

Implementation of Montana’s Early Care and Education (ECE) Workforce Research Agenda Rough Budget

Developed by Child Trends

The *Montana’s Early Care and Education (ECE) Workforce Research Agenda* provides a comprehensive agenda of research to inform investments to support the recruitment, retention, and advancement of Montana’s early care and education workforce. This research agenda was developed with funding from the U.S. Department of Health and Human Services and in coordination with an advisory group of ECE stakeholders in Montana (see Appendix A for a list of Advisory Group Members).

The Research Agenda has been divided below into six meaningful menu options, each associated with a projected rough budget (see budget assumptions below). The majority of research activities associated with this Research Agenda are analysis of existing administrative data, both within and outside of the new MACQS data system. Some research activities involve the collection of qualitative data (focus groups/interviews with ECE directors/owners/providers). A list of research questions associated with each menu option is available in Appendix B.

Budget Assumptions: The figures provided below are rough estimates based on the assumption that Silvana Hackett will be the primary analyst and lead for this project. Ms. Silvana Esposito Hackett has prior experience in management and analysis of early childhood data and evaluation in MT. She has previously worked in data analysis roles at MT DPHHS and MT OPI and is familiar with the data systems and data collection processes for those agencies. Additionally, Ms. Hackett has recently documented the content of the data systems shown in Appendix B. Ms. Hackett will be supported by Dr. Nikki Forry, who assisted in the development of *Montana’s Early Care and Education (ECE) Workforce Research Agenda* and has conducted qualitative and quantitative research in multiple states. These are meant to be used for initial discussions, but a final budget will be aligned to an agreed-upon scope of work.

Timeline Assumptions: Timeline projections assume that all data sharing agreements are in place, and data are matched (if analysis across data sets is applied) and accessible to Ms. Hackett at the beginning of the timeline.

Menu Option	Why do it?	Rough cost estimate	Expected Timeline
Answering high priority research questions identified by Advisory Group	The advisory group that co-constructed the Research Agenda highlighted these questions as yielding the highest priority information for the state (Identified in Appendix B). See Appendix C for list of Advisory Group members.	\$30,000- \$50,000 (depending on amount of data cleaning needed, data matching process, and process for obtaining MOU)	4-6 months

Menu Option	Why do it?	Rough cost estimate	Expected Timeline
Qualitative research with owners/directors/ECE providers to identify issues underlying recruitment, retention, and advancement dynamics	<p>This work could start immediately (without having to wait for MOUs).</p> <p>Qualitative inquiry allows us to see patterns from providers' perspectives. These insights can be used to guide analyses of administrative data.</p>	<p>\$50,000 (12 focus groups)</p> <p>\$80,000 (Focus groups and surveys)</p>	<p>4-6 months (focus groups only)</p> <p>9 months (focus groups and surveys)</p>
Descriptive/Needs Assessment Analysis	<p>Provides information on the current landscape as it relates to provider recruitment, retention, and advancement. This information can be used for identifying patterns and prioritizing needs.</p>	<p>\$30,000- \$50,000</p> <p>(Assumes providing findings for 10 questions)</p>	<p>4-6 months</p>
Process/Outcome Monitoring	<p>Answering these research questions would help in:</p> <ul style="list-style-type: none"> - Identifying implementation issues that may be impacting the efficacy of current initiatives - Deciphering whether interventions are yielding outcomes as expected (This may be useful information prior to investing additional funds to expand initiatives, or to serve as a comparison point for novel initiatives.) 	<p>\$30,000 - \$50,000</p> <p>(Assumes answering retention questions only- see Appendix B¹.)</p>	<p>3-5 months</p>
Evaluation Studies	<p>These methods would use historical data to identify whether program outcomes have been achieved as expected.</p>	<p>\$100,000</p> <p>We would need to work with the MECA Board to identify the scope (depends on methods used and number of programs of interest).</p>	<p>12 months</p>
Updating wireframes	<p>Updating report template wireframes provides an infrastructure for sustainable, automated reporting on trends</p>	<p>\$10,000</p>	<p>2-3 months</p>

¹ Recruitment questions require data matching with OPI and MSU data and can be done for additional cost.

Menu Option	Why do it?	Rough cost estimate	Expected Timeline
	<p>related to recruitment, retention, and advancement of the ECE workforce in MT. Three report structures were developed as part of the research agenda development. This activity would “bring those to life” by developing the programming needed to incorporate into the current data system and supplying it to the vendor. These are not public facing dashboards but internal reports that can be accessed by ECFSD.</p> <p>A public facing Tableau data dashboard can also be developed at an additional cost.</p>	<p>NOTE: This does not include cost of implementing changes to wireframe by the vendor, but does include providing guidance to the vendor.</p>	

Appendix A: Advisory Group Members

Child Care Workforce Advisory Group Members

Jody Lehman	MT DPHHS	Child Care Bureau Chief/CCDF Administrator
Jill Christensen	MT DPHHS	Early Childhood Services Bureau Chief
Sally Tillman	MT DPHHS	Early Learning and School Readiness Program Manager
Kathy Rich	MT DPHHS	Bright Futures B-5 Section Supervisor
Amy Watson	MT DIL	Chief Economist
Caitlin Stewart-Nurse	MT DPHHS	Child Care Licensing Manager
Taylor Forrester	MT Early Childhood Project	Executive Director
Caitlin Jensen	MT Zero to Five	Executive Director
Mark Douglass	MT DPHHS	Head Start Collaboration Director
Sandy Cade	Spark MT	Project Director
Sheryl Hutzenbiler	MT Family Child Care Network	Executive Director
Tracy Moseman	MT DPHHS	Early Childhood Administrator
Joanne Perino	MT Early Childhood Project	Research/Data Analyst

Appendix B: Potential Research Questions to Be Answered

Menu Option	Questions to be Addressed
Answering high priority research questions identified by Advisory Group	<p>Recruitment Questions:</p> <ul style="list-style-type: none"> • How many individuals enter the ECE workforce each year? • What are the qualifications and characteristics of the ECE workforce members who enter? Are these qualifications/ characteristics changing over time (across years)? • What factors drive entry into the ECE workforce? (<i>qualitative inquiry</i>) • What are the characteristics of communities with lower-than-average rates of people entering the ECE workforce? <p>Retention Questions:</p> <ul style="list-style-type: none"> • On a quarterly and annual basis, what is the ratio of people entering vs. exiting the child care workforce? • What factors contribute to turnover? • How strong is the association between provider mental health and turnover? (Could this be a potential driver of turnover?) • What role, if any, do children’s challenging behaviors have on teacher burn- out and exits from the field? What types of behaviors do providers need support with? • What are the characteristics of ECE programs with higher rates of workforce retention? <p>Advancement Questions:</p> <ul style="list-style-type: none"> • Are providers working towards degrees staying in the ECE field or moving onto public schools upon graduation? • Is completion of specific trainings, or training tracks, associated with ECE worker wage increases?
Qualitative research with owners/directors/ECE providers to identify issues underlying recruitment, retention, and advancement dynamics	<p>Recruitment Questions:</p> <p>Drivers of ECE Workforce Entry</p> <ul style="list-style-type: none"> • What factors drive entry into the ECE workforce? • How can we capitalize on intrinsic motivation and other factors driving entry into the ECE workforce through recruitment efforts? <p>Retention Questions:</p> <p>Contributors to Turnover</p> <ul style="list-style-type: none"> • What factors contribute to turnover?

	<ul style="list-style-type: none"> • How strong is the association between provider mental health and turnover? (Could this be a potential driver of turnover?) • What role, if any, do children’s challenging behaviors have on teacher burn- out and exits from the field? What types of behaviors do providers need support with? • Does provider wellbeing impact turnover rates? How can provider wellbeing be improved? (What would improve provider wellbeing?) <p>Improving Workforce Registry</p> <ul style="list-style-type: none"> • How can we minimize registry completion burden for providers while still ensuring enough information to be able to track provider exits accurately? <p>Advancement Questions:</p> <p>Barriers and Supports for Advancement</p> <ul style="list-style-type: none"> • What are reasonable requirements for PD? • What are specific barriers to accessing PD from providers’ (and operators’) perspectives? • How are operators/directors supporting staff in accessing professional development? • How does technology support or hinder access to PD? • Are incentives for engaging in PD enough? • Would offering registry recognition (points) that are commensurate with effort for engaging in coaching motivate providers? How effective is ECP’s current badging system at motivating providers to engage in PD? • What intrinsic motivation do providers have to engage in professional development? Is there a better way to capitalize on this motivation? <p>Association between Advancement and Turnover</p> <ul style="list-style-type: none"> • Does advancement affect ECE workforce members’ decision to stay in the field?
<p>Descriptive/Needs Assessment Analysis</p>	<p>Recruitment Questions:</p> <p>Describing ECE Workforce Entry</p> <ul style="list-style-type: none"> • How many individuals enter the ECE workforce each year? (by region and select community characteristics) • What are the qualifications and characteristics of the ECE workforce members who enter? Are these qualifications/ characteristics changing over time (across years)? Do they vary by region or community characteristics? • What do ECE workforce job postings list as initial wages? • What are the characteristics of communities with higher-than-average rates of entry into the ECE workforce? What about the communities with lower-than-average rates of entry? • How are the demographics of the ECE workforce changing over time in different regions/communities?

School-Based Pathways to Workforce

- What are school districts offering as part of consumer science?
- How many school districts offer a pre-CDA program?
- How many students are enrolled in pre-CDA programs by school district?

Substitutes

- Which programs do/do not have access to substitutes? (analyze by region)
- How many programs have former part/full-time staff that have stayed on as substitutes?

Retention Questions:

Describing Retention Among ECE Providers

- How many ECE workforce members exit their position in a given year? What type of exit are they making? 1) Within Program Turnover, 2) Across Program Turnover, 3) Sector Specific Turnover, 4) Early Childhood Field Turnover, 5) Providers Leaving the State
- On a quarterly and annual basis, what is the ratio of people entering vs. exiting the ECE workforce?
- What is the average career span of ECE workforce members in Montana?
- What are the wages of ECE workforce members, and how do they vary by individual characteristics (e.g., education training), program characteristics (e.g., type of program, quality of program, whether program is licensed), and community characteristics (e.g., poverty density, rurality, Tribal land, region)?
- How do career spans vary by ECE workforce member and program characteristics?
- Is QRIS rating associated with provider turnover?
- What are the characteristics of ECE programs with higher rates of workforce retention?

Cost of Care vs. Cost of Provider Turnover

- What is the true cost of care, and the true cost of provider turnover?

Maintaining Substitutes

- How long, on average, do substitutes stay with a program? How does this vary by region or sociodemographic characteristics of substitute providers?

Advancement Questions:

Access to Professional Development and Advancement

- Are there provider, program, or community characteristics associated with accessing/not accessing professional development?
- What professional development are ECE providers accessing and completing?
- Does advancement vary by region?

Association between Advancement and Turnover

	<ul style="list-style-type: none"> • On average, if providers are not advancing within a certain time frame, are they more likely to leave the ECE workforce? • Are providers working towards degrees staying in the ECE field or moving onto public schools upon graduation? <p>In-house Trainings</p> <ul style="list-style-type: none"> • How many providers are doing training in-house? • What topics are in-house trainings focused on (among approved trainers)? • How many providers are accessing in-house trainings at a program other than their own?
<p>Process/Outcome Monitoring</p>	<p>Recruitment Questions:</p> <p>Outcomes Associated with ECE Career Pipeline Programs</p> <ul style="list-style-type: none"> • How many participants of the pre-CDA for high school program enter the ECE workforce before and after graduating? • Is there an association between taking consumer science courses focused on early learning and care and entry into the ECE workforce? • How many of those graduating with ECE degrees in Montana were employed in the field prior to and following program completion? <p>Retention Questions:</p> <p>Retention Associated with Supports for Children’s Mental Health</p> <ul style="list-style-type: none"> • How many, and which, providers are accessing Infant/Early Childhood Mental Health (IECMH) and complementary coaching? <p>Retention Associated with ECE Career Pipeline and Professional Development Incentive Programs</p> <ul style="list-style-type: none"> • Who is (and who is not) participating in Montana’s Career Path, Early Childhood Apprenticeship Program, Professional Development Incentive Awards, and the Certified Infant Toddler Stipend? (examine by characteristics of providers, programs, and communities) • Are currently established pipelines yielding ECE workforce members that stay in the field at least 5 years?
<p>Evaluation Studies</p>	<p>Recruitment Questions:</p> <ul style="list-style-type: none"> • Was the implementation of child care subsidies for child care workers associated with higher numbers of providers entering the field? • Did the Pay for Performance Metric initiatives impact provider recruitment in targeted areas? • Were PDG-B5 Expansion Grant initiatives successful in recruiting new members to the ECE workforce? <p>Retention Questions:</p>

	<ul style="list-style-type: none"> • Did the Evaluation of Infant/Early Care Mental Health Initiative yield results that could affect provider retention? • Was the implementation of child care subsidies for child care workers associated with higher numbers of providers remaining in the field? • How long are providers engaged in Professional Development Incentive Awards and the Certified Infant Toddler Stipend staying in the early learning and care field after participating? <ul style="list-style-type: none"> • How long are they staying with their current employer? • How frequently are they changing employment among ECE programs after completing professional development? • Did the Pay for Performance Metric initiatives impact provider retention in targeted areas? • Were PDG-B5 Expansion Grant initiatives successful in retaining new members to the ECE workforce? • How long do programs whose employees are engaged the Professional Development Incentive Awards, Certified Infant Toddler Stipend, and child care for child care workers program stay in business, and how does this compare to programs whose employees are not engaged in these programs? <p>Advancement Questions:</p> <ul style="list-style-type: none"> • Professional Development Incentive Awards and the Certified Infant Toddler Stipend: What are the characteristics of participants' ECE employment after program completion? (change in roles with current provider or changing to a better position outside employer?) • Is completion of specific trainings, or training tracks, associated with ECE worker wage increases?
<p>Updating wireframes</p>	<p>Recruitment Questions:</p> <ul style="list-style-type: none"> • How many individuals enter and the ECE workforce each year? • What are the qualifications and characteristics of the ECE workforce members who enter? • How many of those graduating with early childhood education degrees in Montana were employed in the field prior to and following program completion? (to assess the effectiveness of the higher education pipeline) <p>Retention Questions:</p> <ul style="list-style-type: none"> • How many ECE workforce members exit their position in a given year? What type of exit are they making? 1) Within Program Turnover, 2) Across Program Turnover, 3) Sector Specific Turnover, 4) Early Childhood Field Turnover, 5) Providers Leaving the State