Formative Evaluation of Eastern Carver County's Intercultural Specialists Program

2015 – 2016

Prepared by
Satlaj Dighe

A Paper Submitted in Partial Fulfillment of the Requirements for a
Master of Public Health Degree

School of Public Health | University of Minnesota

Prepared on Behalf of
Eastern Carver County School District
Community Education

2016

This project was supported by the Resilient Communities Project (RCP), a program at the University of Minnesota that convenes the wide-ranging expertise of U of M faculty and students to address strategic local projects that advance community resilience and sustainability. RCP is a program of the Center for Urban and Regional Affairs (CURA) and the Institute on the Environment.

This publication may be available in alternate formats upon request.

Resilient Communities Project
University of Minnesota
330 HHHSPA
301—19th Avenue South
Minneapolis, Minnesota 55455
Phone: (612) 625-7501
E-mail: rcp@umn.edu
Web site: http://www.rcp.umn.edu

Formative Evaluation of Eastern Carver County's Intercultural Specialists Program

Satlaj Dighe

School of Public Health

University of Minnesota

Contents

List of Tables:

List of Figures:

Abstract

Background- In recent years, Carver County, Minnesota has witnessed a rapid growth in the number of residents from ethnic minorities. A similar pattern is reflected in the growing diversity of the student population of Eastern Carver County School District. In 2015, the student body was 9.17% Hispanic, 5.13% Black, 4.62% Asian/Pacific Islander, and 0.51% American Indian. Given this diversity, the Intercultural Specialist (ICS) program of Eastern Carver County School District was established in the year 2007 to respond to the demographic changes in Carver County and address the needs of a growing diverse community. The ICS program seeks to connect families from ethnic minorities and underserved communities with the school system. The program has 6 full-time ICS working with Latino, Hmong, Somali and other ethnic minority communities.

Approach- Formative evaluation is an important aid in the program planning, design and improvement process. The present formative evaluation is focused on the development of a theory of change and other relevant tools for the ICS program to help program leadership identify program outcomes, develop an outcome chain, and refine the focus and scope of the program.

Methods- The evaluation data were collected through document reviews, participatory workshops and in-depth interviews. Discussions were recorded as notes. Some of the data were recorded by participants in the form of charts or tables during the evaluation workshops. Data were later analyzed using compare and contrast method. Results of this analysis were used to create evaluation tools and data visualizations. Trustworthiness of data was ensured by sharing all the documents with the program staff and incorporating their comments in the draft.

Results and Conclusion. This formative evaluation developed a theory of change and tools to help ICS team plan and prioritize their activities. The theory of change process in this evaluation included a situation analysis, development of goal and outcome statement, development of outcome chains, and clear program focus and scope. Next steps may include a summative evaluation to understand the impact of the program in addressing educational and early interventions needs of the migrant children in Eastern Carver County school district.

Situation Analysis

The 2014 U.S. Census estimated Minnesota's population as 5.5 million, with the number of minorities growing four times as fast as whites. Minorities now account for more than 1 million of the state's residents and almost 20 percent of the total population(US Census Bureau, 2016). The Minnesota census data show that the age group of birth to 4 years consists of more minority children than that of whites. The immigrant population also shows a rising trend. In 1990, 2.6% of Minnesota's population was foreign-born. This number rose to 5.3% in 2000 and 7.8% in 2011(US Census Bureau, 2016). While the African Americans are largest minority in the state, immigrants from Latin America comprise the largest foreign-born community in Minnesota(US Census Bureau, 2016).

With the rising population of ethnic minorities and immigrant communities, there has also been a steady increase in the number of families with a primary language other than English. Data from the last five years show that there has been a steady increase in Spanish-speaking students in Minnesota. Other prevalent languages spoken in the state include Hmong, Somali, Vietnamese and Russian. Approximately, 7% (n=65,000) of students in the k-12 system in Minnesota are English Language Learners (EL) students (Minnesota Education Equity Partnership, n.d.)

Educational Disparity in Minnesota -

Minnesota is one of the most educated states in the country, across all age groups. Nationally, Minnesota ranks second after Vermont in the percent of adults age 25 to 64 with at least an associate degree(Minnesota Office of Higher Education, 2016). However, there are large achievement gaps in college enrollment, college readiness, postsecondary enrollment and postsecondary retention by race and ethnicity (Table 1). The data also highlight a large diversity in educational attainment among different ethnic minority groups. While the proportion of adults without HS diploma is 6% for all Minnesotans, the proportion is considerably higher in the Mexican (39%), Somali (34%), Hmong (27%) and Lao communities (23%). The proportion of population without HS diploma is lowest in the White population (3%).

Table 1. Educational Attainment by Cultural Groups in the state of Minnesota

Cultural Group	Percentage of population without HS diploma	Percentage of population With HS diploma/GED as highest level of education	Percentage of population with a bachelor or higher degree
White	3	24	37
Asian Indian	4	4	85
Korean	4	12	54
Filipino	6	22	38
Chinese	12	8	70
Hmong	27	22	21
Lao	23	32	11
Vietnamese	20	22	32
African	16	26	17
Ethiopian	20	30	18
Liberian	9	18	28
Somali	34	26	11
Mexican	39	29	12
Puerto Rican	14	19	31
Dakota	22	37	9
Ojibwe	18	35	8
All Minnesotans	6	24	35

Source- Educational Attainment data, (Minnesota Office of Higher Education, 2016)

Minnesota Education Goal

In 201, Minnesota Legislature set the following goals to be achieved by 2025 - 1) 70 percent of adults in Minnesota complete a postsecondary certificate or degree and 2) The achievement gap between white and non-white students will be reduced by 50% (Minnesota Office of Higher Education, 2016)

Fig 1-Minnesota Education Goal and Post-secondary Education Completion Rates of Ethnic Minorities in 2016
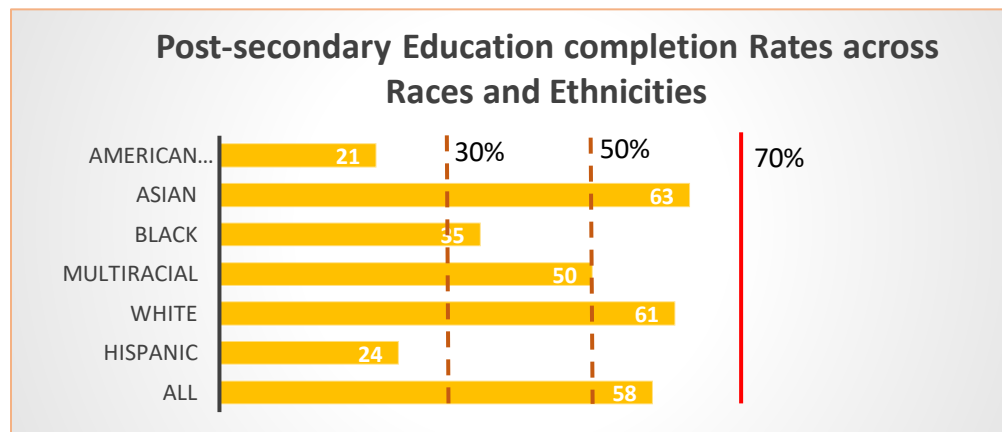
Source- Educational Attainment data, Minnesota Office of Higher Education 2016

The state level trend of rising ethnic minority population is also reflected in the growing diversity of student body of Eastern Carver County school district. Today, the student body of the school district is 9.17% Hispanic, 5.13% Black, 4.62% Asian/Pacific Islander, and 0.51% American Indian. An estimated 5% (n=527) of total students in the K-12 system are English Language Learning (EL students) (Eastern Carver County School District, 2015).

Fig.2: Ethnic and Racial Composition of Student Population in Eastern Carver County School District
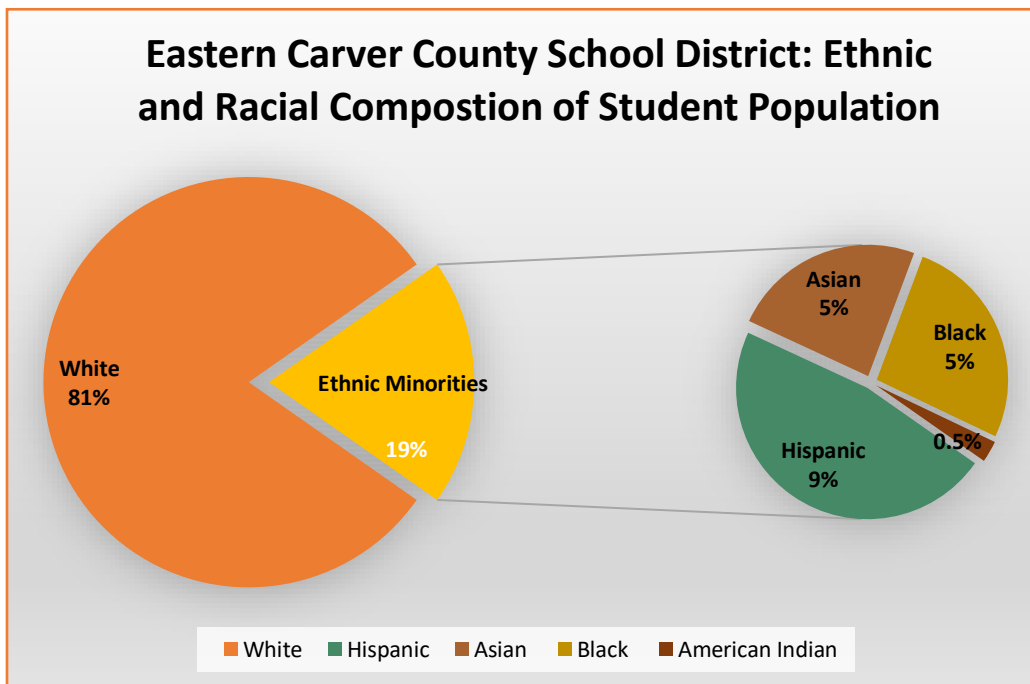
Eastern Carver County School District: Ethnic and Racial Compostion of Student Population

White 81%

Ethnic Minorities 19%

Asian 5%

Black 5%

Hispanic 9%

0.5%

■ White ■ Hispanic ■ Asian ■ Black ■ American Indian

Source- Eastern Carver County School District: World's Best Workforce Setting Goals and Reporting results 2014-15

Eastern Carver County school district also grapples with the issues of achievement gaps in educational attainment. While the district achieved the goal of 90% graduation rates for all students; the graduation rates within certain ethnic groups and economic sections are significantly lower than the district average. For example as shown in Fig. 4, in the year 2014 only 55% of students from Hispanic community and only 47% of EL students were able to graduate. Also, as shown in Fig. 3, the graduation rates for the students receiving Free or Reduced Price Meals (FRP students) was 69. 3%.
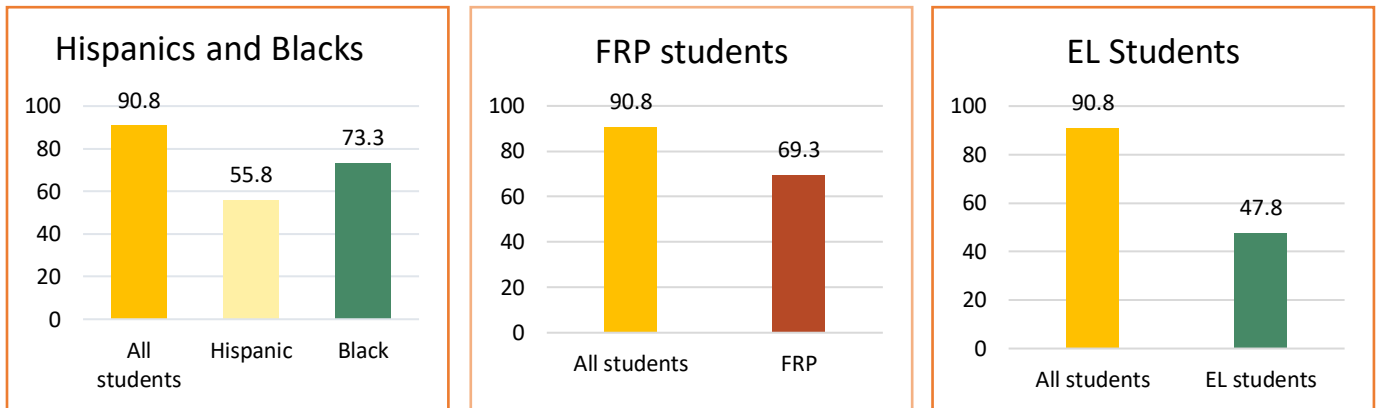
Source- Eastern Carver County School District: World's Best Workforce Setting Goals and Reporting results 2014-15

There is also a significant disparity in Reading and Math skills of ethnic minority students which are reflected in the Reading and Math scores of EL and non-EL students in the grades 3 to 8 and 10. Since most of the EL students belong to Ethnic Minority communities, we can use the EL and Non-EL categories as proxy for students of color and White students respectively. The 2014-15 report by Eastern Carver County school district show that the percentage of Non-EL students who met the Reading standards as measured by state was 4 times greater than the percentage of EL students meeting the state standards(Eastern Carver County School District, 2015). Similarly for Math tests, the proportion of Non-EL students meeting the standards was approximately three times higher than the EL students taking the same test.

Fig. 4- Percentage of EL and Non-EL students from Eastern carver County School district in grades 3-8 and 10 meeting the State Standards for Reading and Mathematics 1
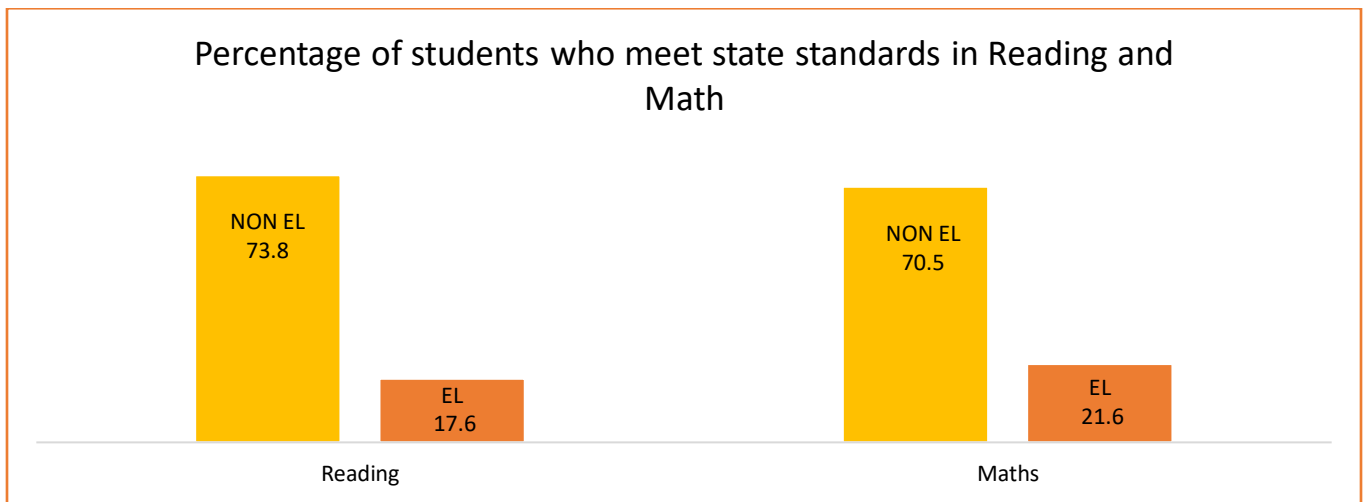
Source- Eastern Carver County School District: World's Best Workforce Setting Goals and Reporting results 2014-15

These large educational attainment gaps between the white students and student of color highlight an urgent need to adopt institutional measure promoting educational achievement of students from ethnic minorities and underserved communities. Programs such as ICS which aim to facilitate greater participation of minority communities in the school system, could be a great resource for families, teachers and the entire school system. These programs could be crucial in the progress towards achieving the state goal of 50% reduction in educational achievement gap between white and non-white students. The program could also play a part in the state's efforts to achieve the target of having 70% of state population in the age group of 25-65 with completed post-secondary education by the year 2025.

Description of Inter-cultural Specialist Program:

Background and History of ICS program: ICS program was established in the year 2007. The program was established as a response to growing cultural and ethnic diversity in the student population. The ICS program was preceded by linguistic interpreter program. The linguistic interpreters program consisted of a team of interpreters helping teachers and school staff communicate with the families from ethnic minority groups. When the interpreters' positions were eliminated due to budget cuts, the ICS Program was introduced to fill the gap. The new ICS team was based in the school as well as community settings. The main role for the ICS was to act as a liaison between ethnic minority communities and school system.

Purpose of ICS program as stated by the program team:

- Connect multicultural and underserved families and students with community and school programs, resources and events
- Promote academic success with multicultural students
- Be a resource for questions and concerns for multi-cultural parents
- Advocate for cultural awareness in the district
- Be a resource for cultural questions and concerns for teacher/staff

Key Program activities of ICSs include —1) Data collection and reporting on Attendance, GPA, Test scores and referrals 2) Introducing parents with the school rules and regulations 3)Educating

teachers and administrators on culture and family values of ethnic communities and 4) Act as a cultural liaison between school system and family as and when required.

The ICS program serves students and families from Hmong, Latino and Somali communities and other immigrant families. Each ICS work with one community. The ICSs belong to the ethnic community they work with. Most of the intercultural specialists are in the age range of 20-30. A typical work day for ICSs involve visiting high schools to work with students, attending meeting with school staff, family visits, phone communications, and participating in after-school activities. On several occasions, ICSs work on weekends to attend community meetings and gatherings. Currently, there are 6 ICSs working on full-time basis. The program also has a full time program coordinator and a full time program manager.

Literature Review

Even though, the practice of school based cultural liaison is gaining traction in the state of Minnesota, the availability of literature examining the impact of such programs is still scant. The fields of Public Health and Social Work, however, have a large body of evidence suggesting efficacy of cultural liaison model in improving wellbeing of ethnic minority communities in the USA (Lewin et al., 2010), (Spencer et al., 2011),(Swider, 2002),(Islam et al., 2013), (Schlesinger EG & Devore Wynetfa, 1995).

Public Health Programs in the US have worked with Community Health Workers (CHW) or Lay Health Workers (LHW) to build and nurture connections with ethnic minorities. CHWs play critical role in establishing long term, two-way communication between the community and the health system. They help health care workers understand health norms, customs, diets, and life-world of health for the community. Similarly they inform community about the available health system services, options, entitlements and help them with the paper work and meetings with the health care teams. This 'link work' aspect is crucial for the health system. Evidence suggest that communities with the CHW have experienced increase in health access, utilization, knowledge, adherence and overall improvement in the health status(Swider, 2002).

A Cochrane meta-analysis of impact of CHWs on maternal and child health showed some successful outcomes including increase in immunization rates, early initiation of breastfeeding, and pulmonary TB cure rates. There is also evidence suggesting that CHWs programs contributed to reduced child morbidity and mortality (Lewin et al., 2010). Use of bicultural CHWs interventions have proved effective in improving health status of ethnic minorities and immigrant communities in United states(Sue, Fujino, Hu, Takeuchi, & S, 1991), (Islam et al., 2013), (Lam et al., 2003), (Corkery et al., 1997), (Chin, Walters, Cook, & Huang, 2007), (Rhodes, Foley, Zometa, & Bloom, 2007). It is observed that CHWs help communities to overcome access barriers by helping them to understand and navigate the health system. They also facilitate program outcomes through communal concordance, trust, and leadership. In many instances, community health workers are effective community advocates as they can understand and recount the realities of exclusion and systemic bias(Pérez & Martinez, 2008).

In early Eighties, the discipline of Social Work adopted Ethnic Sensitive Practice approach to fully understand and address issues faced by ethnic minorities. This approach enabled the practitioners to understand the issues from minority perspective and to explore several themes related to identity formation, value systems, bi-cultural living, support systems and networks as well as the issues of special significance for each minority community in the USA (Schlesinger EG & Devore Wynetfa, 1995). Within the field of social work, the Ethnic Sensitive Practice approach was particularly successful in crisis management, family intervention programs, adoption services and elderly assistance programs(Schlesinger EG & Devore Wynetfa, 1995).

The cultural liaison programs when set in the field of education serves as a model for culturally inclusive education. Immigrant students face range of challenges such as language barriers, limited social capital, and discrepancy in the expectations from school and family, and biases within the education system impede access to and success in formal education. A report— *Preparing Immigrant Students for Higher Education*, prepared by Minnesota Office of Higher Education recommends institutional measures such as hiring special personnel to facilitate cultural diversity and inclusiveness in the school system(Vu & Walters, 2013). The ICS program

which has already implemented several recommendations in the report, could be a model for the state of Minnesota for culturally inclusive education.

Methods

Evaluation Approaches

The evaluation followed the theory of change approach proposed by Funnell and Rogers(Funnell & Rogers, 2011). The theory of change included a situation analysis, the development of outcome chains, and refinement of the focus and scope of the program. The outcome chains were enhanced by adding mechanisms- as a tool from Realist Evaluation (RE) framework. More information on mechanisms is included in the Appendix 4.

This evaluation followed principles of Utilization Focused Evaluation (UFE) (Patton, 2008) and Interactive Evaluation Practice (IPE)(King & Stevahn, 2013) to specifically engage intended evaluation users and stakeholders.

Table 2: Evaluation Models: description and usage in the present evaluation

Name	Authors	Description of the model	Use in the present evaluation
Program Theory	Sue C Funnell and Patricia J Rogers	The Purposeful Program Theory framework describe a step by step approach towards developing representing and using program theory in the program planning and design	1. The present work followed the program theory development approach by Funnell and Rogers as overall guiding framework for the evaluation. 2. The evaluation developed theory of change as a part of formative evaluation. 3. The theory of change included situation analysis, outcome chains and focus and scope development for the program.
Utilization focused Evaluation (UfE)	Michael Quinn Patton	Utilization focused Evaluation is a decision-making framework for enhancing the utility and actual use of evaluations. The model places use of the evaluation as prime criterion to judge the effectiveness and recommends engaging	1. Present evaluation followed key principles of UfE framework. 2. ICS program leadership was identified as primary intended user of the evaluation. 3. UfE approach was followed by a. Engaging program leadership in the program theory development,

		primary users of the evaluation in the evaluation design process.	b. incorporating their evaluation questions in the evaluation design c. Sharing results and interpretations of results with them.
Interactive Evaluation Practice (IEP)	Jean King and Laura Stevahn	IEP can be defined as the intentional act of engaging people in making decisions, taking action, and reflecting while conducting an evaluation study. IEP is effective in case of collaborative and participant directed studies. IEP approach does not assume mutual exclusivity of data collection and analysis activities.	1. The IEP approach was used mainly for data collection and decision making activities. 2. Interactive workshops were used to develop logic model and outcome chains.
Realist Evaluation	Ray Pawson and Nick Tilley	Realist Evaluation is a theory driven evaluation that considers programs as complex social interventions. Realist evaluation studies the questions such as what aspect of the program worked; for whom and in what circumstances?	1. The Realist Evaluation approach was used to identify mechanisms associated with each outcome in the outcome chain. 2. The evaluation did not follow Realist Evaluation approach in any others areas or processes of this evaluation.

Data Collection Methods

1. Document Review: The evaluation reviewed Eastern Carver County: the world's Best Workfare Report (Eastern Carver County School District, 2015). In addition, emails shared by the program staff were reviewed. Data from the documents were used to develop a situation analysis and visualizations for the report.

2. Interactive Methods: The data were collected during staff meetings and workshops at the district office of Eastern Carver County School District. Discussions were written down as notes. Credibility, or internal validity of data, was ensured by sharing all the documents, data, and results with the program staff and incorporating their comments in the draft.

Summary of Interactive Methods-

Table 3: Interactive Data collection Methods

Data Collection session	Method Type	Number of Participants	Description
Introductory Workshop	Interactive session	8	The workshop meeting informed ICS staff about purpose of the evaluation, tentative process of evaluation and sought to understand their expectations and questions for evaluation.
Meeting with program director	In-depth interview	1	A meeting with Program Director was conducted to understand clients' perspectives on the evaluation and history and background of the ICS program
Meeting with key program Staff	In-depth interviews, interactive sessions	2	Meetings were held with Program Director and Program Manager to develop outcome chains, revise goal and outcome statement and discuss background and context of the program.
Interview with ICS staff	In-depth interview	4	In-depth interviews were conducted ▪ To acquire understanding of the ICSs work and experiences. ▪ To refine the evaluation question and obtain inputs on what they would like to address through the evaluation. The data collected through these interviews informed the development of program tools and outcome chains.

Data collection and Tool development Processes for Each Deliverable

Deliverable 1- Description of ICS Teams Perspectives on the Program:

 A narrative of program staff's perspectives on factors limiting participation of ethnic students in the school activities was generated from the data collected in the introductory workshop, meeting with key program staff and interviews with ICSs. The data was recorded as notes and then analyzed using compare and contrast method.

Deliverable 2- Goal and Outcome Statement:

An interactive session with Program Manager and Program Director was conducted to discuss the logic model and list the most prominent activities in terms of time spent, frequency and requests received for the activities from school administration, families and other government departments. In the process, team revised and rephrased the outcomes to better reflect the present activities and challenges for the program. To form the new goal statement, each participant wrote down program outcomes that they thought as the most important. These lists were then discussed to identify three medium term outcomes and one main outcome.

Deliverable 3- Logic Model:

The logic models were developed through group activities and plenary sessions. The session was attended by six Intercultural Specialists, Program Manager and Program Coordinator. This session yielded a list of all the Inputs and activities of the ICS program. The inputs and activities were further discussed, to develop a final list analyzed and categorized to form a concise logic model version.

Deliverable 4- Outcome Chains:

Informed by Funnell and Rogers's (Funnell & Rogers, 2011) methodology, an interactive session was conducted with the Program Manager and Program Coordinator to develop the outcome chains. Resources on outcome chains, mechanisms and attributes of the outcome chains were shared with the participants prior to the session. The session listed all the necessary conditions required for ICS program to achieve its goal. The necessary condition required by the program to achieve its goal was identified as base outcome. All subsequent outcomes required to reach the program goal were identified and listed to form an outcome chain. Each outcome was discussed with respect to underlying mechanisms and attributes.

Deliverable 5- Focus and Scope:

The focus and scope of the program was developed based on information collected in the previous interactive sessions. The activities were classified as focus activities and scope activities on the basis of their contribution to program goal; those most crucial for program goal were

identified as focus and those that contribute to goal but need substantial inputs from programs other than ICS were marked as scope.

Deliverable 6 -Time Maps:

Time maps is a visual representation of ICSs' time spent on program activities, program outcomes and stakeholders. Time spent on daily work activities for 5 ICSs for the month of April was logged and shared through MS outlook calendar. One ICS did not share the calendar. The calendar details included amount of time spent on each activity and names of stakeholders involved in the activity. The data provided by 5 ICSs were aggregated and analyzed using Microsoft Excel 2010.

Results

Deliverable 1- A description of ICS Team's Perspective on the Program

Factors limiting minority students' participation in the school-

During the workshop and in-depth interviews with ICS staff the team discussed several factors that limit the participation of students from minority and under-served communities. These factors include: (1) language issues and communication, (2) lack of information about the school system, (3) awareness of how the school system works, and (4) staff competency in multicultural issues.

Language issues were identified as the chief barrier affecting the participation. Many students and families in the district have limited English vocabulary that affects their communication with teachers and other school staff. Many parents lack information about school systems, paper-work requirements and legal issues involved in the education. Parents, for example, are unaware that if the student does not have minimum attendance in the school, it could result in a legal action from the school. Many families also struggle with timely completion of paper-work. The families, especially newly immigrant families often struggle with challenging economic circumstances. The families do not know how to solicit help from government department and community level organizations.

According to the staff, poverty of the family are the most influential factors affecting students' participation in the school. Staff lacks competencies in the areas of cross-cultural communication which often leads to miscommunication or conflicts between staff and families. The ICS team reports that in recent years the school staff has developed too much dependency on the ICS team to the extent that they do not conduct any meetings without the ICS team. ICS team members believe that the program should work to reduce teachers' dependency on ICS staff to communicate with parents.

Meetings with key program staff reveal that the communities in Eastern Carver County have their own challenges. Many families are hesitant towards paper-work and worry about their repercussions on their legal status. They lack knowledge about how to access resources available from government programs. Somali community in the district is especially worried about the influence of extremist and radical religious organizations on their youth.

Deliverable 2- Program goal statement

Background- Previous Goal and Outcome statement of the ICS program was defined as - "Increased academic performance of students from ethnic minority communities". The program leadership wanted to review the statement to reflect current realities and activities of the program. In the interactive session organized to develop new statement, it was transpired that while increased academic performance of students from ethnic minority communities is an overarching goal for the school district at large, the ICS program is primarily responsible for increased participation of students from ethnic minority communities. In this light, the program leadership arrived at the conclusion that the main outcome of the ICS program is – "Increased participation of students from ethnic minority communities in the school and after-school activities"

Fig 5: New Outcome Statement

Previous outcome	Goal setting worshop	New Outcome
•Increased academic performance of students from ethnic minority communities.	•Discussion on essential outcomes and hierarchy of these outcomes to achieve final impact •Review of Key activities of the program	•Increased participation of students from ethnic minority communities in the school and after-school activities

Deliverable 3- Logic Model

A traditional pipe line logic model was created to represent Activities, Inputs, Outputs and Outcomes of the program.

Fig. 6: Logic model

Inputs

- ICS Time
- Program Manager
- Program Coordinator
- Financial support
- Training
- Collaborations with
  - Social Workers
  - Teachers
  - School Nurses
  - Welcome center staff
  - community Ed. Managers
  - Extended Community Ed.
  - Administrative and clerical staff
  - Deans
  - Youth outreach programs
  - School district Transportation
  - School district food service
- Strategic partnerships with
  - Police department
  - Other Government departments
  - Health organizations
  - Church
  - Community colleges
  - University of Minnesota programs

Activities

- Before and After school activities
- Facilitating culture clubs
- Facilitating IAA activities
- Facilitating family education activities
- Early childhood screenings
- Meetings/help/study sessions with students
- Summer school and other activities in holidays
- Home visits
- Phone calls with parents
- Meetings with parents to share school resources or providing help for any other issue
- Parent-Teacher conferences
- Meetings with program-coordinators, school nurse, social workers and other staff and district leadership
- Meetings with community organizations
- Meeting with government departments
- Administrative work

Measurable outputs

- # of ethnic minority students participating in Before or After school activities, culture Clubs and summer activities
- School Attendance by students from ethnic minorities
- # of Culture clubs and IAA sessions facilitated
- # of Family education programs and early childhood screening facilitated
- # of Meetings/study sessions/help sessions with students
- # of Home visits and phone calls with parents
- # of Joint programs with community organizations
- # of Joint activities/collaborations with government departments

Outcomes

Students from ethnic minority communities feel safe and accepted in the school system

Parents support active participation in the school activities

Community encourages students to be active in the school

Increased participation of students from ethnic minority and underserved communities in the academic and other school activities

19

Deliverable 4- Outcome Chains

This section includes outcome chains developed with mechanisms and attributes attached to them.

Figure 7: Overall main outcome chain

Figure 8: Outcome Chain for Outcome 1

Outcome 1: Parents support their children to participate in school activities

Parents support their children to participate in the school activities

Parents prioritize children's education

Families have resources to focus on school activities

Parents feel confident and comfortable communicating with school staff

Parents are treated with respect

Parents are informed about school rules and activities

Mechanisms

Confidence to talk to school system

Sense of **well-being** for family

Trust in school system

Valuing school success

Attributes

Parents' Confidence and involvement	Basic Needs	Informed Parents

1. Parents attend school activities
2. Active participation in Parent-Teacher conferences
  a. Ask questions
  b. Share concerns
  c. Share achievements
  d. Seek help
  e. Ask questions for career development
3. Parents help in homework
	1. Families know about community level support systems
	2. Community level services such as Health Care, Food Markets are aware about families that need help
	3. Families know basic laws, rules and their entitlements in US.
		1. Parents are informed about basic child care and parenting laws in US
		2. Parents are informed about their entitlements
		3. Parents are aware of academic expectations
		4. Parents are aware about their child's progress in the school
		5. Parents are aware about the challenges their child is facing

Figure 9: Outcome Chain for outcome 2

Outcome 2 - Students feel safe and accepted in the school

Mechanisms

Relationships between students and between students and teachers

Cultural humility in students and staff

Sense of belonging towards school

Positive interaction with teachers

Students feel safe and accepted in the school

Positive interactions and relationships with other students

Teachers understand students' behaviour

Teachers and administrative staff are culturally aware

Teachers encourage other students to be culturally aware
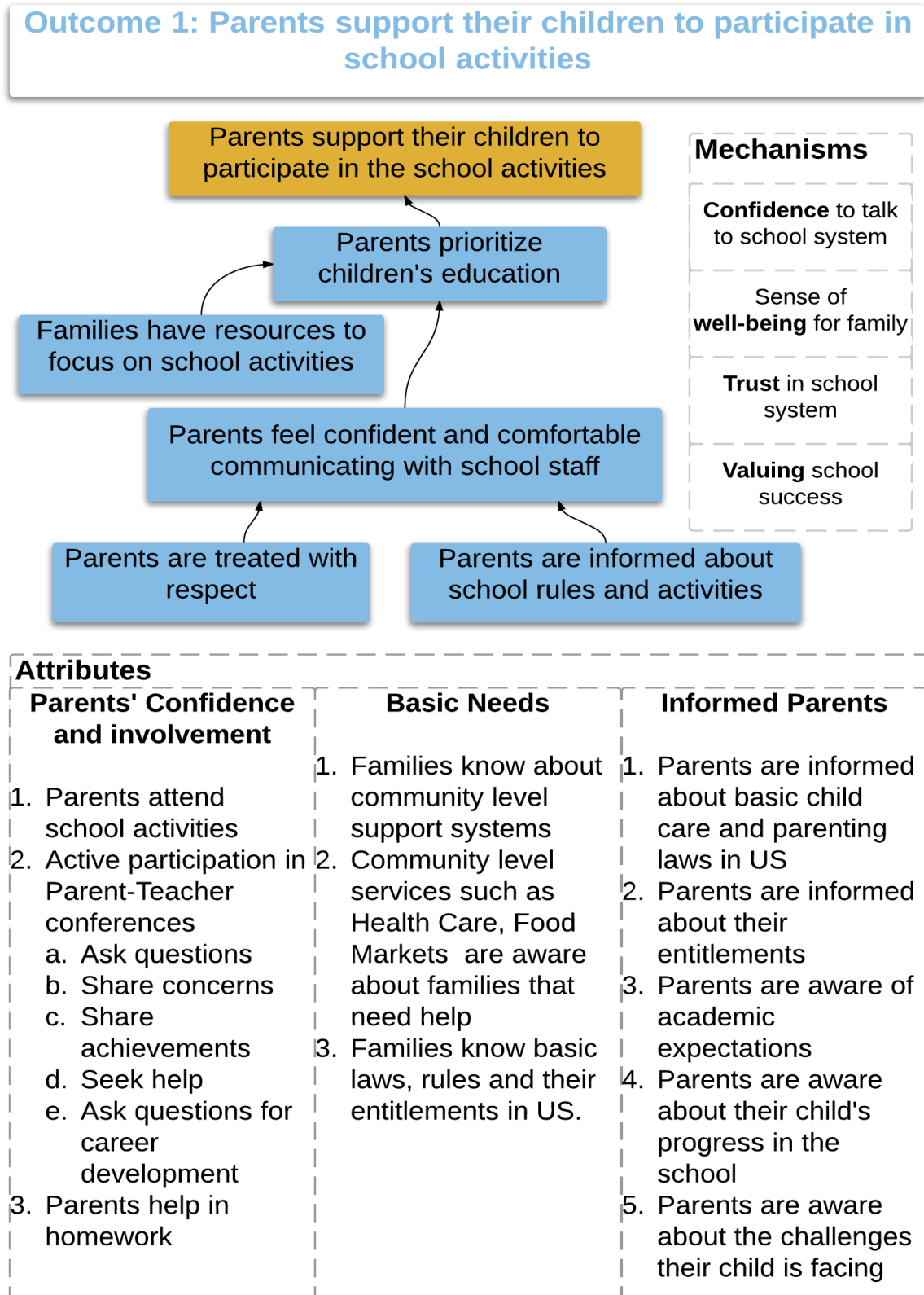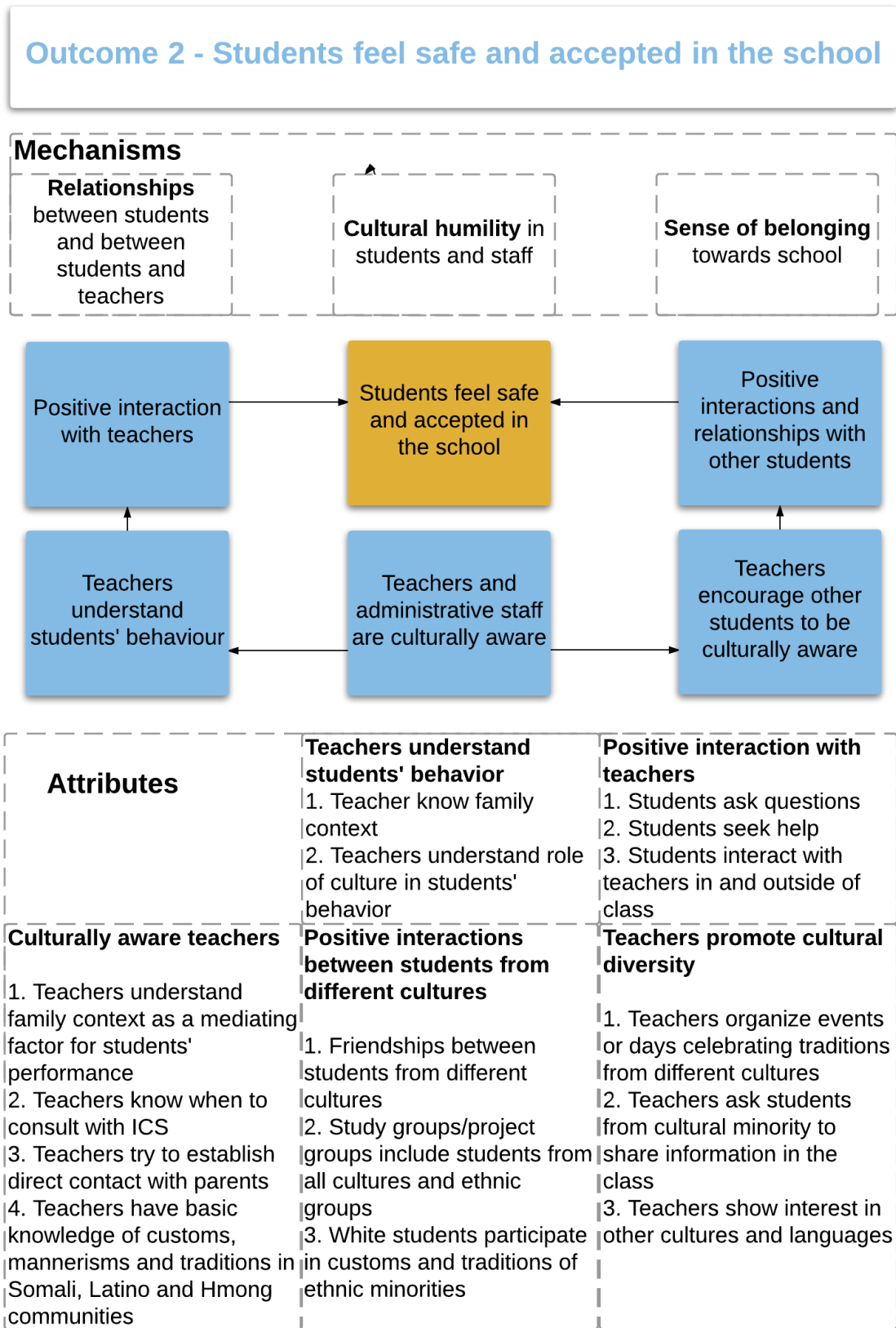
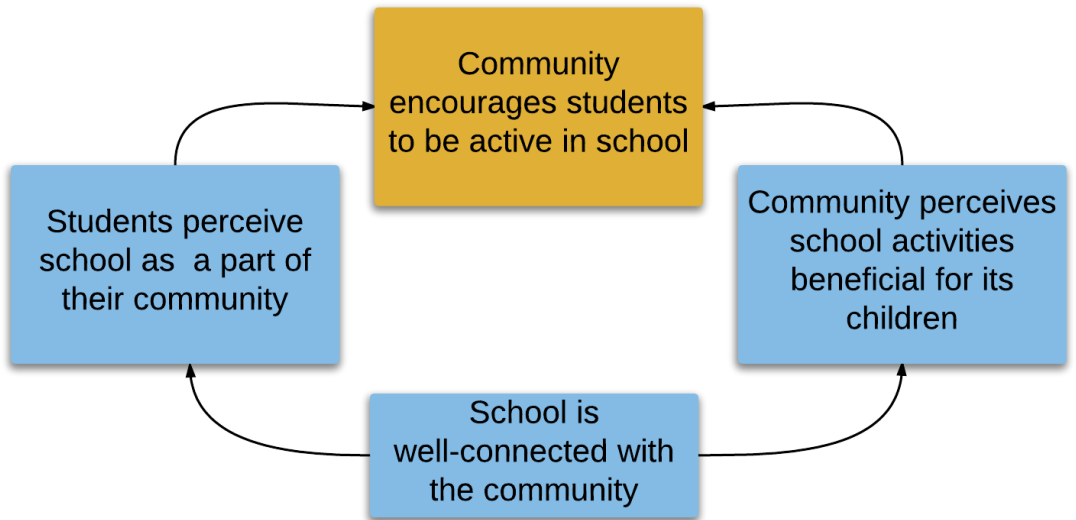| **Attributes**	**Teachers understand students' behavior** 1. Teacher know family context 2. Teachers understand role of culture in students' behavior	**Positive interaction with teachers** 1. Students ask questions 2. Students seek help 3. Students interact with teachers in and outside of class
Culturally aware teachers 1. Teachers understand family context as a mediating factor for students' performance 2. Teachers know when to consult with ICS 3. Teachers try to establish direct contact with parents 4. Teachers have basic knowledge of customs, mannerisms and traditions in Somali, Latino and Hmong communities	**Positive interactions between students from different cultures** 1. Friendships between students from different cultures 2. Study groups/project groups include students from all cultures and ethnic groups 3. White students participate in customs and traditions of ethnic minorities	**Teachers promote cultural diversity** 1. Teachers organize events or days celebrating traditions from different cultures 2. Teachers ask students from cultural minority to share information in the class 3. Teachers show interest in other cultures and languages

Figure 10: Outcome Chain for Outcome

Outcome 3 - Community encourages students to be active in the school

Mechanisms

Trust in school syetem	Shared goals and shared values between community and school	Recognition of inter-dependence between community and school

Community encourages students to be active in school

Students perceive school as a part of their community

Community perceives school activities beneficial for its children

School is well-connected with the community

Attributes

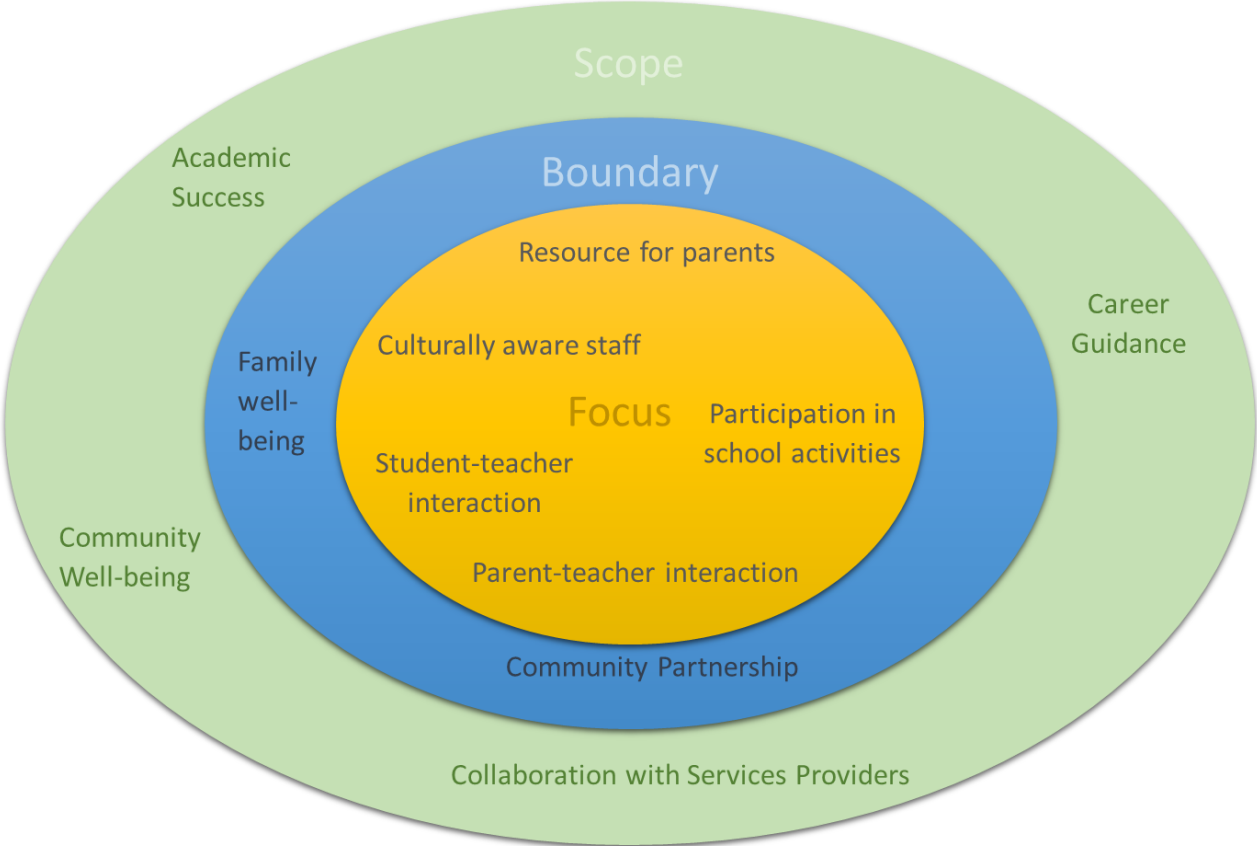| Community perceives school activities as useful for children	School is connected with community	Students perceive school as a part of community
1. Community elders/influential people talk about school programs and education in their meetings 2. Community members are informed about important school activities	1. School understand community's needs,concerns and priorities towards the children 2. School officials participate in community festivals and celebrations 3. ICS and other school officials participate in community meetings 4. School helps community to connect with other services 5.Joint activities by school and community	1. Students share community festivals/meetings/fairs with school staff 2. Students invite teachers and staff to community festivities 3. Community members participate in school programs/activities 4. Joint activities by school and community

Deliverable 4- Focus and Scope of the Program

The Focus of ICS program was defined as the activities through which the program seeks to achieve its main outcome. The program will held itself accountable for the success or failure of the outcomes related to activities in the focus area. The program performance on the activities in the focus area would be measured and monitored. Through reflective discussions in the evaluation process, following aspects were identified as Focus of the program: 1) the Student – Teacher interactions, 2) Parent – Teacher interactions, 3) Cultural awareness of the staff, 4) Sharing resources with parents and 5) Student's participation in the school.

The boundary activities were defined as activities that could become focus area of the program depending on the circumstances. The program activities on boundary activities will be monitored; however, program will not held itself primarily accountable for the achievement of these aspects. Two aspects of the programs: Well-being of the family and partnership with community were identified as Boundary Activities.

The scope of the program was defined as the activities or areas that are related to the program outcomes but are not directly influenced by program activities. These areas are affected by other institutions, societal factors or other programs. The program can develop collaborations and partnerships to work in these areas but will not monitor the performance of these activities. Areas such as academic progress of the students, career development of students, and well-being of the community are identified as aspects that feature in the broader scope of the program.

Fig. 11: Focus and Scope of ICS program

Scope

Academic Success

Boundary

Resource for parents

Career Guidance

Culturally aware staff

Family well-being

Focus

Participation in school activities

Student-teacher interaction

Parent-teacher interaction

Community Well-being

Community Partnership

Collaboration with Services Providers

Deliverable 5- Time Maps

In response to ICSs concerns about lack of clarity on time planning and prioritization, Time Maps were developed to help the team better understand their current time and work patterns. The time maps consisted of 1) Time Spent on each task or activity 2) Time spent on each outcomes and 3) Time spent on each category of stakeholder.

Activity Time Map

Activity time map present hours spent on each activity during the period of April 1 to 30, 2016. Total hours of 5 ICS are 579.3. Details of activities assigned for each stakeholders are presented in Appendix 2.

Fig 12. Activity Time Map
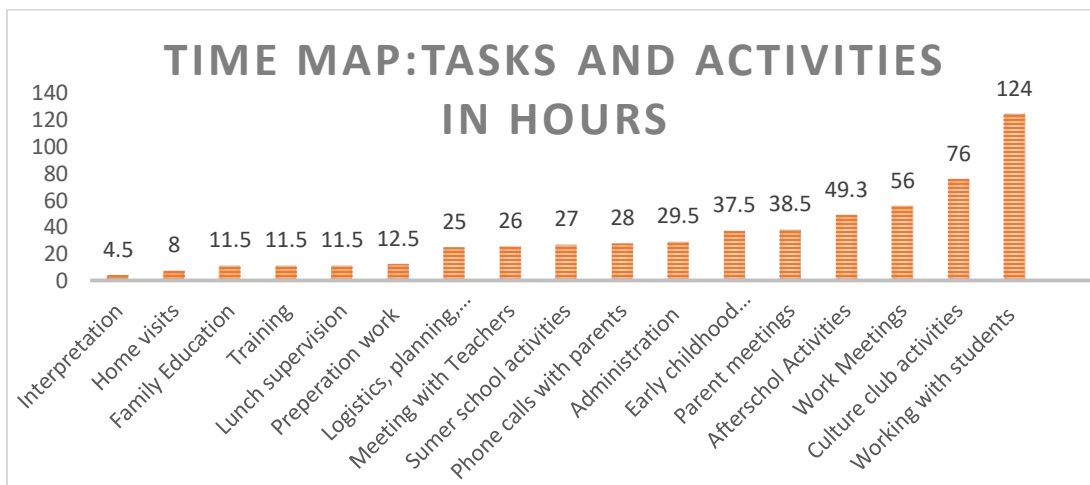
The analysis of activity time maps in fig. 12 indicates that in the month of April, the program spent largest amount of time on working with students (124 hours), followed by Cultural activities (76 hours) and work meeting (56 hours). The smallest amount of time was spent on working with teachers (3 hours), Translation/interpretation services (4.5) and home visits (8 hours). It is important to note that these hours represent aggregate work hours for 5 ICSs. The activity time map for individual ICS considerably vary from each other. However, the aggregate activity-time map gives tentative idea about what activities are most demanding in terms of time.

Outcome Time Maps

Outcome Time Maps represent number of hours spent on each outcome in the time period of April 1-April 30 2016. Total number of hours counted were 519.30. The outcome maps do not include time spent on administrative and training tasks. Details of the activities counted for each outcome are given in Appendix 2.
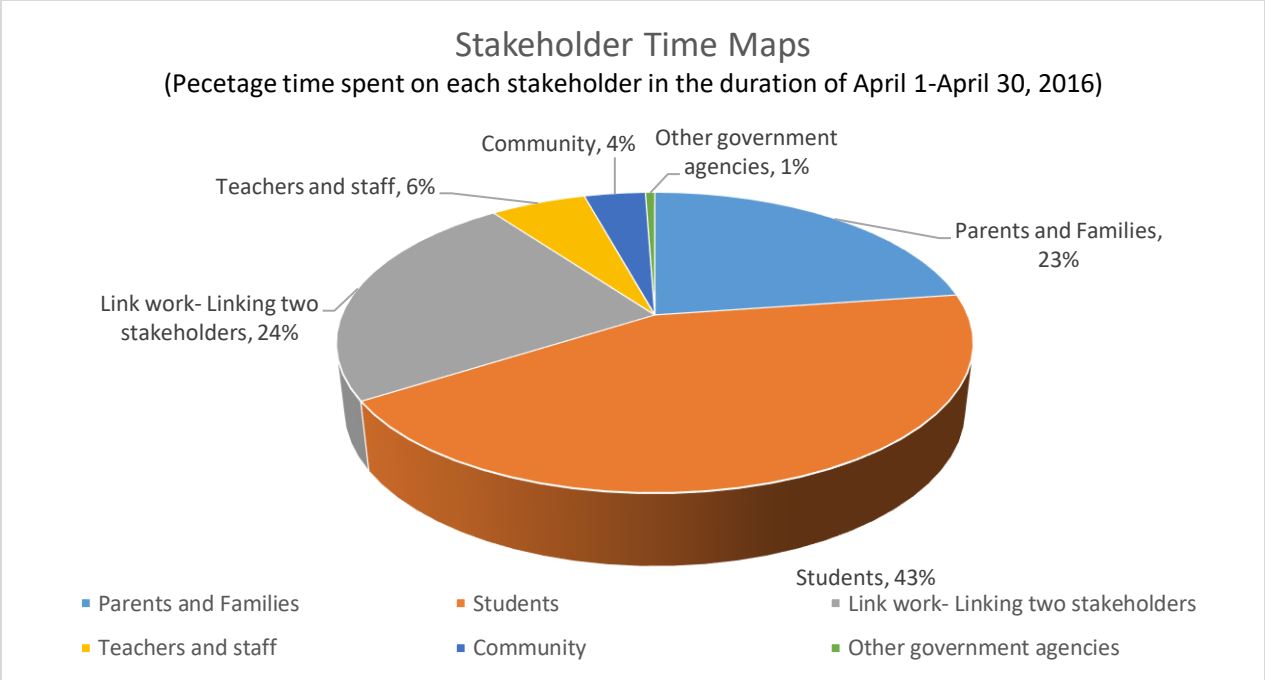
Fig. 13- Outcome Time Map
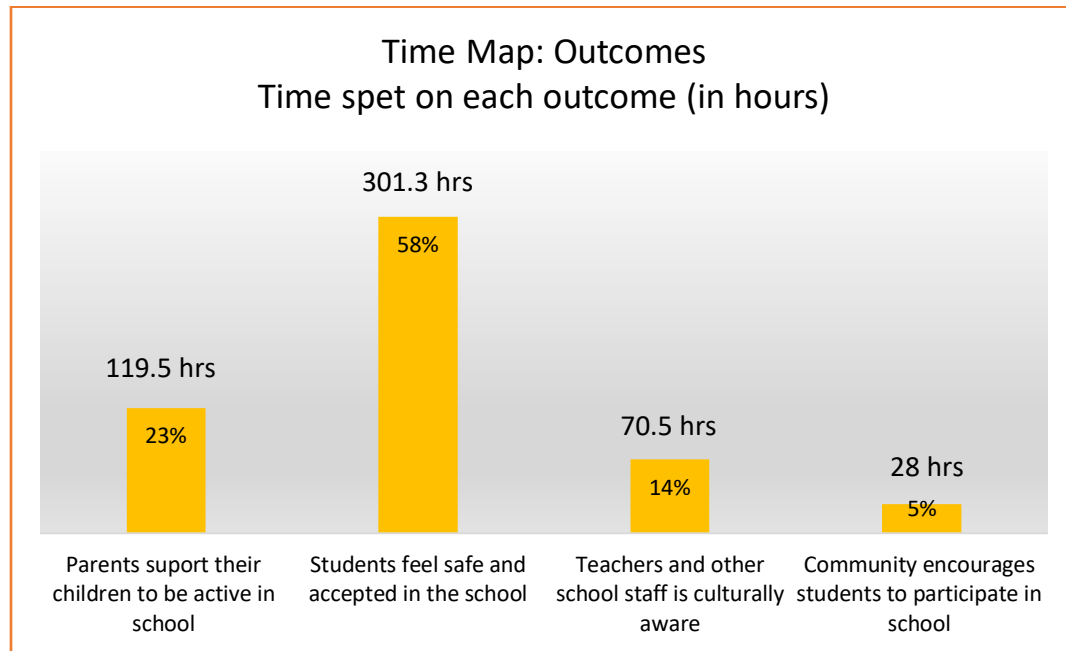
The Outcome-Time map in fig. 13, indicates that in the month of April the team spent 58% of time on the outcome—Student feel safe and accepted in the school. The outcome —Parents support their children to participate in the school activities is second with 23% of total team time. The team spent 14% and 5% of time on the outcome 3—the school staff is culturally aware and outcome 4—Community encourages students to participate in the school, respectively.

Stakeholder Time Map

Stakeholder Time Maps present number of hours spent on each stakeholder category in the period of April 1 to 30, 2016. Total hours counted for the stakeholder time maps are 525.30. The Stakeholder Time maps do not include time spent on administrative work. Details of activities assigned for each stakeholders are presented in Appendix 3.

Fig 14: Stakeholder Time Map

Stakeholder Time Maps
(Pecetage time spent on each stakeholder in the duration of April 1-April 30, 2016)

Community, 4%   Other government agencies, 1%

Teachers and staff, 6%

Link work- Linking two stakeholders, 24%

Parents and Families, 23%

Students, 43%

- Parents and Families
- Students
- Link work- Linking two stakeholders
- Teachers and staff
- Community
- Other government agencies

Stakeholder Time Map, in fig. 14, represent time spent on each group of stakeholders. The maps suggest that the program is engaged most with Students (43%), followed by Parents and families (23). The program spends 24% of time in linking two stakeholders, either students with school staff or community with school.

Discussion

This evaluation was focused on developing formative evaluation tools to help the ICS program by Eastern Carver County school district to plan, design and improve the program. The evaluation process helped staff articulate the program's theory of change, a pathway through which the program aims to achieve its goal and to develop planning and prioritization tools. The evaluation reveals that the activities of the program are well-aligned with its goals and objectives. However, the evaluation also highlighted time-constraints faced by the team resulting from conducting too many activities as compared to available human resources.

ICS program was developed by the Eastern Carver County school district with an aim of improving participation of ethnic minority students in the school. In recent years, Eastern Carver County school district witnessed rapid growth in the number of residents from diverse ethnic

communities. However, this growth was not accompanied by a diversification of the teaching and non-teaching staff in the school district. The ICS program was created to serves as a link between racial minority students and school district staff.

Even though examples of cultural liaison are still rare in the educational settings, the field of Public Health has a large body of evidence suggesting efficacy of community based health workers in improving health access and status of the ethnic minority communities(Spencer et al., 2011), (Witmer, Seifer, Finocchio, Leslie, & O'Neil, 1995), (Sue et al., 1991), (Corkery et al., 1997). Perhaps, a similar model of cultural liaison in education sector could be successful in promoting enrollment rates, graduation rates and educational attainment of minority students. Minnesota Office of Higher Education has already acknowledged school based cultural liaisons as an effective strategy to create a culturally responsive environment in the school setting (Vu & Walters, 2013). The ICS program of Eastern Carver County school district could be studied as a model for a state-wide intervention of school-based cultural liaison.

This evaluation helped identified key activities and theory of change underlying the ICS program model. It was noted that activities such as orienting families with the rules and procedures of US school system, facilitating parent-teacher communication, providing cultural-education to teachers and staff are crucial for creating a culturally responsive environment in schools. Community engagement has already been identified as an important strategy to promote educational attainment. The in-depth interviews and interactive workshops also highlighted contribution of communities in promoting student's participation in the school. Ethnic communities need to view school system as an ally sharing common values and common goals for its young generation. Cultural liaison in this case, serve as representatives of the school to build a mutually respectable, trusting and long term relationship with the communities.

Various theoretical models on multi-cultural education highlight the need of offering culturally pluralistic settings to give students a chance to learn universalistic ethical values and principles (Bank JA, 1976). Bank's Typology of Emerging Stages of Ethnicity notes that culturally pluralistic settings and active engagement with other cultures help students develop a healthy cultural identity. Culture Club, Newsletter and Integrated Art Academy activities undertaken by the ICS

team are great examples of activities that promote healthy cultural identity. These activities also offer opportunity to students and staff to appreciate cultural diversity in the school.

This formative evaluation endorsed a close link between well-being of the family and student's participation in school. Along with problems associated with cultural-assimilation, the newly immigrant families often face economic struggles which can limit academic success and school participation of students(First, 1988). The ICS program responded to this challenge by helping newly immigrant families connect with government and community level resources. However, the ICS team, with its limited resources cannot help newly immigrant families in their economic struggle. Also, helping low-income families is not really a mandate for the program. Perhaps, the school districts can collaborate with different government programs and non-profit organizations to help the families that need help in this area.

Recommendations and Next steps

This formative evaluation aimed to present theory of change and planning tools to assist the ICS team plan their activities. While these tools provide a solid foundation for the continuation and monitoring of program goals and objectives, it will be important that program staff considers the implementation of a process and outcome evaluation. The following are some of recommendations for next steps of the evaluation process:-

Recommendations for the school district-

Recruiting more intercultural specialists- The formative evaluation highlighted the time constraints faced by ICSs. The number of minority students is rising rapidly in Eastern Carver County school district. Currently, there is only one ICS representing each major community in the school district. Currently the ICSs are donning several hats of being family counselor, teaching aid, language interpreter, cultural educator for school staff, after-school activity aid, coordinator of cultural activities and school representative for communities. Recruiting more ICSs can reduce the burden on existing team and help them work effectively.

Collaborating with non-profit organization to help newly immigrant families- The ICSs are currently helping newly immigrant families to connect with non-profit or government services.

They are also helping other government departments to connect with ethnic minority communities. This is an additional work for ICS team. The school district can collaborate with a non-profit to help families access economic and other vital resources.

Recommendations for the program-

- Feedback from teachers- A short feedback form could be developed to be filled by teachers at the end of every school year. The feedback form will aim to understand teachers' ratings for various ICS activities.

- Feedback from parents- Parents from minority and underserved communities could be asked to fill in a form similar to that filled by teachers. The form needs to be available in the family's first language. If the feedback sheets are not a feasible option for the parents, a focus group with each community could be organized to understand parent's perceptions of ICS work. The focus group needs to be facilitated by a person other than ICS who is also fluent in the language spoken by the community. Possible questions for the focus groups could include 1) What are the challenges faced by the parents while interacting or working with the school system 2) Instances or aspects were ICS help was useful 4) Instances or aspects where ICS help was not useful 4) Recommendations or suggestions for the ICS work

- Student testimonies- At the end of the year, testimonials could be collected from students who have regularly interacted with the ICS team member. The testimonials needs to be collected by a person other than ICS who is fluent in the primary language of the students.

- Development of ICS data-base- The ICS team can develop a database consisting of measurable outputs included in the logic model. These data points then could be further used in the outcome evaluation. The database would be useful while developing pre-post analysis of the ICS program.

- Evaluation stories- Evaluation stories are a unique way of collecting and presenting stakeholders narratives in the form of stories. ICS evaluation could consist of several of these stories by parents, students, teachers, community members and ICSs. The stories can elaborate what were the challenge faced by family or students, how ICSs helped and how the challenges were overcome. The evaluation stories could also consist those

where no solution could be found. These stories would help highlight the complexity of ICSs work and the scope of the challenges involved.

Post script: Relevance of the present evaluation to the field of Maternal and Child Health (MCH)

Mental and emotional health of adolescents is an important aspect for the field of MCH. Studies note that school connectedness is an important factor for healthy behavior in youths. A longitudal study of adolescent health concluded that adolescents who feel cared for by people and feel part of their school are less likely to be engaged in substance abuse, risky behavior or initiation of sex activity at an early age(Resnick, Harris, & Blum, 1993) (McNeely, Nonnemaker, & Blum, 2002). The school connectedness is also linked with improved mental health outcomes such as reduction or delayed onset of anxiety and depressive symptoms(Shochet, Dadds, Ham, & Montague, 2006). The present evaluation studies theory of change for the program concerned with the school connectedness and mental health aspects of adolescents in Eastern Carver County Schools. The evaluation thus is deeply connected with the MCH study areas and in process also creates linkages with the educational settings.

Similarly, discrimination based on race, ethnicity and gender has far reaching impacts on mental and behavioral health. Perceived racial discrimination is closely linked with mental disorders such as depression, anxiety and psychosis (McKenzie, 2006), (Noh, Kaspar, & Wickrama, 2007). In that regard, ethnic minority youths face unique health and behavioral risks challenges. Initiatives such as ICS that help students with ethnic identity exploration and inter-racial socialization act as protective factors against depression, low-elf-esteem and risky behavior (Miller & MacIntosh, 1999). In addition, ICS program features such as interaction with supportive adults, career guidance, and support for academic activities further help ethnic minority adolescents develop positive self-esteem and resiliency. ICS program along with school connectedness in minority communities also help families learn and practice positive parenting and parent engagement in school. All these three factors are recognized by CDC as protective factors for reducing health risk behaviors in adolescents.

References

Bank JA. (1976). The Emerging Stages of Ethnicity : Impications for Staff Development. Retrieved July 22,

    2016, from http://ascd.com/ASCD/pdf/journals/ed_lead/el_197612_banks.pdf

Chin, M. H., Walters, A. E., Cook, S. C., & Huang, E. S. (2007). Interventions to Reduce Racial and Ethnic

    Disparities in Health Care. *Medical Care Research and Review*, *64*(5 suppl), 7S–28S.

    https://doi.org/10.1177/1077558707305413

Corkery, E., Palmer, C., Foley, M. E., Schechter, C. B., Frisher, L., & Roman, S. H. (1997). Effect of a

    Bicultural Community Health Worker on Completion of Diabetes Education in a Hispanic

    Population. *Diabetes Care*, *20*(3), 254–257. https://doi.org/10.2337/diacare.20.3.254

Croll, J., Neumark-Sztainer, D., Story, M., & Ireland, M. (2002). Prevalence and risk and protective factors

    related to disordered eating behaviors among adolescents: relationship to gender and ethnicity.

    Journal of Adolescent Health, *31*(2), 166–175. https://doi.org/10.1016/S1054-139X(02)00368-3

Eastern Carver County School District. (2015). *Eastern Carver County Schools: Word's Best Workforce*

    Setting Goals and Reporting Results report for @014-15. Chaska, Minneapolis.

First, J. M. (1988). Immigrant Students in U.S. Public Schools: Challenges with Solutions. *Phi Delta*

    Kappan, *70*(3), 205–10.

Funnell, S., & Rogers, P. J. (2011). *Purposeful Program Theory: Effective Use of Theories of Change and*

    Logic Models. Jossey-Bass.

Islam, N. S., Wyatt, L. C., Patel, S. D., Shapiro, E., Tandon, S. D., Mukherji, B. R., … Trinh-Shevrin, C.

    (2013). Evaluation of a Community Health Worker Pilot Intervention to Improve Diabetes

    Management in Bangladeshi Immigrants With Type 2 Diabetes in New York City. *The Diabetes*

    Educator, *39*(4), 478–493. https://doi.org/10.1177/0145721713491438

King, J. A., & Stevahn, L. (2013). *Interactive Evaluation Practice : Mastering the Interpersonal Dynamics of Program Evaluation* (1st ed.). Tousand Oaks, California: SAGE Publications.

Lam, T. K., Mc Phee, S. J., Mock, J., Wong, C., Doan, H. T., Nguyen, T., … Luong, T.-N. (2003). Encouraging Vietnamese-American Women to Obtain Pap Tests Through Lay Health Worker Outreach and Media Education. *Journal of General Internal Medicine*, *18*(7), 516–524. https://doi.org/10.1046/j.1525-1497.2003.21043.x

Lewin, S., Munabi-Babigumira, S., Glenton, C., Daniels, K., Bosch-Capblanch, X., van Wyk, B. E., … Scheel, I. B. (2010). Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. In *Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD004015.pub3/abstract

McKenzie, K. (2006). Racial discrimination and mental health. *Psychiatry*, *5*(11), 383–387. https://doi.org/10.1053/j.mppsy.2006.08.002

McNeely, C., Nonnemaker, J., & Blum, R. (2002). Promotig School Connectedness: Evidence from National Longitudal Study on Adolescent Health. *Journal of School Health*, *72*(4).

Miller, D. B., & MacIntosh, R. (1999). Promoting resilience in urban African American adolescents: Racial socialization and identity as protective factors. *Social Work Research*, *23*(3), 159–169. https://doi.org/10.1093/swr/23.3.159

Minnesota Education Equity Partnership. (n.d.). English Language Learners (ELL) – MNEEP. Retrieved from http://mneep.org/english-language-learners-ell/

Minnesota Office of Higher Education. (2016). Minnesota Educational Attainment, Population Age 25 to 64, by Cultural Group. Retrieved June 30, 2016, from http://www.ohe.state.mn.us/dPg.cfm?pageID=2174

Noh, S., Kaspar, V., & Wickrama, K. a. s. (2007). Overt and Subtle Racial Discrimination and Mental

Health: Preliminary Findings for Korean Immigrants. *American Journal of Public Health*, *97*(7),

1269–1274. https://doi.org/10.2105/AJPH.2005.085316

Patton, M. Q. (2008). *Utilization Focused Evaluation* (4th ed.). Sage Publications.

Pawson, R., & Tilley, N. (1997). *Realistic Evaluation | SAGE Publications Inc* (1st ed.). London: SAGE

Publications. Retrieved from https://us.sagepub.com/en-us/nam/realistic-

evaluation/book205276

Pérez, L. M., & Martinez, J. (2008). Community Health Workers: Social Justice and Policy Advocates for

Community Health and Well-Being. *American Journal of Public Health*, *98*(1), 11–14.

https://doi.org/10.2105/AJPH.2006.100842

Resnick, M. D., Harris, L. J., & Blum, R. W. (1993). The impact of caring and connectedness on adolescent

health and well-being. *Journal of Paediatrics and Child Health*, *29*, S3–S9.

https://doi.org/10.1111/j.1440-1754.1993.tb02257.x

Rhodes, S. D., Foley, K. L., Zometa, C. S., & Bloom, F. R. (2007). Lay Health Advisor Interventions Among

Hispanics/Latinos: A Qualitative Systematic Review. *American Journal of Preventive Medicine*,

33(5), 418–427. https://doi.org/10.1016/j.amepre.2007.07.023

Schlesinger EG, & Devore Wynetfa. (1995). Ethnic Sensitive Social Work Practice: The State of the Art.

Journal of Sociology & Social Welfare, *22*(1), 29.

Shochet, I. M., Dadds, M. R., Ham, D., & Montague, R. (2006). School Connectedness Is an

Underemphasized Parameter in Adolescent Mental Health: Results of a Community Prediction

Study. *Journal of Clinical Child & Adolescent Psychology*, *35*(2), 170–179.

https://doi.org/10.1207/s15374424jccp3502_1

Spencer, M. S., Rosland, A.-M., Kieffer, E. C., Sinco, B. R., Valerio, M., Palmisano, G., … Heisler, M. (2011).

Effectiveness of a Community Health Worker Intervention Among African American and Latino

Adults With Type 2 Diabetes: A Randomized Controlled Trial. *American Journal of Public Health*, *101*(12), 2253–2260. https://doi.org/10.2105/AJPH.2010.300106

Sue, S., Fujino, D. C., Hu, L., Takeuchi, D. T., & S, W. (1991). Community mental health services for ethnic minority groups: A test of the cultural responsiveness hypothesis. *Journal of Consulting and Clinical Psychology*, *59*(4), 533–540. https://doi.org/10.1037/0022-006X.59.4.533

Swider, S. M. (2002). Outcome Effectiveness of Community Health Workers: An Integrative Literature Review. *Public Health Nursing*, *19*(1), 11–20. https://doi.org/10.1046/j.1525-1446.2002.19003.x

US Census Bureau. (2016). Census.gov. Retrieved July 25, 2016, from http://www.census.gov/

Vu, L., & Walters, N. (2013). *Preparing Immigrant Student in Minnesota for Higher Education*. Minnesota Office of Higher Education. Retrieved from

http://www.ohe.state.mn.us/pdf/PreparingImmigrantStudentsMN.pdf

Witmer, A., Seifer, S. D., Finocchio, L., Leslie, J., & O'Neil, E. H. (1995). Community health workers: integral members of the health care work force. *American Journal of Public Health*, *85*(8_Pt_1), 1055–1058. https://doi.org/10.2105/AJPH.85.8_Pt_1.1055

Appendix

Appendix 1- Time Spent on Activities and Tasks

Activities and Tasks	Total Hours	Notes
1. **Meetings (IAA, ICS, departmental, Leadership, planning)**	56.0	Departmental meetings +ICS meetings+ IAA meetings+ Leadership meetings +Data committee meetings +community meetings +other department meetings
2. **Meeting with parents (include meeting to help families)**	33.0	Meetings with parents +Informal conversations with parents+ helping new parents +Providing resource support to families+ helping parents with school related activities+ Parent-Teacher conferences

3.	**Meeting+ conversations with teachers and other school staff**	26.0	Meeting with student program coordinator+ meeting with principle and deans+ meeting with school nurse/counselor/social worker +meetings with teachers and staff
4.	**Phone calls with parents**	28.0	Phone calls with parents to share news and event+ phone calls with parents to discuss other things
5.	**Home visits**	8.0	Home visits
6.	**Preparation work for meetings and other activities**	12.5	IAA planning+ preparation of packages
7.	**Facilitating educational activities for families**	11.5	FLC, Early learning zones, Adult classes
8.	**Working with students (academic activities , mentoring and providing help)**	124.0	Student check in, helping students with independent studies+ WIN+ I team+ help/conversations with students+ helping students for school administrative work+ Mentoring+ practice spoken word+ Kindergarten(SOAR east in included in helping students with independent studies)
9.	**Translation/interpretation**	4.5	Translation/interpretation
10.	**Culture club activities**	76.0	Intercultural Harmony fest+ CHS diversity fest+ Purple day+ Culture club+ IAA culture
11.	**Sumer school activities**	27.0	summer school + celebrate summer
12.	**Afterschool soccer + Filed trips with students**	49.3	Field trips+ Afterschool soccer +Other extracurricular activities +Twin cap day CES+IAA activities)
13.	**Training**	11.5	MCA training+ MCA math and reading

14.	**Logistics, planning, outreach for community or community events**	25.0	Listening sessions+ Grecia planning+ community outreach+ community interactions/pooling resources+ Newsletter+ Parent leadership council
15.	**other tasks such as lunch supervision**	11.5	Lunch supervision
16.	**Other administrative work including cleaning offices, email checking etc.**	25.5	Admin work+ Paper work
17.	**Early childhood screenings**	37.5	Early childhood screenings
18.	**Working with teachers and staff**	3.0	Working with teachers and staff
Total		579.3	

Appendix 2- Details of activities counted for Outcome Time Map

Outcome	Hours	%	Fields included
Parents support their children to be active in school	119.5	41%	All the family activities, includes Early Childhood Screenings
Students feel safe, confident and accepted in the school	305.3	45%	All the students, culture club, diversity fest, after school.
Teachers and other school staff is culturally aware	68.5	10%	All teachers, newsletter, diversity fest
Community encourages students to participate in school	28.0	4%	All community, Grecia planning
Total hours counted	519.8		
Activities not included in this analysis are- Administrative work, lunch supervision, Meetings and Trainings			

Appendix 3- Details of activities counted for Stakeholder Time Maps

Stakeholders	Hours
Parents and Families	119.5
Students	227.3
Link work- Linking two stakeholders	125.5
Teachers and staff	30.5
Community	19.5
Other government agencies	3
Total Hours	525.3
Activities not included in this analysis are- Administrative work , Lunch supervision, Meetings	

What are outcome chains?

The traditional logic models show inputs used, activities undertaken, and short term and long term outcomes, all without necessarily explaining how the activities bring about the results. The logic models in the form of outcome chains are effective in representing the interventions and its consequences as a series of results. The outcome chains involves building a hierarchy of outcomes starting with the most basic or the first outcome that needs to be achieved in order to achieve the long term main outcome. Each of these outcomes could be evaluated separately to understand the impact of the program.

What are Mechanisms and attributes?

Each outcome is in the outcome chain further clarified with the help of mechanisms and attributes. The concept of Mechanisms developed by Pawson and Tilly for Realist Evaluation Framework assumes that Programs 'work' by enabling participants to make different choices (Pawson & Tilley, 1997). Making and sustaining different choices requires a change in participant's reasoning (for example, values, beliefs, attitudes, or the logic they apply to a particular situation) and/or the resources (that is information, skills, material resources, support) available to them. This combination of 'reasoning and resources' is what enables the program to 'work' and is known as a program 'mechanism'. Realist evaluation approaches evaluation with questions: 'what works, in which circumstances and for whom?' It seeks to understand the multiple realities through identification and examination of mechanisms associated with the intervention or program.

We need to note that the mechanisms are not same as program component or activities; rather, they are underlying processes that describe how an intervention or program produces change. The mechanisms do not work independently; they operate with the background of context and in the anticipation of outcomes (Pawson & Tilley, 1997).

We can observe several mechanisms in case of ICS program. For example, for the Outcome 1 of ICS program- Parents support their children to participate in the activity, mechanisms such as

confidence of parents to talk to teachers and other staff in the system, a sense of well-being in the family, high value placed by parents on school success were identified as crucial aspects that need to be addressed to achieve the outcomes.

What are attributes?

Attributes are statements defining salient characteristics of the outcomes. The attributes try to answer the What, When, Where, Why and Who questions for each outcomes. The attributes help program staff to understand how the outcome will look like in the best possible scenario and what will be its essential features. The attributes can be later used in the stage of outcome evaluation to develop success criteria or measures. For example, the sub-outcome- Parents feel comfortable and confident communicating with school staff has attributes such as 1) number of Parents- Teacher meetings attended by parents, 2) parents asking questions in the Parent – Teacher meetings, and 3) parents sharing concerns in the meeting.

Appendix 5- Evaluation Questions shared by ICS Team

Table 3- Evaluation concerns and questions shared by ICS Team

Stakeholders	Concerns
Program Coordinator	The program needs visibility. For last few years, the district administration has been taking program for granted.
ICS1	We would like to better plan and prioritize our work. These day, I do not know which work I should be prioritizing. I want to know how much time to spend on certain things
ICS2	We seem to have too many grants. Could we be effective without grant money?
ICS3	Are parents aware about our role? How does community perceive us?
ICS4	How do we effectively measure and display the successes and challenges of the work we do?
ICS5	What is my most important job? In which high school I should spend more time? Who are the most important stakeholders in my job?
ICS6	What is the best way of communication? How I am communicating? , How do we effectively communicate our work and vision?
Program Director	Other government department such as Police, Health services wish to partner with us. The partnership requires considerable time from our staff. Should we engage with more partnerships? How can our programs be more visible for district administration?