highest recruitment problems of all provinces/territories, and suffers from high turnover among qualified ECE&As and supervisors. British Columbia has higher recruitment difficulties with ECEAs and supervisors, but not with ECEs, and has higher turnover rates among qualified supervisors than Ontario. The territories have somewhat higher recruitment and retention problems than Ontario. Providers in Yukon Territory have somewhat higher problems recruiting qualified supervisors. Northwest Territories have similar problems to Ontario. Nunavut has more recruitment problems for ECEAs and suffers from a particularly high turnover rates among unqualified ECE&As and supervisors.

The provider characteristics variables do not have very significant effects on recruitment and retention. This could be due to a lack of variables for wage, budget allocation and quality. The number of locations the caregiver operates over has no effect on recruitment and retention. The number of spaces for zero to two year-olds increases recruitment difficulties for ECE&As, but there is no effect on retention. This could be because of self selection effects, whereby those who do not want to care for the youngest age group do not go into centres with a large number of these spaces, and therefore they do not later quit. The number of three to five year-olds has a somewhat negative effect on recruitment difficulties of ECEs. The number of six to twelve year-olds has a positive effect on overall recruitment difficulties and a somewhat positive effect on recruitment difficulties of supervisors. As expected, non-profit status decreases turnover of unqualified ECE&As and somewhat decreases qualified ECE&A turnover. However, non-profit status has no effect on recruitment challenges.

Many of the qualified and unqualified turnover reasons are found to be significant for retention. Not all of the reasons will be straightforward to address. Strategies to limit qualified turnover among ECE&As are directly related to more funding, as two reasons mentioned for qualified turnover were: wanting better pay and lack of support/resources to do job, are associated with increased turnover rates. Another reason for qualified turnover among ECE&As is more difficult to deal with: family care issues.

Strategies to limit qualified turnover among supervisors are also directly related to funding: wanting better pay, wanting better benefits and lack of support/resources to do job. A challenge not directly related to funding, health issues, also needs to be addressed. Three qualified turnover reasons more difficult to deal with are: Were of retirement age, maternity leave/parental leave and changed occupation — no longer working in child care. Surprisingly, the reason, wanting shorter hours, is associated with lower qualified turnover rates, which means that getting extra hours work may be a positive rather than negative experience or is not a significant issue for those currently employed.

Pretty much all of the unqualified turnover reasons resulted in significantly higher or lower turnover rates for ECE&As. Improving interpersonal skills should be the main target of retention strategies in this area as three reasons for high unqualified turnover are: lack of communication skills, lack of management skills and lack of pedagogical skills/ability in program. Two other reasons, which would be harder to deal with, are: Insubordination and chronic absenteeism/attendance issues.

Surprisingly, two reasons for unqualified turnover are associated with lower rates of unqualified turnover: lack of leadership skills and confidentiality issues. These results are perplexing. Reasons for unqualified turnover for supervisors mostly have to do with leadership skills: Failure to follow policies, lack of pedagogical skills/abilities in program and lack of leadership skills. Confidentiality issues increase turnover unlike as was the case for ECE&As and minimizing this issue will be difficult. Surprisingly, insubordination is related to lower turnover rates. Could it be that the work environment is improved when these workers are fired? Screening is shown to have neither a positive nor a negative effect on recruitment and retention. The only significant effect of screening on recruitment and retention is that employers, who obtain a copy of diploma or degree, have higher recruitment difficulties with ECE&As. Perhaps this reflects higher recruitment standards among these employers.

If we are interested in helping the providers most affected by recruitment and retention difficulties, we should focus on the training opportunities mentioned by these providers. The most important recruitment and retention training opportunity is: How to find and attract suitable staff. Providers who mentioned a preference for this opportunity had higher overall recruitment difficulties and higher recruitment difficulties for ECEs. Furthermore, these providers had higher qualified turnover rates among ECE&As.

The most important training opportunity for recruitment, in particular, was: How to prepare employees for future roles within the organization. These were associated with higher recruitment difficulties among supervisors. The next most important training opportunities for recruitment, in particular, which are associated with higher recruitment difficulties among ECEs are: job evaluation and compensation planning and understanding the human resources roles and responsibilities of the employer. The least important training opportunities for recruitment, in particular, are: staff training, leadership, mentoring and coaching skills and employment standards and human right legislation. These three training opportunities were mentioned by centres with lower recruitment difficulties. For similar reasons, the least important training opportunity for qualified turnover particularly is written and human resource communication skills. The follow-up of how to find and attract suitable staff is how to select and hire suitable staff. This affects unqualified turnover of supervisors and should be the most important unqualified turnover training opportunity.

Table A3.3

	Qualified	Turnover	Unqualifi	ed Turnover	Recruitme	Recruitment				
Basic model	Supv.	Staff	Supv.	Staff	All	ECEs	ECEAs	Supv.		
Intercept	0.08**	0.34***	0.01	0.11***	-0.27***	-0.50***	-1.35***	-1.78***		
Newfoundland	0.56***	0.04	0.10	-0.03***	0.35	0.40	0.28	1.35***		
Prince Edward Island	0.28**	0.84***	-0.02	0.69***	0.92**	0.35	0.32	-6.40***		
Nova Scotia	-0.04**	0.02	-0.02	-0.00***	0.34	0.43**	0.14	-6.49		
New Brunswick	-0.09	0.07	-0.02	0.00	-0.43	-0.15**	-0.35	-6.51		
Quebec	-0.02	-0.12	-0.00	0.00	0.03	0.08	-0.36	0.30		
Manitoba	0.02	0.10	-0.01	0.07*	0.38**	0.48***	0.99***	0.63**		
Saskatchewan	0.04	0.26*	0.00	0.01	0.16	0.03	0.37	-6.33**		
Alberta	0.12***	0.18***	0.02	0.04	0.46***	0.42***	0.75***	0.79***		
British Columbia	0.14***	0.05	0.02	0.02	0.53***	0.20	0.74***	0.48**		
Yukon Territory	0.87*	-0.16	-0.03	-0.06	0.14	0.37	-6.56***	-6.39**		
Northwest Territories	-0.10*	0.34	-0.03	-0.02	0.58	-0.04	0.92	-6.22		
Nunavut	0.05	-0.17	0.36***	0.58***	0.09	0.34	1.33**	1.27*		
Number of locations	-0.00	0.00	0.00	-0.00***	-0.00	-0.00	-0.00**	0.00		
0-2 year-old spaces	0.00	-0.00	0.00	-0.00	0.01***	0.01***	0.00***	0.00		
3-5 year-old spaces	-0.00	-0.00	-0.00	-0.00	-0.00***	-0.00***	-0.00***	-0.00		
6-12 year-old spaces	0.00	0.00	0.00	0.00	0.00**	0.00	0.00	0.00**		
Non-profit facility	0.02	-0.09	0.01	-0.09	0.10	0.13	-0.01	-0.21**		

Table A3.4		
	Qualified Turr	nover
Qualified turnover model	Supervisors	Staff
Intercept	0.05	0.27***
Newfoundland	0.57***	-0.01***
Prince Edward Island	0.26**	0.82***
Nova Scotia	-0.03**	-0.01***
New Brunswick	-0.12	0.03
Quebec	-0.00	-0.07
Manitoba	0.00	0.07
Saskatchewan	0.03	0.25*
Alberta	0.11**	0.14**
British Columbia	0.14***	0.03
Yukon Territory	1.00**	-0.01
Northwest Territories	-0.13**	0.30
Nunavut	0.02	-0.23
Number of locations	-0.00	0.00
0-2 year-old spaces	0.00	-0.00
3-5 year-old spaces	-0.00	-0.00
6-12 year-old spaces	0.00	0.00
Non-profit facility	0.02	-0.10
Qualified turnover questions		
Wanting better pay	0.40***	0.36***
Wanting better benefits	0.58***	0.07
Wanting shorter hours	-0.40***	-0.06
Job did meet their expectations		
Health issues	0.18**	0.04
Changed occupation - no longer in child care	0.40***	0.11**
Moved to education sector	0.07	0.12*
Lack of support or resources to do job	0.85***	0.35***
Maternity leave/parental leave	0.17***	0.00
Family care issues	-0.15***	0.45***
Were of retirement age	0.21***	0.05

Table A3.5									
	Qualified Turnover		Unqualified	l Turnover	Recruitment				
Screening model	Supv.	Staff	Supv.	Staff	All	ECEs	ECEAs	Supv.	
Intercept	0.12	0.28**	0.03	0.13**	-0.44***	-0.76***	-1.58***	-1.97***	
Newfoundland	0.58***	0.09	0.09	-0.00**	0.41	0.37	0.34	1.31***	
Prince Edward Island	0.27**	0.80***	-0.03	0.70***	0.92**	0.35	0.45	-6.64***	
Nova Scotia	-0.02**	0.01	-0.02	-0.00***	0.36*	0.47**	0.15	-6.72	
New Brunswick	-0.08	0.08	-0.02	0.01	-0.37*	-0.11**	-0.26	-6.65	
Quebec	-0.03	-0.14	-0.00	-0.00	0.08	0.15	-0.37	0.34	
Manitoba	0.04	0.09	-0.02	0.08*	0.38**	0.48***	1.07***	0.58**	
Saskatchewan	0.05	0.26*	0.00	0.02	0.20	0.02	0.40	-6.49**	
Alberta	0.12**	0.18***	0.01	0.04	0.51***	0.47***	0.88***	0.77***	
British Columbia	0.15***	0.06	0.01	0.03	0.56***	0.21	0.82***	0.46**	
Yukon Territory	0.88*	-0.19	-0.03	-0.06	0.14	0.35	-6.64***	-6.55**	
Northwest Territories	-0.07*	0.29	-0.02	-0.04	0.66	0.05	1.09	-6.22	
Nunavut	0.03	-0.22	0.35***	0.58***	0.17	0.46	1.51**	1.34*	
Number of locations	-0.00	0.00	0.00	-0.00***	-0.00	-0.00	-0.00**	0.00	
0-2 year-old spaces	0.00	0.00	0.00	-0.00	0.01***	0.01***	0.00***	0.00	
3-5 year-old spaces	-0.00	-0.00	-0.00	0.00	-0.00***	-0.00***	-0.00***	-0.00	
6-12 year-old spaces	0.00	0.00	0.00	0.00	0.00**	0.00	0.00	0.00**	
Non-profit facility	0.01	-0.11	0.01	-0.10	0.12	0.13	-0.02	-0.26**	
Screening questions									
Review application/resume	-0.12	-0.10**	-0.02	-0.01***	-0.03	-0.27	-0.08	0.40	
Criminal record check	0.04	0.03	0.00	0.06	-0.23	-0.10	-0.22	-0.25	
Conduct interviews	0.10	0.20*	0.01	-0.02	0.02	0.27	0.06	0.03	
Reading, writing and basic math skills testing	0.04	-0.10*	-0.01	0.06	0.30	0.20	0.31	0.22	
Problem solving skills testing	-0.00	-0.07	0.00	-0.01	-0.02	0.02	-0.17	0.14	
Check references	0.00	0.13	-0.00	0.01	0.31**	0.20	0.17	0.04	
Attitude testing	-0.00	0.01	0.02	-0.02	0.03	-0.07	-0.17	-0.24	
Aptitude testing	-0.10	-0.09	-0.03	0.05	-0.17	-0.19	0.16	-0.27	
Obtain copy of diploma or degree	-0.03	-0.13	-0.02	-0.05	0.09	0.14	0.44***	-0.02	
Obtain copy of certification by province	-0.03	-0.10**	0.00	-0.02*	0.00	0.05	-0.06***	0.13	
Conduct performance test/on- the-floor testing	-0.03	-0.00*	0.00	-0.00	0.00	0.05	-0.07	-0.11	

Table A3.6

Table A3.6									
	Qualified Turn- over		Unqualified Turn- over		Recruitment				
Training opportunities model	Supv,	Staff	Supv.	Staff	All	ECEs	ECEAs	Supv,	
Intercept	0.05	0.27***	0.00	0.07**	-0.88***	-0.98***	-1.66***	-2.05***	
Newfoundland	0.57***	-0.01***	0.10	-0.05**	0.05	0.17	0.14	1.42***	
Prince Edward Island	0.26**	0.82***	-0.03	0.68***	0.86**	0.24	0.27	-6.78***	
Nova Scotia	-0.03**	-0.01***	-0.02	-0.02***	0.23	0.36*	0.08	-7.07	
New Brunswick	-0.12	0.03	-0.03	-0.01	-0.62	-0.28*	-0.42	-7.07	
Quebec	-0.00	-0.07	-0.00	0.01	0.19	0.21	-0.20	0.32	
Manitoba	0.00	0.07	-0.02	0.06	0.23	0.36**	0.98***	0.69**	
Saskatchewan	0.03	0.25*	0.01	0.00	0.01	-0.07**	0.29	-6.87**	
Alberta	0.11**	0.14**	0.01	0.03	0.38***	0.35***	0.73***	0.81***	
British Columbia	0.14***	0.03	0.02	0.02	0.50***	0.17	0.74***	0.58**	
Yukon Territory	1.00**	-0.01	0.03	-0.04	0.38	0.62	-6.13***	-6.67**	
Northwest Territories	-0.13**	0.30	-0.04	-0.05	0.27	-0.32	0.84	-6.61	
Nunavut	0.02	-0.23	0.35***	0.53***	-0.21	0.06	1.18*	1.21*	
Number of locations	-0.00	0.00	0.00	-0.00***	-0.00	-0.00	-0.00*	0.00	
0-2 year-old spaces	0.00	-0.00	0.00	-0.00	0.01***	0.01***	0.00***	0.00	
3-5 year-old spaces	-0.00	-0.00	-0.00	0.00	-0.00***	-0.00***	0.00	-0.00	
6-12 year-old spaces	0.00	0.00	0.00	-0.00	0.00**	0.00	0.00	0.00	
Non-profit facility	0.02	-0.10	0.01	-0.09	0.05	0.09	-0.03	-0.19	
Training opportunities questions									
Development of human resources policies	0.00	0.02	-0.00	0.02	0.10	0.05	-0.01	0.16	
Creation of job descriptions	-0.00	-0.06	0.00	-0.02	-0.00	-0.01	-0.07	-0.32	
How to prepare employees for future roles	0.05	0.05	-0.00	0.03	0.11	0.16	0.27*	0.42**	
How to find and attract suitable staff	0.04	0.18**	-0.01	0.03	0.70***	0.47***	0.25	0.15	
How to select and hire suitable staff	0.07	-0.05**	0.05***	0.02	-0.04***	-0.04***	-0.02	0.18	
Staff orientation	0.00	0.07	0.02	0.04	-0.00	0.16	-0.10	-0.24	
Staff training	0.01	0.03	0.01	-0.02	-0.13	-0.15	0.04	0.08	
How to review staff performance	-0.00	-0.02	-0.01	-0.02	-0.16	-0.17	-0.27	-0.06	
Leadership, mentoring and coaching skills	0.00	0.02	0.00	-0.00	0.08	0.13	-0.32	-0.33	
Team building skills	-0.02	-0.08	-0.00	0.00	-0.07	-0.10	0.17	-0.02	
Conflict management skills	-0.03	0.05	0.00	-0.02	0.19	0.11	0.16	-0.02	

Job evaluation and compensation planning	0.04	0.07	-0.01	-0.00	0.21	0.17	0.41**	0.16
Employment standards and human rights legislation	-0.01	-0.01	-0.00	-0.00	-0.31	-0.21	-0.35**	0.04
Understanding the employer's human resources role	0.02	-0.03	-0.01	-0.00	0.20	0.16	0.41**	-0.08
Written and oral human resources communication skills	-0.11	-0.13	-0.02	0.01	-0.07	-0.10	-0.17**	-0.12
Use of human resources data tracking systems	0.00	0.00	0.01	0.00	0.15	0.13	0.00	0.29

APPENDIX IV: GOVERNMENT RECRUITMENT AND RETENTION INITIATIVES

Canada Wide

Recognition

Canadian Child Care Federation's Award for Excellence in Child Care Prime Minister's Award of Excellence in Child Care

Non-governmental Non-wage Financial Benefits

Multi-sector Pension Plan created by CUPE and SEIU.

Newfoundland and Labrador

Government Funding

Student loans forgiveness program

- \$5,000 if work for two years of work full-time or part-time work part-time employments requires extended period of service

Education supplement

Start-up grants

Summer institute bursary

- \$1,200 upgrade via distance education

Bursary

- \$5,000 for two years of return to service

Education

Distance delivery of ECE education

Online workshops

Enhanced Professional Development opportunities

Two day course for summer employment force

- Certification valid until Labour Day

Funding for College of the North Atlantic

Funding for entry level students to gain higher levels of certification

Recognition

Raise profile of profession by ECE association ECE week

Recruitment and Retention Initiatives

NL launched a multi-faceted strategy to support certified early childhood educators and to promote recruitment and retention. Initiatives include:

- Educational Supplement;
- Income Enhancement;
- Bursaries for ECE students;

- Child Care Workforce Industrial Adjustment Strategy;
- Funding for College of the North Atlantic; and
- Funding for entry level students to gain higher levels of certification

Government-led promotion/recruitment strategies.

- Funding from the Province of Newfoundland & Labrador provided a set of materials for high school students (DVD, pamphlet, brochures) was created.

Prince Edward Island

Government Funding

Direct funding of centres

- Maintenance grant is available to licensed full day centres
- Flat rate grant available to licensed nursery programs, family day care homes and school-age centres
- Infant incentive grant is available to licensed centres that provide spaces for infants
- Special needs grant is available to licensed centres who have a special needs children enrolled

Funding was provided to deliver professional development training and workshops for early childhood educators and directors.

For directors, the new quality enhancement grant will be providing funding specifically for director training.

A grant of up to \$2000 per staff person is now available (\$500 per course, up to maximum of four courses) to complete studies for those who need additional courses to meet certification requirements.

Education

Shift of child care into education system

Parents guide to ECEC

Funding provided to deliver professional development training and workshops for early childhood educators and directors.

For directors, the new quality enhancement grant will be providing funding specifically for director training.

A grant of up to \$2000 per staff person is now available (\$500 per course, up to maximum of four courses) to complete studies for those who need additional courses to meet certification requirements.

Equivalency Assessment

Prior Learning Assessment and Recognition (PLAR) Services

- Information Sessions on Prior Learning Assessment and Portfolio Development
- Portfolio Development workshops and programs
- PLAR Practitioner Training and Certification through Workplace Learning PEI

Recruitment and Retention Initiatives

Government-led promotion/recruitment strategies.

Other

Development of employer councils: Early Learning Operators of PEI (ELOPEI).

Early Learning Operators of PEI (ELOPEI) worked collectively to hire an human resource management specialist to develop tools for them to participate in collective bargaining process.
Nova Scotia

Government Funding

Child Care Subsidy Program

- Child care subsidy provides funding assistance with the cost of child care.

Child Care Expansion and Replacement Loan

- Financial assistance for new and existing facilities to expand capacity.

Child Care Operating Grant

- Available to licensed commercial and non-profit full-day child care centres.
- The Child Care Operating Grant is available to licensed full-day and part-day child care centres (commercial and non-profit). Funding amounts will be determined by the license (full-day or part-day) that the child care centre holds.
- Full-day licensed centres will receive \$8 per day per occupied space for infants; \$3 per day per occupied space for toddler and preschool children; and \$2 per day per occupied space for school age children.
- Part-day licensed centres will receive \$2 per day per occupied space for infant, toddler, preschool and school age children.

Energy Upgrade Grant

- One-time funding that will enable a facility to operate in a more energy efficient manner.

Outdoor Playspace Grant

- Grants to assist in the creation of natural, safe and stimulating outdoor play spaces.

Program Enhancement Grant (PEG)

- Grants to assist in the enhancement of safe and stimulating programs.

Repair and Renovation Loan

- Assistance for licensed commercial and non-profit child care centres.

Stabilization Grant

- The Child Care Stabilization Grant provides funding to full-day child care facilities to support the wages, benefits and training of child care staff. A minimum of 80% of the Stabilization Grant funding must be spent on salaries; while 20% may be spent on benefits and professional development for early childhood educators.

Supported Child Care Grant

- Provides funding for programs that deliver an inclusive early learning environment to support all children.

Accessible Training

- Both the ECE diploma and the Child & Youth Study degree programs are offered on-line via distance education and are accessible throughout the province.

Education

Continuing Education Program for Child Care Staff

- Program provides financial support for child care staff to continue their education. Program will also assist individuals interested in attaining an Early Childhood Education (ECE) credential part-time while working in licensed child care.
- Program provides reimbursement for continuing education courses to eligible staff working in licensed child care centres or family home child care (FHDC) agencies.
- Eligible staff can qualify for reimbursement totaling:
 - Up to a maximum of \$1000 per year if employed part time (70-120 hours per month)
 - Up to \$5000 per year if employed full-time (more than 120 hours per month)

- For courses that require staff members to attend classes during normal paid working hours, the centre or agency where the staff member is employed during that time, will continue to pay the staff member and will be eligible to receive funding based on a predetermined hourly rate for hours a substitute was required.
- A fixed travel allowance of \$250 per course is also available if an eligible staff person takes a course at a location that is further than 100km away from their home and there is no option for the course to be available at a closer facility.
- Staff members taking advantage of this reimbursement will be required to commit to work in a Nova Scotia licensed child care centre or FHDC agency for 750 or 1500 hours depending on the amount reimbursed and the timing of the reimbursement.

Early Childhood Education Assistance Program

- Program provides a debt reduction incentive to eligible Early Childhood Education graduates who successfully complete an ECE diploma/degree program from an approved ECE training program and received a student loan through the Nova Scotia Student Assistance program during the years of study in the ECE training program.
- For every year the applicant attended the approved post-secondary education and received a student loan for that year, the applicant will be eligible for a reimbursement of up to \$5000 per year for a maximum of four years.
- Participants in the program will be reimbursed when they complete 1500 hours in a licensed child care centre or a FHDC agency, within a 12 month period.

Early Childhood Education Training Initiative

- Provides annual funding to the ECE training institutions and associated programs to deliver additional training and support services to the early childhood development sector.

Equivalency Assessment

- Facilitates the retention of workers in the field by recognizing work experience and partial training in early child-hood education.

Prior Learning Assessment and Recognition (PLAR) Services

- Information sessions on PLAR provided through approved training institutions.
- Portfolio Development workshops and programs provided.
- Assessment and recognition is completed through the ECE training institutions.

Equivalency Assessment

Prior Learning Assessment and Recognition (PLAR)

Recruitment and Retention Initiatives

Strategy to build a plan to take steps to stabilize and enhance the child care workforce in order to deliver quality licensed child care services in Nova Scotia.

- Develop and implement strategies to encourage people to enter the child care workforce.
- Develop and implement strategies to retain current staff of the child care workforce.

The key strategy areas include:

- Promoting child care as a career choice.
- Organizational development.
- Developing leadership.
- Developing workforce skills and capacity.
- Reviewing accountabilities specific to funding aimed to increase salary and benefits, and
- Resourcing the workforce.

Recruitment and Retention Initiatives

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 - Organizational development.
 - Developing leadership.
 - Developing workforce skills and capacity.
 - Reviewing accountabilities specific to funding aimed to increase salary and benefits.
 - Resourcing the workforce.

Other

Child Care Connections Nova Scotia has developed a specific mentoring model that recognizes the different needs of students, new graduates and experienced staff.

New Brunswick

Government Funding

NB Day Care Assistance Program

- Program provides financial assistance to access child care for parents who are working, attending school or undergoing medical treatment. Assistance is paid directly to the child care provider. The parent will be responsible for paying any difference between the actual cost of child care and the subsidy amount approved.

Alternative child care program

- Parents who do not have access to a licensed day care facility may be eligible for assistance under the Alternative Child Care Program.

Early Learning and Child Care (ELCC) Trust Fund

- In June 2007 a \$13.7-million Early Learning and Child Care Trust Fund was established to provide funding for training for child-care workers, the development and implementation a new early learning and childcare curriculum, and provide financial incentives for the creation of new child-care spaces in the province.
- The ELCC Project Review Board disburses funds to child care operators, accredited postsecondary institutions and training organizations for approved projects related to:
 - Development and implementation of early learning and child care curriculum
 - Training for ECEC workers
 - Creation of new rural, infant, non-traditional and seasonal child care spaces
- Through the Trust Fund one-time incentive funding is available for creation of new rural, infant, non-traditional and seasonal child care spaces as follows.
 - \$2,500 per space is available to approved day care centers and community day care homes to create new infant child care spaces. A minimum of 3 new spaces must be created.
 - \$5,000 per facility is available to approved day care centers to create new child care spaces in rural New Brunswick. A minimum of 5 new spaces must be created.
 - \$3,000 per facility is available to approved community day care homes to create new child care spaces in rural New Brunswick. A minimum of 3 new spaces must be created.
 - \$7,500 per facility is available to approved day care centres to create new child care spaces that support fami-

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lies who work shift work (after 6 p.m. or on weekends). A minimum of 8 new spaces must be created.

- \$5,000 per facility is available to approved community day care homes to create new child care spaces that support families who work shift work (after 6 p.m. or on weekends). A minimum of 3 new spaces must be created.
- \$5,000 per facility is available to approved day care centers to create new seasonal child care spaces. A minimum of 5 new spaces must be created.
- \$3,000 per facility is available to approved community day care homes to create new seasonal child care spaces. A minimum of 3 new spaces must be created.

Be Ready for Success, An Early Childhood Strategy Action Plan was released in 2008. The following commitments were addressed in Year One of this 10 year strategy:

- Increase in child-care subsidies for low-income parents;
- Increased funding to support the recruitment and retention of specialized personnel who provide services to preschool children with autism spectrum disorders;
- Increased funding for integrated daycare and early intervention services for at-risk preschool children;
- Enhanced day-care support for families leaving social assistance for paid employment, or making the transition to work;
- Hiring eight new community-based early learning specialists to provide guidance and support to regulated child-care facilities, preschool programs, family resource centres and parents with young children;
- New funding for family resource centres working with at-risk children and families to expand outreach services and increase parenting programs and services;
- Increased funding to support special-needs children who require a support worker while attending a child-care facility;
- An increase in wages for regulated child-care staff to build on previous wage enhancements;
- Implementation of an early childhood development community mapping model to provide government and communities with information to identify needs, to service gaps, and to assess the effectiveness of programs and services; and
- Build on the existing public awareness campaign on the benefits of quality child-care and early learning experiences for preschool children.

Effective September 2009 the Early Learning and Child Care Curriculum (English) developed by the University of New Brunswick and the Curriculum éducatif (French) developed by Université de Moncton will be implemented in all regulated childcare facilities in New Brunswick.

The promotional materials Quality Child Care in New Brunswick are available for parents

- Includes 3 booklets – Quality Child Care at a glance, Helping Families with Child Care Costs, and A Parent's Guide to Quality Child Care in New Brunswick

Education

Between 2003-2007 individuals working in approved child day care facilities had the opportunity to participate in the Distance Education Training Initiative at no cost to the participants.

Since 2007 funding is available through the ELCC Trust Fund to support individuals accessing early childhood education training opportunities at recognized training institutions across the province. In order to be eligible for funding, the training must include courses that can be applied to the one year Early Childhood Education (ECE) certificate. Individuals must have completed the one year ECE and be currently employed in an approved child day care facility or must be employed in an approved child day care facility and taking courses towards the completion of the one year ECE.

The annual Braiding our Resources conference is a collaborative initiative between the PEI and NB child care associations providing professional development opportunities for early childhood educators. PEI on workshops and other initiatives

Braiding Our Resources

Through the Director to Director (D2D) component under Opening the Door to Quality Child Care and Development project, Directors of ECEC facilities are engaged in activities to support and mentor each other to develop leadership skills.

Equivalency Assessment

A proposed ECE Certification Model has been developed as part of the ECCENB's Professional Development Plan. In addition, a recommended short term model for assessing equivalency linked to the certification model been completed, as has a review of post- secondary ECE programs, curriculum and delivery approaches. ECCENB is awaiting further direction and support from government in order to fully implement the recommendations of each of these reports.

Recognition

The Quality Improvement Funding Support (QIFS) program supports the wages of individuals employed in the province's regulated child day care facilities. Trained ECE's or the equivalent receive an amount of \$4.50/hour worked beyond the wages paid by their employer whereas untrained staff receive an amount of \$2.75/hour work beyond the wages paid by their employers are required to pay their employees no less than the provincial minimum hourly wage.

Recruitment and Retention Initiatives

A Recruitment and Retention Strategy is one of the six strategic priorities addressed by Early Childhood Care and Education NewBrunswick/Soins et éducation á la petite enfance Nouveau Brunswick in their 2007-2012 Strategic Plan.

Funding support for individuals accessing the ECE training such as that offered through the Distance Education Training Initiative and more recently the ELCCTrust Fund have led to an increase in the number of ECE qualified individuals in the province. The 10 year Early Childhood Strategy Be Ready for Success has committed to continue to support the early learning and child care sector in the development and implementation of a comprehensive career promotion and recruitment/retention strategy for regulated child care staff across the province.

The wage support provided through the QIFS Program has contributed to improved recruitment and retention rates.

Quebec

Government Funding

Government funding to enhance the wages of centre staff and the income of family child care providers over a four-year period beginning in 1999/2000.

- This measure was an important factor in attracting students at the CEGEP level to enrol in ECE. Starting in September 1999, there has been a noticeable jump in registrations. The increase coincided with the five dollars per day programme in the CPE (centres de la petite enfance).

Wage subsidies/funding to wage scales

In the fall of 2006, a new measure was also instrumental in attracting and retaining workers in the sector, i.e. the pay equity. Up until 1999, the hourly wage has been only \$11.50. In 2008, it is \$20.

Another measure which contributed to retaining day care workers has been pension fund. For younger people, it is not really a major factor in attracting them.

Provide financial support to staff enrolled in college-level ECE courses and compensating centres who need to hire substitute staff while permanent staff are taking courses. This initiative has increased the proportion of trained people in the province.

Bursaries are available for full time early childhood education students.

Education

In this branch, the DEC (diplôme d'études collégiales) is the recognized qualification. In each and every CPE, two thirds of the personnel must have a DEC and the remaining 1/3 should have an AEC, which is less demanding than the former.

The Brio Project in Québec was designed to provide professional development for administrators, which would include some administration-related information.

Recruitment and Retention Initiatives

The government of QC has undertaken public education programs specifically to attract more students into the child care field. The result has been increased enrolment in ECCE training programs.

In 2000, Quebec launched a recruitment campaign to promote the profession of early childhood educator entitled Besoin de toi! In 2004, promotion efforts were directed at school age child care providers Carrière pleine de vies! Bursaries are available for full time early childhood education students.

Other

Development of employer councils: Associations of CPE in Québec.

There is no competition between daycare centers: wages are the same as they follow strict standards enacted by the Quebec government. It is the case for CPE and private kindergartens alike.

When workers are unionized, they get more benefits than their non-unionized counterparts. A relatively high percentage of the childcare workforce is unionized and wages have increased for all of the sectors workers whether or not they belong to unions.

Turnover rates have dropped due to improved child care staff wages and common compensation scales.

Managerial staff's working conditions are the same as can be found in other sectors. A CPE's manager can earn as much as \$90 000/year, the minimum being \$55 000/year. Salaries are very competitive with those ones found in the public sector. Quite often, a MBA is the degree that we are looking for that kind of position

Non managerial positions: most day-care teachers/educators (90%) fall into that category. They earn \$21/hour which translates into \$40,000 - \$45,000/year. Without a degree, you won't get the same compensation. There is no such thing as a staff drain towards other sectors of the economy.

Ontario

Government Funding

Direct child care subsidies

- Increased eligibility for financial support

Ontario Child Benefit

- Provides low-income families with a one-time down payment of up to \$250 per child starting in 2007 and growing to a maximum of \$1,100 annually per child by 2011. Delivered via tax system, not child care specific

Funding child care space expansion

Funding to provide improved access to training

Funding to create a regulatory College for Early Childhood Educators

Wage subsidy for ECEC workers

- Full and part-time staff
- Funding increased to support a wage increase of approximately three per cent

Education

Regulatory College of Early Childhood Educators

Grants to assist with the costs of training, as well as grants to cover the associated travel and living costs.

Providing parents and families with improved access to information on licensed child care centres.

The Province of Ontario has developed two ECE apprenticeship training program as an alternative to diploma programs.

The Durham Region Child Care Forum maintains a Supervisors' Network

Mentoring Pairs for Child Care, an innovative partnership between the Early Childhood Community Development Centre and Government of Ontario, seeks to enhances child care quality by matching more experienced child care supervisors with less experienced child care supervisors in their own communities.

Ontario Coalition for Better Child Care's Child Care Management Kit

Equivalency Assessment

ECE diploma/degree credentials are not necessarily transferable from other jurisdictions to Ontario. Before the College was founded The Association of Early Childhood Educators Ontario (AECEO) issues two types of equivalency certificate:

Letter of Equivalency

- The Letter of Equivalency certificate is recognized by the MCYS as a valid employment credential for ECEs in Ontario. The AECEO also issued "AECEO Accredited ECE Program" status to ECE programs that successfully completed the AECEO Program Accreditation process.

Recognition of Equivalency

- Publicly funded Canadian education institutions outside of the province of Ontario offering ECE diploma/degree programs are reviewed against a set of established criteria in order to be eligible for automatic recognition for their graduates.
- Graduates from a recognized institution are eligible for automatic equivalency, or a Recognition of Equivalency Certificate.

Recognition

Child care appreciation day

Regulatory College of Early Childhood Educators

Other

Local employers develop market competitive wage scales.

Ontario Coalition for Better Child Care benefit plan.

The Ontario Coalition for Better Child Care collaborated with several unions for pay equity for early childhood education and care workers.

Manitoba

Government Funding

Wage subsidies/funding to wage scales.

- increasing remuneration by 20 per cent over five years, including a new pension plan.
- Implementing a wage adjustment fund for front-line child-care staff, the first step toward establishing a minimum base wage.

Tuition Support Program

- An Early Childhood Education Tuition Support Conditional Grant of up to \$4,000 is available to full-time ECE college students to assist with tuition costs. Applicants must agree to work in Manitoba's licensed child care system for a minimum of two years after graduation or repay the grant.
- \$4,000 is available for full-time ECE College students working toward their ECE II classification level.

Replacement Grant

- The Staff Replacement Grant is available to cover substitute costs so that child care assistants may attend ECE college workplace training. Workplace students who typically go to school two days a week and work three days a week are able to continue to receive their full salary while they train.

Training incentives

- Training Grant: An annual \$350 training grant is available to all child care assistants working in non-profit child care centres or family child care providers. The grant assists with the cost of taking ECE courses at recognized post-secondary institutions. This grant also will be extended to Early Childhood Educator II's who want to upgrade their credentials.
- Funding for director skills training to help build better work environments.

Funding to recruit back ECE's who have left the field.

Recruitment Incentive Program: A Recruitment Incentive Grant of up to \$3,000 is available for eligible ECE IIs
or IIIs returning to employment in a non-profit child care centre after an absence from the licensed system of at
least two years. The individual must meet current qualification requirements and agree to work in the Manitoba
licensed child care system for a minimum of two years or repay the grant. Priority is given to those centres that
have difficulty in recruiting qualified ECEs.

Scholarship fund

- Creating a scholarship fund starting in high schools in areas with the greatest labour shortage, which includes Manitoba's Northern and Francophone communities.

Education

Tuition Support Program

(see above for details)

Replacement Grant

(see above for details)

Training incentives

(see above for details)

Apprenticeship program

- Expanding the training options by piloting a professional stream of apprenticeship for early childhood educators.

Director skills training

- Funding for director skills training to help build better work environments.
- Continued expansion of the workplace training model at Manitoba colleges, including 25 more seats at Assiniboine Community College's Brandon site in January 2009, and video streaming of workplace training by Red River College to communities outside of Winnipeg.

Equivalency Assessment

The Early Childhood Educator: Internationally Educated Qualifications (ECE: IEQ) Program addresses classification needs of early childhood educators with international post-secondary education with an early childhood educationfocus. Successful participants will demonstrate competence at the Early Childhood Educator II (ECE II) trained level according to the *Manitoba Child Care Program's Standards of Performance*. The Manitoba Child Care Program recognizes that immigrants with formal prior learning in early childhood education have the right to a fair and creditable qualification recognition process.

The project resulted in a 90% completion rate by participants. Manitoba Child Care office subsequently assigned a halftime staff year to continue to offer PLAR to candidates.

Prior Learning Assessment

The CBA/PLA Program addresses classification needs of early childhood educators with post secondary credentials from foreign countries or non-Child Care Education Program Approval Committee (CCEPAC) accredited programs. Successful completion will demonstrate competence at the Early Childhood Educator II (ECE II) trained level according to the *Mani-toba Child Care Program's Standards of Performance*. Successful completion results in a trained and current ECE II classification level and the right to enter further programs to attain an Early Childhood Educator (ECE III) classification.

Recruitment and Retention Initiatives

The government of Manitoba has undertaken public education programs specifically to attract more students into the child care field. The result has been increased interest and enrolment in ECCE courses.

Workforce Stability Strategy

- Wage increase
- Minimum base wage
- Increased training
- Workplace training
- Expanded programs
 - Working with the community to expand early childhood educator training programs, such as the SISTARs project that helps people leave welfare and become early childhood educators.
- Wage subsidies
 - Providing wage subsidies through Manitoba Works! to employ more workers who receive social assistance.
- Public awareness campaign
 - Launch new public awareness campaign to highlight the benefits of working in the field.
- Scholarship fund
 - In areas with the greatest labour shortage.
- Apprenticeship program
 - Piloting a professional stream of apprenticeship for early learning and child-care workers.
- Director skills training
 - Funding for director skills training, delivered in partnership with the Manitoba Child Care Association, to help build better work environments.

Recruitment campaigns will be launched and will include:

- Incentives for Aboriginal students
- Efforts to recruit more new Manitobans
- Upgrading assistance for existing early childhood educators who wish to enhance their credentials
- Scholarships

- Efforts to recruit more men to the field
- A focus on more home-based providers
- Steps to "recruit back" those who have left the field
- Recognizing the importance of family child care, especially in rural and remote communities, Manitoba will explore
- New ways to make home-based child care more attractive to providers, encouraging them to stay in the field.

Other

Manitoba will work together with child care boards, to develop and pilot new models of governance, including the development of "hubs" enabling programs to share administrative costs and expertize. The hub model is designed to increase the human resources capacity of a group of ECEC centres. By centralizing the human resources management of several centres there can be efficiencies gained in human resources practices and shared costs.

Manitoba Child Care Association retained a human resource management firms to provide professional assistance in establishing a market competitive wage scale to enable the child care sector to compete more effectively with other sectors that have similar/comparable jobs. Manitoba Child Care Association also had a Human Resources Management Kit Guide developed.

In Winnipeg, centre directors have formed a director support group that meets on a regular schedule and provides a forum for providing support, discussing problems and exchanging information. In other situations, experienced directors undertake to mentor directors who are new to the role.

Saskatchewan

Government Funding

For child care centres:

- Space Development Capital Grant: \$3360 per space (in 2009-10) for new child care centre spaces;
- Start-up Grants: \$615 per space for infant, toddler and preschool spaces in centres; \$308 per school-age space in centres;
- Early Childhood Services Grant: An operating grant to child care centres that covers approximately 30% of operation costs. Increases to this grant are provided periodically for the purpose of staff recruitment and retention, including raising the wages of Early Childhood Educators employed in the centres;
- Inclusion grants: Grants are available to assist with additional costs, including additional staffing costs, of providing services to children with diverse needs and children with exceptionally high diverse needs.

For licensed family child care homes:

- One-time start-up grant
- One-time fire, health and safety grant
- Monthly nutrition grant
- Annual equipment and program grant
- Inclusion grants to assist with the care of children with diverse needs

For teen support centres and homes:

- Additional funding is available to assist with the costs of providing services to parents under 22 years of age who are attending school

For Northern child care centres:

- Additional funding is available for transportation, equipment and training in northern child care centres

Child Care Subsidies

The Ministry of Social Services provides subsidies to low-income parents who are working or attending school to assist with the costs of licensed child care.

Training Grants

Tuition Reimbursement Grant: Grants are available to licensed child care facilities for the reimbursement of tuition fees paid with respect to classes in early childhood education that are successfully completed by a person employed in the facility.

Education Support Grant: For the period 2008-2010, a one-time Education Support Grant was offered to licensed facilities to assist with costs related to staff training. The funds can be used for additional tuition costs, rural travel costs, books and materials and staff replacement costs. A similar grant may be established as an ongoing grant beginning in 2010-11.

Education

Classes in Early Childhood Education are available in Saskatchewan from the Saskatchewan Institute of Applied Arts and Sciences (SIAST). They can be taken at one of SIAST's three campuses or by distance education. Regional community colleges deliver some of the same classes using a combination of self-study and local classroom time.

Equivalency Assessment and Recognition

Prior leaning assessment and recognition is available for classes in Early Childhood Education through the Saskatchewan Institute of Applied Arts and Sciences.

Recruitment/retention initiatives

Training Grants: Grants are provided for Tuition Reimbursement and Education Support (please see details above).

Exemptions: In order to assist centres with meeting their staffing requirements, licensees may be temporarily exempted from the educational requirements for the purpose of hiring staff who will meet the requirements within a specified period of time.

Wage increases: Regular increases to the Early Childhood Services Grant are provided for the purpose of increasing wages and for other recruitment and retention initiatives determined by the licensee.

Other

A provincial sector study was completed in January 2006.

Child care information systems are undergoing a major upgrade which will provide the ability to collect and access administrative data. As part of this work, a Human Resources database is being developed that will allow tracking of Early Childhood Educators and more effective targeting of future recruitment and retention initiatives.

Alberta

Government Funding

Child Care Bursary for Leaders in the Child Care Community

- A three-year program designed to off-set educational costs for staff aspiring to leadership roles in the sector. In addition to funds for tuition and books, a travel amount of up to \$500 is available to applicants living over 100 kilometres away from the institution they attend. The maximum disbursement per bursary is \$10,000.

Staff Attraction Incentive

- Offered to recruit back trained child care professionals who have been out of the field for at least six months. A commitment to working in a pre-accredited or accredited child care program for two years is required. Eligible child care programs will receive up to \$5,000 over the two-year period, to be transferred to the employee at the end of each year. A 12% benefit contribution is also made to the child care program to off-set the cost of mandatory employer contributions.

Accreditation Professional Development funds to help cover program/textbook costs for directors/administrators upgrading their skills

A potential ECE apprenticeship program is currently being examined in Alberta

Scholarship of \$2500 was available to students who have completed the Child Care Orientation Course while in high school and who enroll in an Early Learning and Child Care post-secondary program.

Education

Children's Services Child Care Bursary Accreditation Professional Development funds Scholarships

Other

Local employers develop market competitive wage scales

In Edmonton, centre directors have formed a director support group that meets on a regular schedule and provides a forum for providing support, discussing problems and exchanging information. In other situations, experienced directors undertake to mentor directors who are new to the role.

British Columbia

Government Funding

ECE Incentive Grant Pilot Program

- designed to encourage licensed ECEs who have not worked in the field for at least two years to return to the sector. A maximum of 100 full time applicants to receive the grant of \$2,500 annually for 2 years. Payment issued directly to the applicant upon completion of their first and second year as an ECE in a licensed child care facility. Program ran from January 2008 to June 2009.

British Columbia Early Childhood Educator Loan Assistance Pilot Program

- Under this program, recent ECE graduates may be eligible for a maximum award of \$2,500 to assist in the repayment of their B.C. student loan.
- For full-time regular employee at a licensed daycare facility. B.C. student loan debt will be reduced by up to \$1,250 for each of the first and second year they are employed as an early childhood educator.
- If they are a part-time regular employee (working two days or less per week), the amount of the loan assistance award was pro-rated accordingly. Program ran from January 2008 to July 2009.

Bursaries for early childhood students, eligibility criteria recently broadened.

The BC Ministry of Children and Family Development provides professional development funding to various organizations to develop, deliver and assist with the cost of PD and training opportunities for ECEs.

ECEBC and Vancity Community Foundation offer an Early Childhood Educator Bursary program.

BC Ministry of Advanced Education's Leadership, Administration and Management in Child Care Services: A Curriculum Guide

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for Facilitators. Designed to be a template for training across BC to enhance leadership, administration and management in the ECEC sector.

BC Aboriginal Childcare Society's Caring for Our Children, a resource and training kit for Aboriginal children's programs in BC includes a module on governance and funding & finance.

ECEBC is developing a strategy regarding a \$20 per hour starting wage for ECEs

Government-led promotion/recruitment strategies.

The University of British Columbia pays half of the professional development fees for their ECEC staff.

Education

ECEBC and BC Association of Child Care Employers have developed Leadership, Administration and Management (LAM) courses which provide leadership, administration, human resources, financial management and community & board relations training for experienced ECEC practitioners.

Aboriginal Childcare Society provides ECE Scholarship, which recognizes two Aboriginal ECE students for the highest academic achievement in a Basic and Post Basic ECE program.

Other

Westcoast Child Care Resource Centre maintains a job postings website (among other resources)

Creating the Vancouver's Child Care Administrators Network.

Early Childhood Educators of BC (ECEBC) offers a Communities of Innovation Program that works with communities to develop and implement local leadership projects that strengthen professional identity, build leadership capacity and/or raise public awareness about the value of ECEC work. ECEBC also offers Team Building/Dealing with StaffTriangles training on building positive staff relations, positive communication skills and professionalism.

Exploring the hub model. The hub model is designed to increase the human resources capacity of a group of ECEC centres. By centralizing the human resources management of several centres there can be efficiencies gained in human resources practices and an economy of scale (shared costs).

Yukon

Government Funding

Wages initiative

Increase in wages via government wage supplement

2007 30% increase in supplement

2008 40% increase in supplement

Direct operating grant

- Funding options health and safety

Education

training initiatives

- recruit

Training enhancement

- Try to encourage existing staff to take more training.

Trying to put money into retention and recruitment initiatives

Information to Parents what to look for in quality child care

Yukon's "Partners for Children" funded by CAPC (Public Health Agency of Canada).

- Provides professional development activities (workshops) for early childhood educators at no cost. This program works in partnership with the Yukon College to extend credit for participation in four workshops combined with follow up work at the college—those who complete this work are able to obtain one Yukon College credit for an ECE elective course (ECE106).

Equivalency Assessment

Prior Leaning Assessment Recognition

- Academic
- Not foreign credentials

Northwest Territories

Government Funding

Child care subsidies

Funding to licensed non-profit child care

Afford costs of starting a program

Based on spaces

- Infants
- Pre-school
- After-school
- Special needs

Health and safety renovations

Rent / Mortgage assistance programs

Regional Aboriginal HR Development Agreement holders receive funds through First Nations Inuit Child Care initiative; some of these funds are used for training purposes.

Education

Distance Education

Recruitment

Information pamphlet

Nunavut

Regional Aboriginal HR Development Agreement holders receive funds through First Nations Inuit Child Care initiative; some of these funds are used for training purposes.

Government Funding

Child care subsidies

Education

Government of Nunavut is providing training locally in rural/remote communities.

Government of Nunavut's appreciation day for ECEs

The Government of Nunavut is providing on-site professional development opportunities to minimize the burden placed on individuals and to encourage participation in training/professional development.

Recognition Staff appreciation Day Certificate of appreciation