

Fiene Early Childhood Program Quality
Improvement & Indicator Model
ECPQIM

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Dr Richard Fiene, (November 11, 1949 -) is a research psychologist who has done research into the key elements in an early care and education program quality improvement system called *Early Childhood Program Quality Improvement and Indicator Model (ECPQIM)*. His research has led to the development of differential/targeted monitoring, risk assessment, and key indicator methodologies to more effectively and efficiently measure regulatory compliance with early care and education standards.

University of North Carolina (1973 - 1975) Professor
Commonwealth of Pennsylvania and Pennsylvania State University (1975 - 2000) Research Psychologist and Adjunct Professor

Pennsylvania State University (2000 - 2012) Professor
Research Institute for Key Indicators and Pennsylvania State University (2012 -) Research Psychologist and Affiliated/Retired Professor



Dr Richard Fiene, Research Psychologist

1 Overview

Dr. Fiene has spent his professional career in improving the quality of child care in Pennsylvania, nationally, and internationally. He has done extensive research and publishing on the key components in improving child care quality through an Early Childhood Program Quality Improvement & Indicator Model (ECPQI2M4) of training, technical assistance, mentoring, licensing, monitoring, and accreditation. The child care models that he de-

veloped in the 1970s and 1980s have been used in the majority of states to improve their licensing/regulatory systems and were the precursors to the development of quality rating systems. A *Parent's Guide to Choosing Safe and Healthy Child Care* published by the Federal Department of Health and Human Services and used by the National Resource Center for Health and Safety in Child Care is based upon Dr. Fiene's *13 Indicators of Child Care Quality* has been used as a checklist by parents nationally to select child care (<http://aspe.hhs.gov/basic-report/13-indicators-quality-child-care>) or (Parents Guide Checklist). This checklist was highlighted in a Parade Magazine article (7/19/09) *The New Push For Quality Child Care*. In addition, his 13 Indicators have been used as part of NACCRRRA's Report Card on Child Care Quality: *We CAN Do Better*.

In addition to Dr Fiene's academic appointments at the University of North Carolina at Greensboro and the Pennsylvania State University as a professor of human development and psychology, he has been a Special Assistant to both the Deputy Secretary for the Office of Children, Youth and Families and the Secretary of Public Welfare during the 1990's in which he was the Research Director and Policy Analyst for the development of the licensing and training systems in the Department of Public Welfare for the Commonwealth of Pennsylvania. He also was part of the statewide committee that developed the original standards for the Keystone STARS Quality Rating System in Pennsylvania and the original designer of the child care/early childhood training and professional development system. He co-founded the Early Childhood Education Linkage System (ECELS) with Dr Susan Aronson, he was the founding director of CAECTI – Capital Area Early Childhood Training and Research Institute with Dr Mark Greenberg, and helped to bring TEACH to Pennsylvania.

Over the past 40 years, Dr Fiene's research and publications have helped states develop and improve their child care licensing systems to more clearly focus on the key factors in developing high quality child care programs. His key indicator and weighting methodologies developed in the 1970's have led to the development and implementation of risk assessment, differential monitoring, and abbreviated inspections in the regulatory administration field; have been highlighted in two major national publications by the Assistant Secretary's Office of Planning and Evaluation (ASPE) and the Office of Children Care (OCC): the white paper (*Innovation in Monitoring ECE Programs*) and licensing brief (*Monitoring Strategies for Determining Compliance*) can be found at the following locations — (http://aspe.hhs.gov/hsp/15/ece_monitoring/rpt_ece_monitoring.cfm) and (https://childcareta.acf.hhs.gov/sites/default/files/public/1408_differential_monitoring_final_1.pdf); and are part of the *NARA Licensing Curriculum*.

His key indicator and weighting methodologies have led to the development of Stepping Stones to Car-

ing for Our Children, the National Early Childhood Program Accreditation system, Head Start Differential Monitoring and Key Indicators, Caring for Our Children-Basics (<http://www.acf.hhs.gov/programs/ecd/caring-for-our-children-basics>), Thirteen Key Indicators to Quality Child Care, and the Cruise to Quality Child Care Standards for the cruise line industry as adapted by CLIA.

In 2012, Dr Fiene retired from Penn State University and started the Research Institute for Key Indicators (RIKI) to continue his work into differential monitoring, risk assessment, and key indicators. Dr Fiene was department head for both the Psychology and Human Development & Family Studies programs at Penn State Harrisburg and he directed the Capital Area Early Childhood Research and Training Institute when he retired. He received numerous awards over his 40 year career while with the Commonwealth of Pennsylvania and with the Pennsylvania State University.

In 2015, RIKI (Research Institute for Key Indicators) and NARA (National Association for Regulatory Administration) entered into an exclusive partnership for the future development and implementation of differential monitoring, risk assessment and key indicators in which NARA will assume the intellectual property rights of these methodologies.

Dr Fiene's research into regulatory compliance has introduced an interesting paradigm to how rules/regulations/standards should be measured or assessed. Based upon his Theory of Regulatory Compliance (TRC) he proposes that substantial rather than full compliance with all rules/regulations produces the best outcomes. For additional information regarding TRC, please see the publications that follow and the web site in particular that contain additional information.

1.1 Areas of Research:

As a research psychologist Dr Fiene has spent his professional career in improving the quality of early care and education/child care in various states, nationally, and internationally with positions within academia (University of North Carolina at Greensboro and the Pennsylvania State University) and in state government (Commonwealth of Pennsylvania). He has done extensive research and publishing on the key components in improving early care and education/child care quality through an Early Childhood Program Quality Indicator & Improvement Model (ECPQI2M4©) of training, technical assistance, quality rating & improvement systems (QRIS), professional development, mentoring, licensing, risk assessment, differential program monitoring, key indicators, and accreditation. This ECPQI2M4© is in its fourth edition. Dr Fiene is a retired professor of human development & psychology (Penn State University – University Park and Harrisburg campuses) where he was department head (Harris-

burg) and director of the Capital Area Early Childhood Research and Training Institute (University Park).

Kontos & Fiene (1987). Child care quality, compliance with regulations, and children's development: The Pennsylvania Study, in *Quality in Child Care: What Does Research Tell Us?*, Phillips, editor, Washington, D.C.: National Association for the Education of Young Children.

Morgan, Stevenson, Fiene, & Stephens (1986). Gaps and excesses in the regulation of child day care, *Reviews of Infectious Diseases--Infectious Diseases in Child Day Care: Management and Prevention*, 8(4), 634-643.

Fiene & Nixon (1985). Instrument based program monitoring and the indicator checklist for child care, *Child Care Quarterly*, 14(3), 198-214.

Fiene (1985). Measuring the effectiveness of regulations, *New England Journal of Human Services*, 5(2), 38-39.

Dr Fiene's research falls into three major areas. Dr Fiene's work into identifying early care and education key indicators of regulatory compliance has led to the development of national health and safety standards for the early care and education field. The recent publication of *Caring for Our Children: Basics* (2015) by the Federal Office (ACF – Administration for Children and Families) sets out the voluntary national standards based upon, in part, my child care licensing key indicator and risk assessment methodologies. Also, Dr Fiene's key indicator and risk assessment methodologies have led to the development of a cost effective and efficient differential monitoring approach used by the majority of states in monitoring and licensing early care and education/child care facilities in the USA; and the Office of Head Start, the National Early Childhood Program Accreditation, & National Center for Health and Safety in Child Care at the national level; and several provinces in Canada and the Cruise Line Industry at the international level.

Fiene, (2015). *Early childhood program quality indicators model (Version 4): Differential monitoring, risk assessment and key indicators*, Middletown, PA.: Research Institute for Key Indicators.

Fiene (2013). A Comparison of International Child Care and US Child Care Using the Child Care Aware – NAC-CRRA (National Association of Child Care Resource and Referral Agencies) Child Care Benchmarks, *International Journal of Child Care and Education Policy*, 7(1), 1-15.

Fiene (2003). Licensing related indicators of quality child care, *Child Care Bulletin*, Winter 2002-2003, 12-13.

Fiene (2002). *Thirteen indicators of quality child care: Research update*. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services.

A second area involves Dr Fiene's work into developing effective professional development and technical assistance opportunities through mentoring programs for early

care and education/child care (ECE/CC) professionals has provided guidance to the ECE/CC field in designing and implementing cost effective means for ECE/CC professional development state systems. The mentoring program Dr Fiene developed influenced the training and technical assistance system which is part of many Quality Rating and Improvement Systems (QRIS). He directed an ECE/CC training institute based at Penn State University from 2000-2012, created and directed the Commonwealth of Pennsylvania's ECE/CC professional development system from 1990-1995, co-founded the Early Childhood Education Linkage System (health & safety training) and the Capital Area Early Childhood Training Institute (infant toddler caregiver training).

Johnson, Fiene, McKinnon, & Babu (2010). *A study of early childhood education pre-service teacher education at major universities in 38 pre-k states*. New York, New York: Foundation for Child Development.

Fiene (2009). *Mentoring programs help caregivers "weigh" in on children's eating behaviors*, *Penn State Policy Briefing*, University Park, Pennsylvania: Center for Public Policy Research in Environment, Energy and Community.

Fiene (2002). Improving child care quality through an infant caregiver mentoring project, *Child and Youth Care Forum*, 31(2), 75-83.

Johnson, Fiene, Keat, Darling, Pratt, Iutovich (2001). Mastering course content and learner satisfaction: A comparison of regular classroom instruction with three variations of internet delivery. *Journal of Early Childhood Teacher Education*, 22(4), 267-274.

The third area involves Dr Fiene's work into the design, validation, evaluation and implementation of ECE Quality Rating and Improvement Systems (QRIS) has helped to develop the Pennsylvania Keystone STARS QRIS and other QRIS systems across the country. Gail Zellman and Fiene have written an influential research brief (Zellman & Fiene, 2012) outlining a four tiered framework for validating state QRIS being used by many states as they validate their QRIS systems for the Race to the Top Federal program initiative.

Lahti, Elicker, Zellman, & Fiene (2014). Approaches to validating child care quality rating and improvement systems (QRIS): Results from two states with similar QRIS type designs, *Early Childhood Research Quarterly*, available online 9 June 2014, doi:10.1016/j.ecresq.2014.04.005.

Zellman & Fiene (2012). *Validation of quality rating and improvement systems for early care and education and school-age care*, Washington, D.C.: OPRE and Child Trends.

Manlove, Benson, Strickland, & Fiene (2011). *A comparison of regulated child care in rural and urban Pennsylvania*, Pennsylvania: Center for Rural Pennsylvania.

Fiene and Isler (2007). Home based and family child care: Characteristics and quality issues, In C.J. Groark, K.E. Mehaffie, R.B. McCall & M.T. Greenberg (Eds.), *Evidence-Based Programs, Practices, and Policies for Early Childhood Care and Education*. Thousand Oaks, CA: Corwin Press.

1.2 Timeline: Development of Differential Monitoring, Risk Assessment and Key Indicator Methodologies:

Dr Fiene started work on differential monitoring, risk assessment and key indicators as a graduate student in the department of psychology at SUNY Stony Brook in the early 1970's while working with Dr Francis Palmer when he designed a regional model on Long Island in New York to track and categorize early care and education programs. This developed into a major area of research as his professional career unfolded. During this time while he was directing the Mary Elizabeth Keister Infant Toddler Program at the University of North Carolina at Greensboro he was doing additional research into the play patterns of infants and toddlers and came up with an innovative model for describing their play patterns which he termed "clustering". At the same time, other researchers from the University of Minnesota used the term "herding" but they were describing the same behavior. Dr Fiene later applied this developmental play pattern discovery as a suggestion for improving and supporting the need to alter adult child ratios based upon developmental play patterns.

In 1975, Dr Fiene was recruited by the Governor's Office of the Commonwealth of Pennsylvania to develop his regional monitoring model for Appalachian Regional Commission Child Development Programs throughout the state. He left the University of North Carolina but established a relationship with the Pennsylvania State University that became the backbone of his professional career, first in an adjunct professor capacity but later in his career as a full time faculty member. The monitoring system he developed EMIS - Ecological Monitoring Information System, an instrument based program monitoring system, was the first generation/pilot phase in the development of his Early Childhood Program Quality Improvement and Indicator Model (ECPQIM0) that became the focus of his research for the next 40 years. Very few researchers were interested in doing this type of policy research especially when it involved licensing and program monitoring.

In 1977, Dr Fiene collaborated with Dr Susan Aronson, a pediatrician also interested in the health and safety related to early care and education (ECE) programs. This collaboration would endure for the next 40 years and is still active as of this writing. Drs Aronson and Fiene developed a very innovative instrument based program monitoring system called the Child Development Program Evalua-

tion (CDPE) that would have a tremendous impact on the licensing and monitoring of ECE programs. During this time, Dr Fiene devised other instrument based systems to monitor ECE standards such as his Adult Child Ratio Regulatory Compliance Model. This was an innovative model in which concepts taken from geometry were used to measure compliance with specific adult to child ratios.

During this time, the Federal Interagency Day Care Requirements (FIDCR) were being revised and the Federal government was looking for a streamlined approach to deal with the large number of specific regulations. In 1979, Drs Aronson and Fiene were invited to Washington, D.C. to explain how the CDPE system could be used with the new FIDCR requirements. It was during this time that Dr Fiene designed the Key Indicator methodology initially and then the risk assessment and finally the differential monitoring methodologies. Based upon this work, Dr Fiene and a consortium (CSMTC - Children's Services Monitoring Transfer Consortium) of states, Pennsylvania, California, West Virginia, Michigan, and New York received a federal grant to further develop and dissemination Dr Fiene's work into differential monitoring, risk assessment and key indicators. Based upon this research several publications were produced on program monitoring, risk assessment and key indicators and the *Child Development Program Evaluation Scale (CDPES)* and *Caregiver Observation Form and Scale (CO-FAS)* which factored the risk assessment and key indicators from the states of the CSMTC (1981, 1983, 1984, 1985)(ECPQIM1). In 1987 these methodologies developed in ECE programs were expanded to child welfare/child residential programs and Dr Fiene's Theory of Compliance Outcome/Regulatory Compliance appeared in the *New England Journal of Human Services*.

A key component/element of the ECPQIM1+ was to tie differential monitoring, risk assessment and key indicators to child development outcomes. This study was undertaken by Drs Susan Kontos and Fiene in 1987 and published in NAEYC's *Research Monograph Quality in Child Care: What Research Tells Us* edited by Deborah Phillips. This was a very important study which established a model for doing this type of policy research and helped to round out Dr Fiene's ECPQIM.s

The 1990's ushered in an expansion of the ECPQIM2 to include several demonstration projects in the professional development area, such as ECELS - Early Childhood Education Linkage System, co-founded by Aronson and Fiene through the Pennsylvania Chapter of the American Academy of Pediatrics, bringing TEACH to Pennsylvania, the Better Care Project and the Child Care and Early Childhood Development training system (CCECD); and the development of the National Early Childhood Program Accreditation (NECPA) system based upon the key indicator and risk assessment methodologies. *Stepping Stones to Caring for Our Children* was developed based upon Dr Fiene's risk assessment methodology. ECPQIM moved into its second edition through a Zero to Three

federal grant that resulted in a publication by Griffin and Fiene entitled *Systematic Approach to ECE Regulatory Review*. During this time Dr Fiene helped to develop two very important public policy initiatives in Pennsylvania: Key Stone STARS: Pennsylvania Quality Rating and Improvement system which became a national model and the Human Services Licensing Office. But probably the most significant piece of work during this decade was Dr Fiene's publication *A Potential Solution to the Trilemma* which appeared in *Child Care Information Exchange* which laid out a innovative policy paradigm for balancing quality with accessibility and affordability in ECE.

The year 2000 was a major shift for Dr Fiene as he moved from being part time at Penn State to a full time faculty member (Prevention Research Center, Department of Human Development and Family Studies, College of Health and Human Development) leaving the Pennsylvania Office of Human Services Licensing. In 2000, he and Dr Mark Greenberg co-founded the Capital Area Early Childhood Research and Training Institute (CAECTI) which became a statewide model for infant toddler caregiver mentoring. In 2001, saw several major publications of Dr Fiene's work which helped to expand and refine his ECPQIM, such as the National Association for Regulatory Administration's *Licensing Curriculum* included a chapter on *Licensing Measurement (ECPQIM3)* that highlighted Dr Fiene's work; the *Pennsylvania Early Childhood Program Quality Study* was completed, the Assistant Secretary Office of Planning and Evaluation (ASPE) published Dr Fiene's *13 Quality Indicators* which has impacted state's regulatory development and implementation; National Resource Center for Health and Safety in Child Care publication of a *Parent's Guide to Safe and Healthy Child Care* based upon Dr Fiene's *13 Quality Indicators*; and the publication of Dr Fiene's *Infant Caregiver Mentoring Model* in *Children and Youth Quarterly*. Later in the decade the National Association for Child Care Resource and Referral (NACCRRA) began publishing their *We CAN Do Better Reports* based partly on Dr Fiene's work. And finally, an evaluation was undertaken of the Key Stone STARS QRIS in 2006 to determine its effectiveness.

2010 started with Dr Fiene developing standards for child care provided on cruise ships based upon his key indicator and risk assessment methodologies. This was followed by two studies on professional development in higher education funded by the Foundation for Child Development and an assessment of rural child care funded by the Center for Rural Pennsylvania. But probably 2012 saw the beginning of a major refinement to Dr Fiene's ECPQIM4 model with the OPRE publication of Zellman & Fiene's Validation Brief which conceptualized a framework for states to do validation studies in licensing and QRIS. This was followed in rapid succession with several national, state and provincial validations (Georgia, Kansas, Illinois, New York, Ontario, Head Start). But probably the most significant developments during this decade and the cul-

mination of Dr Fiene's research was the publication and dissemination of the following very important and significant publications in 2015 by the federal government (Department of Health and Human Services, Administration for Children and Families, Office of Child Care, Office of Head Start, and Assistant Secretary Office for Planning and Evaluation: *Caring for Our Children BASICS, Head Start Key Indicators, and Innovation in ECE Program Monitoring*. Other significant events in this decade was Dr Fiene's retirement from Penn State University and the creation of the Research Institute for Key Indicators (RIKI) and the sale of the property rights for differential monitoring, risk assessment and key indicators to the National Association for Regulatory Administration (NARA).

Dr Fiene continues to research and write about differential monitoring, risk assessment, key indicators, policy analysis and other ECE issues in general through his Research Institute for Key Indicators (RIKI) and his new association with the National Association for Regulatory Administration (NARA). But his major focus is on the full adoption of *Caring for Our Children BASICS* by the ECE field.

To view or access many of these publications, please go to the **Research Institute for Key Indicators LLC**: <http://rikoinstitute.wikispaces.com>

Fiene & Kroh, (2016). *Human service licensing measurement, regulatory compliance, and program monitoring systems*, Lexington, KY.: National Association for Regulatory Administration.

Fiene, (2015). *Early childhood program quality indicators model (Version 4): Differential monitoring, risk assessment and key indicators*, Middletown, PA.: Research Institute for Key Indicators.

Lahti, Elicker, Zellman, & Fiene (2014). Approaches to validating child care quality rating and improvement systems (QRIS): Results from two states with similar QRIS type designs, *Early Childhood Research Quarterly*, available online 9 June 2014, doi:10.1016/j.ecresq.2014.04.005.

Fiene (2013). A Comparison of International Child Care and US Child Care Using the Child Care Aware – NACCRRA Child Care Benchmarks, *International Journal of Child Care and Education Policy*, 7(1), 60-66.

Zellman & Fiene (2012). *Validation of quality rating and improvement systems for early care and education and school-age care*, Washington, D.C.: OPRE and Child Trends.

Fiene & Carl (2011). Child Care Quality Indicators Scale, in T Halle (Ed.), *Quality Rating and Improvement Systems Tool Kit*, Washington, D.C.: Child Trends.

Manlove, Benson, Strickland, & Fiene (2011). *A comparison of regulated child care in rural and urban Pennsylvania*, Pennsylvania: Center for Rural Pennsylvania.

- Johnson, Fiene, McKinnon, & Babu (2010). *A study of early childhood education pre-service teacher education at major universities in 38 pre-k states*. New York, New York: Foundation for Child Development.
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- Co-Principal Investigator, Developing a Valid and Reliable BASICS Health and Safety Checklist, Early Childhood Education Linkage System, Pennsylvania Chapter of the American Academy of Pediatrics with the University of California at San Francisco as prime contractor, proposal developed.
- Consultant, iLookOut Child Abuse Prevention Program, College of Medicine, Hershey Medical Center, Penn State University, National Institute for Health, Washington, D.C., proposal submitted.
- Consultant, National Center for Early Childhood Quality Assurance, ICFI, Office of Child Care, Administration of Children and Families, Department of Health and Human Services, Washington, D.C., awarded contract, 2015-2020.
- Consultant/Investigator, National Head Start Monitoring System, Lewin Group, Office of Head Start, Washington, D.C., awarded contract, 2015-2020.
- Lead Consultant/Investigator, Differential Monitoring, Key Indicator, Risk Assessment Modeling, National Association for Regulatory Administration, \$100,000, 2015-2020.
- Consultant/Investigator, Ontario Child Care Risk Based Assessment System, Ministry of Education, Province of Ontario, Canada, \$12,995, 2015-16.
- Principal Investigator, New York Key Indicators for Centers and Homes/Quality Indicators, Fund for the City of New York, \$18,000, 2015-16.

- Investigator/Evaluator, Infant Toddler Quality Improvement Project, Pennsylvania Early Childhood Linkage System, Federal Department of Maternal and Child Health, Health Resources and Services Administration, \$420,000, 2013-2016.
- Principal Investigator, Colorado QRIS Key Indicators Project, Qualistar Colorado, \$15,000, 2014.
- Principal Investigator, Illinois Risk Assessment and Key Indicators Project, National Association for Regulatory Administration, \$22,000, 2014.
- Principal Investigator, Wisconsin Differential Monitoring and Risk Assessment Project, National Association for Regulatory Administration, \$2,000, 2014.
- Principal Investigator, Hawaii Key Indicator Blueprint Project, University of Hawaii, \$9,000, 2013.
- Principal Investigator, Oregon Differential Monitoring, Key Indicator and Risk Assessment Blueprint Project, Oregon Licensing Office, and BLH Technologies, \$16,500, 2013.
- Principal Investigator, Kansas Child Care Key Indicators Project, National Association for Regulatory Administration, \$16,000, 2013.
- Principal Investigator, Office of Head Start Key Indicators Project, Administration of Children and Families, Federal Department of Health and Human Services, \$42,000, 2012-2013.
- Co-Investigator, Georgia Licensing and Monitoring Project, Georgia Department of Early Care and Learning and the University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, \$20,000, 2012-2013.
- Principal Investigator, Georgia Child Care Compliance Project, Georgia Department of Early Care and Learning, Atlanta, Georgia, \$160,000, 2011-2013.
- Investigator, California Human Services Key Indicator Inspection Model Project, National Association for Regulatory Administration and California Office of Licensing, \$15,000, 2011-2012.
- Principal Investigator, Child Care Standards Cruise to Quality Project, Cruise Line Industry, Miami, Florida, \$65,000, 2010-2012.
- Principal Investigator, Early Childhood Education, Infant, and Toddler Professional Development and Quality Improvement Program, Greater Harrisburg Foundation, Wells Foundation, Whitaker Foundation, and Office of Child Development and Early Learning, Department of Public Welfare, Harrisburg, Pennsylvania, \$7,650,000, 2000-2012.
- Co-Principal Investigator with Betsy Manlove and Margaret Benson, Characteristics of Regulated Child Care in Rural Pennsylvania, Center for Rural Pennsylvania, \$49,994, 2009-2010
- Co-Investigator with James Johnson and Kathleen MacKinnon, National PK-3 Pre-Service Teacher Education Project, Foundation for Child Development, New York, New York, \$130,000, 2008-2009.
- Co-Principal Investigator with Matthew Kaplan, Adult Residential Living Training Project, Pennsylvania Department of Public Welfare, Harrisburg, Pennsylvania, \$496,142, 2006-2007.
- Co-Principal Investigator with James Johnson, Early Childhood Development Initiative, Children, Youth and Families Consortium, Social Sciences Research Institute, The Pennsylvania State University, University Park, Pennsylvania, \$20,000, 2006-2007.
- Co-Investigator with Barbara Carl, York Quantum Human Services Planning and Evaluation, York County YWCA, York, Pennsylvania, \$30,000, 2005-2006.
- Principal Investigator, Mind in the Making Evaluation, Pennsylvania Key/Office of Child Development, Department of Education, Harrisburg, Pennsylvania, \$33,519, 2005-2006.
- Co-Principal Investigator with Elizabeth Manlove, Judy Zaengline, Jane Keat, Caroline Owens, & Beth Gill-McDonald, Family Communications Early Childhood Workshop Evaluation Project, SAMHSA, Washington, DC, \$100,000, 2003-2006.
- Co-Principal Investigator with Anne Farber, Keystone Stars Evaluation, University of Pittsburgh and Pennsylvania Department of Public Welfare, Harrisburg, Pennsylvania, \$15,800, 2002-2004
- Principal Investigator, Mentoring Evaluation Projects, York, Lebanon, Cumberland, Lycoming counties, Department of Public Welfare, Harrisburg, Pennsylvania, \$79,000, 2002-2003.
- Co-Principal Investigator with Mark Greenberg, The Pennsylvania Early Childhood Quality Study, Governor's Task Force on Early Care and Education, Governor's Partnership, Harrisburg, Pennsylvania, \$560,000, 2002-2003.
- Principal Investigator, Lycoming-Clinton Head Start Family Child Care Mentoring Evaluation, Williamsport, Pennsylvania, \$78,000, 2000-2002.
- Principal Investigator, Louise Child Care Mentoring Evaluation, Heinz Foundation, Pittsburgh, Pennsylvania, \$4000, 2001-2002.
- Principal Investigator, National Accreditation Validation Outcome Project, National Child Care Association, Atlanta, Georgia, \$10,000, 1999-2000.
- Co-Principal Investigator with R. Neal, National Standards Research Project, National Resource Center for Health and Safety in Child Care, University of Colorado at Denver, Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Washington, D.C., \$130,000, 1999-2000.

Co-Principal Investigator with J. Johnson, Children, Youth and Families Child Care and Information Technology, Children, Youth and Families Consortium, The Pennsylvania State University & Keystone University Research Corporation (Erie), University Park, Pennsylvania, \$105,500, 1998-2000.

Principal Investigator, Georgia Weighted Indicator Project, Georgia Child Care Leadership Forum, Atlanta, Georgia, \$25,000, 1996-1997.

Co-Principal Investigator with C. Kuhns, National Evaluation Instrument for the APHA/AAP Standards Project, National Center for Early Childhood Program Evaluation; National Center for Education in Maternal and Child Health, Georgetown University, Early Childhood Health Division, Bureau of Maternal and Child Health, Dept. of Health and Human Services, Washington, D.C., \$210,000, 1993-1995.

Principal Investigator, Maryland Licensing Indicator Systems Project, Maryland Office of Child Development, Baltimore, Maryland, \$17,000, 1993-1994.

Principal Investigator, National Child Care Association's (NCCA) National Early Childhood Program Accreditation System, and National Pilot Study, National Child Care Association, Atlanta, Georgia, \$21,000, 1991-1993.

Co-Principal Investigator with S. Aronson, Early Childhood Education Linkage System, Pennsylvania Chapter of the American Academy of Pediatrics. Office of Maternal and Child Health, Federal Department of Health and Human Services, Washington, D.C. and the Robert Wood Johnson Foundation, Princeton, NJ \$737,000, 1989-1993.

Co-Principal Investigator with S. Melnick, Pennsylvania Chapter of the American Academy of Pediatrics Evaluation Project, Pennsylvania State University at Harrisburg. Office of Maternal and Child Health, Federal Department of Health and Human Services, Washington, D.C., and the Robert Wood Johnson Foundation, Princeton, NJ, \$150,842, 1989-1992.

Co-Principal Investigator with S. Melnick, State of Washington Licensing Matrix Project, Department of Social and Health Services, Olympia, Washington, \$121,375, 1991-1992.

Co-Principal Investigator with S. Melnick, Ken-Crest Centers, Plymouth Meeting, Pennsylvania, Abandoned Infant Assistance Program—Technology Dependent Babies Evaluation Project. Administration for Children Youth and Families, Federal Department of Health and Human Services, Washington, D.C., \$59,825, 1990-1992.

Co-Principal Investigator with S. Melnick, Pennsylvania Early Childhood Program Quality Study, Pennsylvania State University at Harrisburg. Pennsylvania Office of Policy and Evaluation, Department of Public Welfare,

Harrisburg, Pennsylvania, \$50,000, 1988-1990.

Co-Principal Investigator with H. Williams and R. Lesniak, Child Care Training Needs Survey Project, Continuing Education Division and the Behavioral Science and Education Division, Pennsylvania State University at Harrisburg, Middletown, Pennsylvania, \$5,000, 1988-1989.

Co-Principal Investigator with S. Kontos, Pennsylvania Day Care Study, Pennsylvania Office of Children Youth and Families and the Pennsylvania State University, University Park, Pennsylvania, \$10,000, 1984-1986.

Principal Investigator, Children's Services Monitoring Transfer Consortium, Washington, D.C., Office of Human Development Services, Federal Department of Health, Education and Welfare, and Federal Department of Health and Human Services, Washington, D.C., \$450,000, 1980-1982.

Principal Investigator, Evaluation and Monitoring Project, Governor's Office for Human Resources, HEW# A4243451B, Harrisburg, Pennsylvania, \$120,000, 1975-1977.

Principal Investigator, Day Care Group Size Study, University of North Carolina at Greensboro, NC# 260016, Greensboro, North Carolina, \$25,000, 1973-1974.

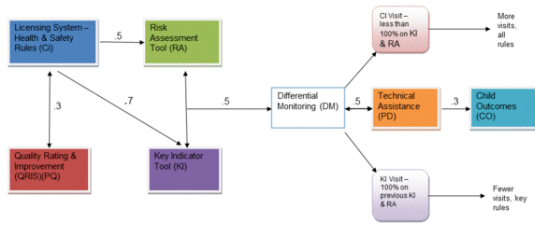
2 Graphics describing Dr Fiene's methodologies:

Key Indicator Formula Matrix

	Providers In Compliance with specific standard	Programs Out Of Compliance with specific standard	Row Total
High Group = top 25%	A	B	Y
Low Group = bottom 25%	C	D	Z
Column Total	W	X	Grand Total

Use data from this matrix in the formula on the next slide in order to determine the phi coefficients

2.1 The first graphic displays the Key Indicator Formula Matrix showing how the data are used to determine the phi coefficients in the following formula:



$$\sum CI \times \sum PQ \Rightarrow \sum RA + \sum KI \Rightarrow \sum DM + \sum PD \Rightarrow CO$$

25

2.2 $\Phi = (A * D) - (B * C) / \text{SQRT}(W * X * Y * Z)$

2.3 The second graphic displays the Differential Monitoring Logic Model and Algorithm (DMLMA) showing the relationship of the key components/elements of the model.

2.4 $\Sigma PC \times \Sigma PQ \Rightarrow \Sigma KI + \Sigma RA \Rightarrow \Sigma DM + \Sigma PD \Rightarrow CO$

For additional details regarding these models, please go to the following:

<http://rikinstitute.wikispaces.com>

This website contains the full detailed descriptions of differential monitoring, risk assessment and key indicator methodologies.

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