

WAGE\$ and Early Childhood Education Quality Incentives



Goals

The goal of quality incentives for ECE professionals, including the WAGE\$ program, is to help programs improve quality by reducing turnover and increasing teachers' education.

Practice Features

Financial incentives are one mechanism of supporting quality enhancements by encouraging talented professionals to enter and remain in the ECE field. Increasing quality includes improving conditions for ECE professionals, such as providing higher wages or tuition for courses.

Financial incentives include bonuses, awards, or stipends for completing education or reducing turnover. The Child Care WAGE\$ Project provides education-based salary supplements to low-paid teachers, directors, and family child care providers working with children between the ages of birth and five. The project is designed to provide preschool children more stable relationships with better-educated teachers by rewarding teachers' educational advancement and continuity of teachers in child care situations.

Any child care professional earning at or below the income cap selected by the funding partnership may be eligible to participate. The supplement recipient must work with children ages birth to five at least 10 hours per week in a licensed child care program in a participating county and have some formal child care credential or education beyond a high school diploma. Child Care WAGE\$ requires participants at lower education levels to move up an education level on the salary supplement scale in order to continue receiving a supplement. Teachers and directors have two years to advance and home providers have three.

Target Audience

Early care and education directors and teachers

WAGE\$ and Early Childhood Education Quality Incentives Snapshot

- **EC Profile Indicator:** EDU 10 - Percent of children enrolled in 1-5 star centers that have at least 75% of lead teachers with college degrees or EDU 20 - Percent of children enrolled in 1-5 star centers that have directors with college degrees
- **Clearinghouse Rating:** None
- **Research supports** use with early childhood educators, including directors and teachers
- **Related Smart Start outcomes:**
 - Decrease in teacher turnover
 - Decrease in director turnover
- **Implementation Guidance:** Available for WAGE\$ at http://www.childcareservices.org/wage_sapps/index.php

Documented Outcomes

	Type of Study	Wages related to teacher turnover*	Education related to teacher turnover *	Experience related to teacher turnover*	Wages related to the quality of care**	Wages related to director turnover*
Gable et al. (2007) ⁱ	Quasi-experimental, longitudinal study with comparison group	✓	✓			
Cassidy et al. (2011) ⁱⁱ	Non-experimental, with purposive sampling	✓				
Child Care Services Association (2015) ⁱⁱⁱ	Non-experimental, survey	✓				
Cleveland & Hyatt (2002) ^{iv}	Non-experimental, secondary data analysis	✓	✓	✓		
Toquati et al. (2007) ^v	Non-experimental				✓	
Whitebrook & Sakai (2003) ^{vi}	Non-experimental	✓				✓

This table contains outcomes found to be associated with the program or approach. Individual studies may contain additional outcomes that were tested and not found to be associated with the program or approach.

*Aligned with Smart Start outcome *Decrease in Teacher Turnover and Decrease in Director Turnover*

**Aligned with Smart Start outcome *Improved ECE program environment*

Research Evidence for ECE Professional Quality Incentives including WAGE\$

- There is some evidence indicating that the wage of the highest paid teacher in a center predicts child care quality even when accounting for ratio, teacher training, and teacher education,^{vii} but the evidence is mixed.^{viii, ix}
- Studies suggest that wages, including incentives tied to educational attainment, and benefits are linked to the reduction of teacher and director turnover.^{x, xi, xii, xiii, xiv}

Review of Experimental and Quasi-Experimental Studies

Citation	Gable, S., Laschober, T., Thornburg, K. R., & Mauzy, D. (2007). Cash incentives and turnover in center-based child care staff. <i>Early Childhood Research Quarterly, 22</i>, pp. 363–378.
Population and Sample	<ul style="list-style-type: none"> • 513 center-based teaching staff and 167 directors from 179 child care centers across the state of Missouri: <ul style="list-style-type: none"> ○ Intervention group = 304 teachers, 93 directors, 99 centers; ○ Comparison group = 209 teachers, 74 directors, 80 centers; • Intervention group teachers, compared to comparison group teachers, had a slightly higher average age, fewer with a high school diploma, and more with an associate’s degree or higher; more were African American; fewer earned between \$4.80 and \$7.20; and more earned \$9.60 per hour or more. • Intervention group directors, compared to comparison group directors, included more African American; fewer earned between \$4.80 and \$7.20; and more earned \$16.80 per hour or more.
Methodology	Quasi-experimental, longitudinal study with comparison group
Purpose	The purpose of the study was to evaluate the impact of the Workforce Incentive project (WIN) on the turnover rates of providers working in licensed child care programs. In an effort to increase workforce stability, especially among experienced and educated staff, WIN provides bi-annual cash incentives to motivate providers to increase their level of education beyond the requirements of Missouri law. The study addressed whether turnover rates differ (1) between the intervention and comparison groups; (2) by position type, educational attainment, experience in the field, and hourly wages between the two groups; and (3) by position type and education and experience, education and hourly wages, and

	experience and hourly wages between the two groups?
Measures & Assessments	<ul style="list-style-type: none"> • Questionnaire and telephone interview • Professional Achievement and • Recognition System (PARS) enrollment form
Study Implementation	<ul style="list-style-type: none"> • The intervention group were required to enroll in the Professional Achievement and Recognition System (PARS), the state’s voluntary child care provider registry. Intervention group participants were selected on a first-come, first-served basis based on the date on the postmark of their enrollment package. To maintain WIN eligibility, providers were required to work a minimum of 30 hours per week for 9 months each year, renew their PARS enrollment information, and complete 12 contact hours of training each year. • Comparison group participants were matched at the county level using publicly available basic demographic data sources. Comparison centers were contacted and, if they agreed to participate in the study, directors were asked to identify teachers in their center who worked at least 30 hours per week for at least 9 months per year. • Following recruitment, participants in both groups completed a telephone interview and were asked to complete and return a questionnaire packet for which they received a \$10 gift card. Following the receipt of baseline questionnaires, participants were contacted every 4 months to complete follow-up telephone interviews (a total of 5 interviews were conducted).
Staff Qualifications	<ul style="list-style-type: none"> • Not addressed
Key Findings	<ul style="list-style-type: none"> • <u>Turnover Rates between Study Groups</u> <ul style="list-style-type: none"> ○ There was a significant difference in turnover rates between all members of the intervention (WIN) and comparison groups for each follow-up period. In addition, at 20-months following baseline, which was the end of the study, 70% of WIN participants and 54% of comparison participants remained in their original programs. ○ There was a significant difference in turnover rates for teaching staff between the intervention (WIN) and comparison groups for each follow-up period. At the end of the study, 67% of WIN teaching staff and 48% of comparison teaching staff remained in their original programs. ○ There was no significant difference in turnover rates for center-based directors between the intervention (WIN) and comparison groups for each follow-up period. At the end of the study, 81% of WIN directors and 73% of comparison directors remained in their original programs. • <u>Turnover Rate by Education</u> <ul style="list-style-type: none"> ○ WIN teaching staff with more than a high school diploma had significantly lower turnover rates than similar teaching staff in the comparison group, with 71% of WIN teaching staff and 50% of comparison teaching staff remaining in their original programs by the end of the study. ○ There were no significant differences in turnover between WIN and comparison directors based on level of education (i.e., high school diploma, Child Development Associate, associate’s degree, bachelor’s degree). • <u>Turnover Rate by Experience</u> <ul style="list-style-type: none"> ○ Although the differences between the two groups were not significant, turnover rates were lower for WIN teaching staff with more than 5 years of experience than for the comparison group. ○ There were no significant differences in turnover for WIN and comparison directors based on years of experience. • <u>Turnover Rate by Hourly Wages</u> <ul style="list-style-type: none"> ○ Turnover was lower for WIN teaching staff earning between \$7.20 and \$9.60 per hour than for comparison teaching staff with the same earnings. Results indicated no significant differences in turnover between WIN and comparison teaching staff who earned up to \$7.20 per hour or those who earned more than \$9.60 per hour. ○ WIN directors earning more than \$12 per hour had significantly lower turnover than comparison directors at the same rate of pay. • <u>Turnover Rate by Education and Experience</u> <ul style="list-style-type: none"> ○ WIN teaching staff with more than a high school diploma and more than 5 years of experience had lower turnover rates than comparison teachers with equivalent education and experience. ○ There were no significant differences in turnover for directors based on education and experience. • <u>Turnover Rate by Education and Hourly Wages</u> <ul style="list-style-type: none"> ○ WIN teaching staff with more than a high school diploma and hourly wages greater than \$7.20 had significantly lower turnover rates than comparison teachers.

- WIN group directors with at least a bachelor’s degree and hourly wages greater than \$12.00 had significantly lower turnover rates than comparison directors.
- Turnover Rate by Experience and Hourly Wages
 - WIN teaching staff with more than 5 years of experience and hourly wages greater than \$7.20 had significantly lower turnover than comparison teachers.
 - There were no significant differences in turnover for directors based on experience and hourly wages.

Review of Meta-Analyses

None

Review of Descriptive and Non-Experimental Studies

Citation	Cassidy, D. J., Lower, J. K., Kinter-Duffy, V. L., Hedge, A. V., & Shim, J. (2011). <i>The day-to-day reality of teacher turnover in preschool classrooms: An analysis of classroom context and teacher, director, and parent perspectives.</i> <i>Journal of Research in Childhood Education, 25(1), pp. 1-23.</i>
Population and Sample	<ul style="list-style-type: none"> ● 34 teachers (departing and new) in 13 classrooms in 9 centers experiencing teacher turnover in the 2-year study period. <ul style="list-style-type: none"> ○ Teachers: 63.0% European American, 37.0% African American and other ethnic groups; some college education; averaged 78.4 months of experience; average hourly wage of \$8.82. ○ Directors: 66.7% European American, 22.2% African American, 11.1% American Indian; 88.9% had either a 2- or 4-year degree and 11.1% had a graduate degree. ○ Centers: quality star ratings ranged from 3 to 5 (out of a possible 5 stars).
Methodology	Non-experimental using purposive sampling
Purpose	The study’s goal was to investigate the impact of teacher turnover on the quality of an intentionally small sample of classrooms (n=13) by collecting data on the experiences of teachers, directors, parents, and children in a center that was experiencing staff turnover. The study was guided by the following questions: (1) What are the day-to-day experiences of teachers, directors, and parents during turnover transitions? (2) How is classroom quality compromised as a result of turnover? (3) What areas of the classroom are most affected (e.g., materials/activities, language/interactions, global quality) by turnover? and (4) How are relationships among children, parents, and staff affected by turnover?
Measures & Assessments	<ul style="list-style-type: none"> ● Semi-structured interviews ● Early Childhood Environment Rating Scale–Revised (ECERS-R) ● Student-Teacher Relationship Scale (STRS)
Study Implementation	<ul style="list-style-type: none"> ● Over a 2-year period, 38 child care center directors were contacted about the study. Researchers contacted the 11 centers that agreed to participate twice a month until a turnover situation was identified. Ultimately, 9 of the 11 centers experienced a turnover situation. ● All directors and 65.4% of the 42.3% of parents who agreed participated in interviews. ● In the last week of employment, departing teachers participated in interviews and completed the survey measures and their classrooms were observed ECERS-R. ● One week after beginning employment, new teachers participated in interviews, completed the survey measures, and were observed using the ECERS-R in their classrooms. ● Other teachers in the classrooms (e.g., co-teacher, assistant teacher), who remained consistent and worked with both the departing and the new teachers, were interviewed and completed the survey measures. ● Researchers kept field notes about the procedures used by the centers to maintain consistency in the classrooms during teacher transitions. ● Three coders independently applied the coding scheme to interview transcripts with discrepancies discussed and resolved.
Staff Qualifications	<ul style="list-style-type: none"> ● Not addressed
Key Findings	<ul style="list-style-type: none"> ● Four centers (five classrooms) were identified as proactive because they had established policies and systems to minimize the disruption caused by teacher turnover. Five centers (eight classrooms) were identified as reactive because they had no such systems in place. ● Overall ECERS-R scores decreased between the pre- (M=4.35) and post-turnover (M = 4.13) assessments, indicating a negative effect of turnover on classroom quality. Note that the sample size was too small to test for significance.

- Proactive classrooms had higher overall ECERS-R scores (M=5.11) than classrooms identified as reactive (M=3.61) on the post-turnover assessments.
- Proactive centers experienced a lower turnover rate (20.9%) than reactive centers (29.8%) centers.
- Based on the results from scores on the STRS, departing teachers as compared to new teachers shared a closer relationship with the children in the classroom ($p=.01$), and perceived children to be more dependent on them ($p=.001$).
- Interviews indicated three suggestions for reducing turnover, particularly from departing teachers: (1) increase salaries, the most often mentioned strategy; (2) offer better benefits; and (3) create supportive and positive work environments by lowering teacher-child ratios for smaller group sizes and increasing the number of teachers with education in early childhood.

Citation	Child Care Services Association. (2015). WAGE\$ statewide final report: Fiscal year 2015. Retrieved from: http://www.childcareservices.org/wagesapps/StatewideFinalFY15_Full.pdf
Population and Sample	<ul style="list-style-type: none"> • N/A
Methodology	Non-experimental
Purpose	The report was to present feedback from participants about the Child Care WAGE\$® Project in North Carolina. WAGE\$ provides financial incentives for child care teachers and directors to improve their education and remain employed in their current child care or early education programs.
Measures & Assessments	<ul style="list-style-type: none"> • Participant survey
Study Implementation	<ul style="list-style-type: none"> • WAGE\$ awards salary supplements to child care professionals as an incentive to increase their education and reduce turnover. Recipients were surveyed.
Staff Qualifications	<ul style="list-style-type: none"> • Not addressed
Key Findings	<ul style="list-style-type: none"> • The statewide turnover rate in 2014 for all full-time early education teachers (not just WAGE\$ participants) was 19%. In 2015, turnover rate for WAGE\$ participants was 12% and for NC Prekindergarten program teachers (and assistants) the turnover was 10%. The statewide turnover rate was 31% in 1998. • 76% of the teachers who did not leave their jobs earned less than \$12 per hour. • 69% of active WAGE\$ participants earn less than \$12 per hour (69% of teachers, 91% of home providers or small facility operators and 36% of directors or those with partial administrative time earn less than \$12). • 44% of WAGE\$ participants in NC Pre-K classrooms earn less than \$12 per hour; 48% of the NC Pre-K teacher assistants and 27% of the teachers earn less than \$12 per hour. • 97% of survey respondents indicated that WAGE\$ encourages them to stay with their current child care programs. • 98% of participants indicated that supplement had an impact either on their desire to remain in the child care or early education field or the decision to further their education.

Citation	Cleveland, G. H., & Hyatt, D. E. (2002). Child care workers' wages: New evidence on returns to education, experience, job tenure and auspice. <i>Journal of Population Economics</i>, 15, pp. 575–597.
Population and Sample	<ul style="list-style-type: none"> • Data from 501 directors and 2,441 staff working in full-day (6 hours or more) child care centers were extracted from the Caring for a Living Study, which was conducted in 1991, and the Canadian Census of 1991. Sample consisted of: <ul style="list-style-type: none"> ○ 58% teachers, 19% assistant teachers, 22% teacher-directors or administrative directors, 1% individuals in other jobs (such as cooks and maintenance staff) ○ 83% with education beyond a high school: 23% with two or three-year college diploma, 15% with bachelor's degree, and 2% with graduate training. ○ 53% with 5 or fewer years of experience in the child care field, 25% with 6–10 years of experience, and 20% with more than 10 years of experience; average of 3.5 years of experience with current employer. ○ 83% employed full time, 13% part-time, and 3% casual or substitute. ○ 75% employed by non-profit or municipal centers and 15% by for-profit operators; 13% union members.
Methodology	Non-experimental, secondary data analysis
Purpose	The study's goal was to examine the differences between center type (for-profit versus non-profit) with respect to staff wages and turnover.
Measures & Assessments	N/A
Study Implementation	N/A

Staff Qualifications	<ul style="list-style-type: none"> • N/A
Key Findings	<ul style="list-style-type: none"> • Early childhood educators and assistants earn slightly less than 75% of the average or median income of similar female workers in all other occupations, and slightly more than 50% of similarly educated elementary and kindergarten teachers. • Wages are about 7% higher for workers with some college or university than for those with high school or less education. Workers with a one-year certificate earn about 12% more than workers with less than high school. Workers with a two-year certificate earn about 21% more and a college diploma about 24% more, and a bachelor's degree about 28% more than those with less than a high school education. Workers with more than bachelor's degree earn about 23% more than those with less than a high school education. • Wages are about 6% higher for workers with 4–5 years of experience than those with less than 4 years' experience. Wages are about 11% higher for those with more than 5 years of experience and each year of job tenure is worth about 1%. • Municipal centers typically pay their child care staff about 31% more and non-profit centers 13% more than for-profit centers. • Union members are paid significantly more per hour on average (+17%), but turnover is higher. • Turnover is higher for those making low wages, but employer pension benefits appears to be related to a decrease in turnover. • Turnover is lower for those with specialized child care credentials (one year and two year college) than for those with less than a high school education. • Turnover is higher for teachers with a bachelor's degree or above than for those with less than a high school education. • Turnover is significantly higher for those with less than one year of experience in the child care field.

Citation	Manlove, E. E., & Guzell, J. R. (1997). Intention to leave, anticipated reasons for leaving, and 12-month turnover of child care center staff. Early Childhood Research Quarterly, 12, pp. 145-167.
Population and Sample	<ul style="list-style-type: none"> • 169 providers in 28 licensed child care centers in 11 counties in Pennsylvania <ul style="list-style-type: none"> ○ 166 female ○ Age ranged from 19 to 83 years (average=34); 79% were 40 years of age or younger. ○ 31% with at least a bachelor's degree, 31% with some college, and 37% with a high school diploma or less. ○ Experience in the field ranged from less than one year to more than 15 years (average=3.8 years). ○ 11 owner-teacher-directors, 18 teacher-directors, 53 teachers, 48 assistant teachers, and 39 aides. ○ 64% worked 35 or more hours per week; 14% worked less than 20 hours per week ○ Average hourly wage=\$5.14.
Methodology	Non-experimental
Purpose	The purpose of the study was to examine the role of both work and non-work factors in child care worker intentions to leave their jobs and actual job turnover.
Measures & Assessments	<ul style="list-style-type: none"> • Participant survey <ul style="list-style-type: none"> ○ Job satisfaction and organizational commitment was based on the National Child Care Staffing Study • Maslach Burnout Inventory
Study Implementation	<ul style="list-style-type: none"> • Child care directors who were interested in participating in the study were divided into four groups: rural for profit, rural nonprofit, urban for profit, and urban nonprofit. Sites were then randomly selected from each group with the exception of small for profit. Due to the small number of sites in this group, all those interested were included in the study. • Surveys were distributed only to staff who spent regularly scheduled time working directly with children. Participants received \$10 for completing the survey. • Each program was contacted for information on staff turnover 12 months after surveys were collected.
Staff Qualifications	<ul style="list-style-type: none"> • N/A
Key Findings	<ul style="list-style-type: none"> • 41% of respondents expected to leave their jobs in the near future. In the 12 month follow-up, 23% had actually left. Full time workers (35 or more hours per week) were no more likely to intend to leave or actually leave their jobs than part time workers. • Although full time workers were paid significantly higher hourly wages, had more experience, and reported higher levels of emotional exhaustion, they were no more likely to leave than part-time workers. • Assistant teachers and aides had significantly lower levels of wages and education than teachers, teacher-directors, and owner-teacher-directors. Assistant teachers also were the least

- experienced in the field and owner-teacher-directors were the most experienced.
- Individuals who believed there were job alternatives are almost three times as likely (2.8) to intend to leave the current job in the near future.
- Individuals with increasing levels of emotional exhaustion makes it 2.4 times more likely they will intend to leave the current job in the near future.
- As the number of years in the field increase, individuals are increasingly less likely to intend to leave in the near future.
- Advancement (changing jobs, returning to school) was the most frequent reason given for those who expected to leave (n=35), and none of those who actually did leave for advancement planned to go to another early childhood program.
- Concerns about the low pay and the need to earn a higher wage were cited by 13 of those expecting to leave their jobs in the near future and 10 participants said they expected to remain in their jobs because of lack of other options.

Citation	Torquati, J., Raikes, H., & Huddlestone-Casas, C. (2007). Teacher education, motivation, compensation, workplace support, and links to quality of center-based child care and teachers' intention to stay in the early childhood profession. <i>Early Childhood Research Quarterly, 2</i>, pp. 261–275.
Population and Sample	<ul style="list-style-type: none"> Stratified random sample of 964 child care center providers working in full-day full-year programs in 4 mid-western states participated in phone surveys. <ul style="list-style-type: none"> 99% female; mean age of 35 83% white, 8.4% African American, 5.7% Hispanic, 1.2% American Indian Experience: 12% had 10 or more years, 19% had 5-10 years, 15% 3-5 years, 29.4% had 1-3 years, and 24% had less than 1 year 45% cared for their own children in the child care setting in which they worked A subset of 223 providers participated in classroom assessments. <ul style="list-style-type: none"> 122 infant toddler providers 101 preschool providers 105 followed Head Start or Early Head Start performance standards, but were not Head Start programs.
Methodology	Non-Experimental
Purpose	The study's goal was to develop and test a model of decisions to enter the early childhood profession, supports for retention, and factors surrounding decisions to leave the profession, as well as the impacts of the decision-making process on the quality of care.
Measures & Assessments	<ul style="list-style-type: none"> Telephone survey Early Childhood Environment Rating Scale - Revised (ECERS-R) Infant-Toddler Environment Rating Scale (ITERS) Caregiver Interaction Scale Staff-child ratio
Study Implementation	<ul style="list-style-type: none"> A stratified random sample of full-time child care centers was drawn from state-level child care licensing and subsidy files. Sample strata included: state, subsidy/non-subsidy, center-based programs for infants/toddlers and preschool aged children, licensed family homes, registered family homes license exempt homes, and early Head Start/Head Start partners. Respondents were randomly selected until each strata was complete. Providers were contacted by telephone and asked to complete a 12.5 minute surveys. The response rate was 99%, with 95% of respondents agreeing to be added to an observation list. Providers were contacted by phone using the same stratification procedures and asked to participate in observations. Response rates across the four states ranged from 48 to 59%. Teachers received a \$20 gift certificate for participating. Several variables were tested using structural equation modeling to determine which, if any, predict the quality of interactions, observed quality of care, and intention to remain in the child care field. The variables included teacher education, compensation, workplace supports, and teacher motivations for child care work. Paired observations were conducted every 10 observations with the ITERS, ECERS, and Caregiver Interaction Scale to maintain reliability in scoring.
Staff Qualifications	<ul style="list-style-type: none"> N/A
Key Findings	<ul style="list-style-type: none"> <u>Quality of Interactions</u> <ul style="list-style-type: none"> None of the variables tested in this study predicted the quality of interactions. <u>Observed Quality of Care</u> <ul style="list-style-type: none"> Years of education significantly predicted teacher compensation, which significantly predicted observed quality. <u>Intention to Remain in the Field of Child Care</u>

- Motivation for child care work significantly predicted intention to stay in the field of child care.

Citation	Whitebrook, M., & Sakai, L. (2003). Turnover begets turnover: an examination of job and occupational instability among child care center staff. <i>Early Childhood Research Quarterly, 18</i>, pp. 273–293.
Population and Sample	<ul style="list-style-type: none"> • 149 teaching staff and 71 directors employed in 92 child care centers
Methodology	Non-experimental
Purpose	The purpose of the study was to identify differences in demographic, professional preparation, and personal and workplace characteristics of child care teaching staff and directors as they relate to both job and occupational turnover.
Measures & Assessments	Interview protocols adapted from measures used in the National Child Care Staffing Study and from earlier phases of data collection.
Study Implementation	<ul style="list-style-type: none"> • In 1994, 92 centers participated in a longitudinal study to examine NAEYC accreditation as a strategy for improving the quality of care in child care centers, with 55 centers in the study group seeking NAEYC accreditation and 37 centers in a comparison group not seeking accreditation. During the study 260 teaching staff and 92 directors were interviewed and asked for permission to contact them to update their information at a later date; 87 directors agreed. Follow-up visits occurred in 1996 and 2000. • In 2000, teachers and directors who had been interviewed in 1996 were contacted and asked to participate in a follow-up interview; 57% of teachers and 77% of directors responded and participated in telephone interviews. • Differences in teaching staff: 21% of the teaching staff that were located in 2000 worked in for-profit centers at a wage of \$11.28 per hour in 1996. 32% of the teaching staff that the research team was unable to locate in 2000 worked in for-profit centers at an average wage of \$10.35 per hour in 1996. • There were no differences in directors that research staff were able or unable to locate in 2000. • Respondents were asked about their current employment, wages, and benefits; professional preparation; demographics and family characteristics; and opinions about turnover, training opportunities, professional organizations, and recommendations for policy makers. Directors also were asked to provide information about salaries, training, and education for all teaching staff employed at the center in 1996 and 2000. • Research assistants piloted the interview questions during training and practice visits, with revisions made following the visits. Each version of the questionnaire was piloted at least five times.
Staff Qualifications	<ul style="list-style-type: none"> • N/A
Key Findings	<p><u>Teaching Staff</u></p> <ul style="list-style-type: none"> • Of the 149 teaching staff interviewed, 68 (46%) were still employed in the same centers as they were in 1996. Of the 81 teach staff no longer working in the same centers, 41 (50%) were working early childhood settings and 40 (50%) had left the child care field. • Of the 260 teaching staff interviewed in 1996, 76% were no longer employed in the centers in 2000; there were no differences in turnover between the NAEYC accredited and non-accredited centers. • Teaching staff who left their centers but remained in the field were younger on average (M=41) than teaching staff who stayed in their centers (M=47). • Among teaching staff interviewed in 2000 who remained in their centers, left their centers, or left the child care field: <ul style="list-style-type: none"> ○ There were no differences with respect to gender, ethnicity, living with a partner or spouse, with a bachelor’s degree, or who participated in an early childhood practicum as part of their training; ○ Those remaining in their centers reported significantly longer tenure in their centers than the other two groups; ○ Those remaining in their centers reported significantly longer tenure in the child care field than the other two groups; ○ Those remaining in their centers and those who left their centers but remained in the child care field were significantly more likely to belong to a professional organization; ○ Those remaining in their centers were significantly more likely to receive pension benefits than those who left their centers but remained in the field; ○ Those remaining in their centers were paid significantly higher wages in 1996 than the other two groups; and ○ Those remaining in their centers were paid significant higher wages in 2000 than those who left their centers but remained in the field.

- Job turnover among teachers was significantly lower in programs where the director remained on the job. There were no differences in turnover among assistant teachers.
- Highly trained teachers were more likely to leave their jobs if: 1) their wages were lower, 2) they worked in a program with higher turnover among highly trained co-workers, 3) experienced a change in director, and/or 4) worked in a program where a higher percentage of teaching staff did not have a bachelor's degree.
- On average, teaching staff who left the child care field earned significantly higher wages.

Directors

- Of the 71 directors interviewed, 45 (63%) were still employed in the same centers as they were in 1996. Of the 26 who left their centers, 10 (39%) remained in the child care field as directors or assistant directors, 3 (11%) were employed in child care agencies, and the remaining 13 (50%) were either retired, deceased, staying at home with children, or employed in another field.
- Of the 75 centers still operating in 2000, 30 (40%) had a new director since 1996 and 20 (67%) of the 30 had two or more in that period of time.
- There were no significant differences in demographics or professional backgrounds between directors who left and those who stayed, except directors who left were significantly more likely to be people of color.
- Directors remaining in their centers were paid significantly higher wages in 1996 than those who left.
- Directors remaining in their centers worked in programs that paid higher average wages in 1996 to teachers (not including assistant teachers).

End Notes

i Gable, S., Laschober, T., Thornburg, K. R., & Mauzy, D. (2007). Cash incentives and turnover in center-based child care staff. *Early Childhood Research Quarterly*, 22, pp. 363–378.

ii Cassidy, D. J., Lower, J. K., Kinter-Duffy, V. L., Hedge, A. V., & Shim, J. (2011). The day-to-day reality of teacher turnover in preschool classrooms: An analysis of classroom context and teacher, director, and parent perspectives. *Journal of Research in Childhood Education*, 25(1), pp. 1-23

iii Child Care Services Association. (2015). WAGE\$ statewide final report: Fiscal year 2015. Retrieved from: http://www.childcareservices.org/wagesapps/StatewideFinalFY15_Full.pdf

iv Cleveland, G. H., & Hyatt, D. E. (2002). Child care workers' wages: New evidence on returns to education, experience, job tenure and auspice. *Journal of Population Economics*, 15, pp. 575–597.

v Torquati, J., Raikes, H., & Huddlestone-Casas, C. (2007). Teacher education, motivation, compensation, workplace support, and links to quality of center-based child care and teachers' intention to stay in the early childhood profession. *Early Childhood Research Quarterly*, 2, pp. 261–275.

vi Whitebrook, M., & Sakai, L. (2003). Turnover begets turnover: an examination of job and occupational instability among child care center staff. *Early Childhood Research Quarterly*, 18, pp. 273–293.

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viii United States General Accounting Office. (2002). Child care: States have undertaken a variety of quality improvement initiatives, but more evaluations of effectiveness are needed. Author: Washington, DC.

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Additional Resources

Child Care Services Association, Child Care WAGE\$ Project – North Carolina
<http://www.childcareservices.org/wagesapps/index.php>

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