CHALLENGE:

Early Childhood Innovation Prize

PHASE: Open Submission  >  MISSIONS: Surprise Us  >

Early Childhood Program Quality Improvement and Indicator Model (ECPQI2M)

ECPQI2M is a systems approach to improving ECE through state data systems by identifying key indicators tied to child outcomes.

Written by Dr Richard Fiene
Updated 5 hours ago

Name or Organization

Penn State University and Research Institute for Key Indicators (RIKILLC)

Geography

The ECPQI2M can be implemented at the national, international or jurisdiction level (state, province, local, etc...) levels. It is totally scalable and can be tied to any intervention in order to identify the key predictor indicators.

What is your stage of development?

- Advanced Innovator with 3 to 10+ years of experience in ECD

Type

- Individual

What is the stage of your proposal?
• Full-scale roll-out: I have completed a pilot and analyzed the impact of that pilot on the users I am trying to reach with my idea. I am ready to expand the pilot significantly.

Describe your submission in one clear sentence

The Early Childhood Program Quality Improvement and Indicator Model (ECPQI2M) aims to improve the overall quality of early care and education programs via a statistical key predictor indicator methodology which can be applied at the local, state, jurisdiction, national, or international levels.

Describe how your solution could be a game-changer for your selected Opportunity Area (600 characters)

The ECPQI2M will make any local, state, national, or international monitoring or data system more cost efficient and effective. It is a non-parametric approach to statistical analysis which focuses on identifying the "right" standards rather than attempting to reduce or increase standards in a non-empirical approach. It is data driven based upon 40+ years of research in identifying key predictor indicators.

Select an Innovation Target

• System design: Solutions that target changing larger systems.

Tell us more about your innovation (1500 characters)

The Early Childhood Program Quality Improvement and Indicator Model (ECPQI2M) aims to improve the overall quality of early care and education programs via a statistical key predictor indicator methodology which can be applied at the local, state, jurisdiction, national, or international levels. The ECPQI2M focuses on data from licensing, quality improvements, professional development, training, technical assistance, and accreditation systems. ECPQI2M than integrates the data from the various systems into a holistic approach to identifying high quality environments for children.

What problem are you aiming to solve? (3 sentences)

1) Fuzzy public policy development not based upon empirical data.
2) Dealing with inefficient and ineffective data and monitoring systems.
3) A focused/targeted approach to improving early care and education quality.

Explain your idea (5000 characters)
The ECPQI2M can be used in any existing system no matter the level of sophistication from paper to electronic real time systems. A series of statistical algorithms are applied to the various data and monitoring systems used by the jurisdiction. A small group of statistical key predictor indicators are identified that are tied to child outcomes. The impacted systems become more effective and efficient through the process that is sustainable over time.
The ECPQI2M will be applied to actual systems’ interventions which will produce key predictor indicators. These results will be written up in reports which will be shared with other jurisdictions and placed on the web so others can learn the methodology. This will be done in a public domain so that anyone can have access to the results. I believe in a free exchange of ideas and sharing of information that should be placed in the public domain for others to learn from.
The nature of scientific inquiry is for all of us to learn from each other and to move the field forward. The ultimate goal is to reach as many jurisdictions as possible through the public dissemination of information. Having access to national organizations who are interested in these issues will make this easier to do.

Who benefits? (1500 characters)

1a) The children and their families should benefit the most by having more sensitive public policies that will meet their needs.
1b) Jurisdictions will benefit by having more cost efficient and effective monitoring and data systems related to early care and education delivery.
2) I have over 40 years of research and public policy work engaged in the development and implementation of the methodologies of ECPQI2M.

What kind of impact will your idea have? (1500 characters)

The ECPQI2M has already led to the development of Stepping Stones to Caring for Our Children and to Caring for Our Children BASICS which are two widely used publications that assist state administrators in improving the quality of early care and education, especially at the licensing or regulatory levels. The key indicators developed in the past in licensing systems via ECPQI2M have been used as a basis for the development of voluntary national ECE standards at the Federal level in the US. The plan would be to expand ECPQI2M into quality improvements, training, technical assistance, professional development, and accreditation systems and to go well beyond the regulatory and licensing arena which has dominated my work and contributions in the past.

How does or how could your idea impact low-income children? (1500 characters)
Because ECPQI2M can be applied to any data or monitoring system, it is an easy application that can be used by state or federal governments with any subsidy based program.

**Innovation: What makes your concept innovative? (1500 characters)**

Statistical Key Predictor Indicators in the past have assumed linear relationships. The ECPQI2M approach is based upon a non-linear algorithm which is more in tune with the nature of the social science data we are dealing with. It is not about more or less standards, it is about finding the “right” standards that have the most impact on children and families.

**Scale: Describe how your idea could reach a significant number of end-users. (1500 characters)**

The ECPQI2M does not require legislation or regulations, it uses existing data to make the delivery systems more effective and efficient. Therefore, it has the ability to reach all users within a jurisdiction, state, national, or international level. For example, these methodologies have the potential impact of reaching the 14,000,000 children who are served in early care and education programs on a daily basis.

**Feasibility: Where are you with understanding the feasibility of your idea? Describe what you’ve done so far and your plans. (3000 characters)**

There are a group of national consultants who could help in the development and implementation of ECPQI2M as well as myself and a national organization that could help.

Over $10,000,000 have been obtained over the past 40 years to develop, refine, and implement ECPQI2M in various jurisdictions. It presently is in its 4th edition. The plan would be to expand ECPQI2M impact on a much broader scale.

**Business Viability: How viable is your business model? (1500 characters)**

It has been utilized in several markets, the plan is to expand this market presence. ECPQI2M has been tried and tested in many jurisdictions to date. Outcome studies have been done, cost efficient studies have been done. It has been used at the national level and at the state/jurisdiction levels. ECPQI2M has been written up in the research literature and is practically a "turn-key" system intervention.
HCQ: How have you used human centered design to build or refine your concept? (1500 characters)

There is always an end user feedback loop and validation phase to the implementation of ECPQI2M in any jurisdiction it has been developed for. A validation methodology and framework has been developed to determine if the model really works within a specific jurisdiction.

Tell us more about you (3000 characters)

Idea came to me as a graduate student as I visited early care and education programs in low income areas in New York City. I have spent over 40 years in trying to improve the overall quality of ECE. I have written extensively on the subject and continue to work in the field presently. I have no intentions of stopping my work. Early childhood is the beginning for all children and I want it to be the highest quality for every child. In those 40 years, I have worked within academia (research universities) and the public policy sector (state and federal government) in attempting to improve early care and education program quality. I remember so clearly the ups and downs of ECE over the years, where in the middle of my career feeling we weren't moving forward - that we had started to move in a backwards fashion and coming to the conclusion we were no better off than when I entered the field 20 years earlier. This is a very sobering experience for anyone early in their career. We always think our field will move forward in a positive way. But after reaching this low point, I am so encouraged by where we are at now, and this Prize is such an excellent example of what we can do when we think "outside the box". I just want to be part of this wonderful initiative as we move forward, to work with others on improving the quality of care for our most vulnerable young children. My website (http://prevention.psu.edu/people/fiene-richard) clearly delineates the types of experiences I have had in this area.

Do you have the people and partners you need to do what you’ve described? (500 characters)

Yes, I have the partners I need but would be open to including others which will probably be the case because this is a systems intervention.

As you consider your next steps, what kinds of help could you use? Is there a type of expertise that would be most helpful? (1800 characters)

I would be open to working with anyone who shares a passion for improving the quality of early care and education. I have always been known for my ability to
work with others in a collaborative fashion. I welcome the opportunity to work with others to learn from them and hopefully for them to learn from me. This Prize is such a wonderful opportunity in ECE, it just has not existed in the past.

**Would you like mentoring support? [Relevant only for Early Submission Deadline]**

- Yes

**If so, what type of mentoring support do you think you need? (1200 characters) [Relevant only for Early Submission Deadline]**

I would be open to any interaction with other innovators. I have done a great deal of research in the field but I am humbled by all the unanswered questions. Only through interacting with others will we be able to answer these questions.

**Are you willing to share your email contact information submitted on OpenIDEO with Gary Community Investments?**

- Yes, share my contact information

**[Optional] Biography: Upload your biography. Please include links to relevant information (portfolio, LinkedIn profile, organization website, etc).**

https://rikinstitute.com/

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**WRITTEN BY**

**Dr Richard Fiene**

*Research Psychologist*

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**TEAM**

**CREATE TEAM**

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ATTACHMENTS (1)

1ECPQIM PRESENTATION.pdf
Powerpoint describing the ECPQIM - Early Childhood Program Quality Improvement and Indicators Model which is a systems approach to improving ECE by a combination of identifying key predictor indicators from professional development, licensing, quality initiatives, accreditation, training, & technical assistance and tying these key indicators to child outcomes.

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