Brown Rice and Beans

Promoting Health Eating While Preserving Cultural Capital

by

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ABSTRACT

Healthy eating promotes the optimal growth and development of children and can help reduce the risk of developing many health-related problems such as obesity and diabetes in both children and adults. Low-income, minority children disproportionately suffer from several chronic diseases when compared to middle to upper class non-Hispanic whites. The school is an environment in which children can learn about the importance of healthy eating by observing foods served, observing role models and interacting with a curriculum that emphasizes health and good nutrition. Parent involvement has been shown to play a role in improving health habits of children.

Therefore, promoting nutrition education in the school by effectively improving parent involvement among minority parents is a promising approach.

The purpose of this action research was to examine the process of developing and evaluating a culturally sensitive, family-based nutrition newsletter for Latino parents of preschool children. The study aimed to: 1) identify challenges and explore education outreach and food-related issues facing preschool Latino families and 2) develop and evaluate a culturally sensitive, family-based nutrition education newsletter that promotes family engagement and healthy eating. The four phases of this research included: 1) a formative stage; 2) a development stage; 3) an evaluation stage and 4) a sustainability stage. Descriptive statistics and thematic coding was used to analyze the data. Findings from parent and staff surveys indicated that newsletters and healthy recipes were the preferred methods of receiving food and nutrition-related information and the priority health issues for participants were diabetes and obesity. Based on the preferences of parents and staff, a family based nutrition newsletter was developed that was designed to

encourage parents and children to work together while engaging with newsletter material.

The newsletter was evaluated by parents and staff for content, format and effectiveness.

Overall, the newsletters were well received by parents and staff. The newsletter increased interest in nutrition, but participants wanted more information and wanted more fun activities for the children. The findings of this study indicated that the tailored approach to designing newsletters is not only feasible, but acceptable regarding the audience's specific needs and preferences in this specific context and is a viable delivery method for nutrition education and sustainable nutrition education outreach for this Center. The development of culturally sensitive nutrition education materials that meet the needs of the specific intended audiences is discussed.

DEDICATION

This dissertation and my doctoral degree is dedicated to my father who instilled in me the value of education and supported all of my educational endeavors, and my mother, a fellow teacher who taught me that women can go to school and be a good mother too.

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CHAPTER 1

INTRODUCTION

Overview

Fifty years ago, four women decided that the disadvantaged children in a southern Chester County, Pennsylvania town needed help in school. They reached out to members of the community and began a rocky journey that resulted in a thriving preschool that currently assists underserved families by providing affordable, high quality child care that prepares students to be successful in school. Little did they know that a half century later, their altruistic endeavor would develop into a fully functioning preschool with an English immersion program that develops the whole child in a loving and nurturing environment.

Over the past three years, I observed the staff and children of the Tick Tock Early Learning Center and was involved in many discussions about the staff's interest in teaching the children and their families about healthy eating practices and the promotion of health in general. This preschool represents a microcosm of the health and nutrition-related issues facing the larger US Latino/Hispanic immigrant population. The US Latino community is growing and the percentage of Latino/Hispanics is projected to rise from 17.3% in 2014 to 28.6% by the year 2060 (US Census Bureau, 2014). With this growth comes challenges in several areas including social, economic, educational and health systems.

Tick Tock Early Learning Center is located in Kennett Square, PA, which is an ethnically diverse, growing community with an overall population of 6,167 (United States Census Bureau, 2015). Of the total population, 48% are Latino, with a majority originating from Mexico, many of which are employed in the local mushroom farms.

Kennett Square is known as the Mushroom Capital of the World, producing over 400 million pounds of mushrooms annually (Charles, 2012; Morris, 2014).

In 1965, with wide-spread community support, the Tick Tock Early Learning
Center began its mission of providing high quality early childhood education to children
of underserved working families primarily in Southern Chester County, PA. Tick Tock is
a non-profit organization licensed by the Department of Public Welfare and is able to
provide quality day care and learning experiences through the support of the United Way
of Southern Chester County and through private contributions. Currently, the center
serves children ages 18 months through 3rd grade with a staff/child ratio of 1 to 6, which
facilitates a strong, successful learning process. Children at the school are predominantly
Latino/Hispanic (91%). Most of these families are of Mexican decent, many of which are
first and second generation immigrants (Tick Tock Director, personal communication,
2013).

Tick Tock Early Learning Center envisions a world where "every child has hope and is loved, valued, and given the opportunities to develop the skills and confidence to achieve success" (Tick Tock Website, 2016). The Center's philosophy is to accomplish their mission by providing affordable, quality child care for hard-working low-income families. Since the lack of reliable child care is very often an obstacle for parents in this community with regard to obtaining, excelling in or keeping a job, it is the aim of this Center to remove that obstacle (Tick Tock Director, personal communication). They provide a well-rounded, hands-on curriculum, as well as a summer camp program, in a safe, nurturing and supportive environment. Their emphasis is on school readiness and

English Language acquisition and the curriculum is linked to the PA Early Learning Standards.

There is a large body of research that examined how immigrant status and acculturation affects the health of Latinos (Goldman, 2016). The Latino Paradox is a phenomenon that has piqued the interest of nutrition and public health professionals for over a decade and suggests that despite lower socioeconomic status (SES), first generation Mexican immigrants experience better health, for particular outcomes, than their US-born counterparts (Hunt, Schneider & Comer, 2004; Singh & Yu, 1996; Sundquist & Winkleby, 1999; Vega et al., 1998; Viruell-Fuentes, 2007; Wei et al., 1996). However, as Mexican immigrants acculturate, their health deteriorates. Eating habits have been a factor implicated as a contributor to declining health in this group (Ayala, Baquero & Klinge, 2008).

The school environment is a context in which children eat meals and learn about health. The process of acculturation for immigrants with children involves the US school system. In 2010, Congress passed the Healthy, Hunger-Free Kids Act (Sec.204 of P.L. 111-296) that established school wellness policies that include goals for nutrition education and promotion (Center for Disease Control, 2012). When children are well fed, they are better able to concentrate and focus in school, thereby improving overall school performance (Taras, 2005). This legislation marked the national recognition of the relationship between healthy eating, children and schools. Healthy eating promotes the optimal growth and development of children and can help reduce the risk of developing many health-related problems such as obesity, cardiovascular disease, diabetes, and dental caries in both children and adults (Dietary Guidelines for Americans, 2010).

Many health professionals and educators (including Tick Tock staff) are concerned about the high prevalence of many health conditions, such as obesity and type II diabetes among US children and some have deemed this a major public health problem, especially among low-income minority groups (Mozzafarian et.al, 2016).

Healthy eating habits can be taught in schools and nutrition education outreach is a viable way to educate both parents and children about eating a healthy diet (Ayala, et al., 2008). There are many ways the school environment can provide ways to improve food, nutrition and health related behaviors (Perez-Rodrigo & Aranceta, 2001). Parent involvement in the school setting and family engagement have been shown to have a positive impact on academic achievement (Fan & Chen, 2001) and healthy eating habits (Arredondo et al., 2006; Bright Futures, 2011; Greening, Stoppelbein, Konishi, Sytsma Jordan, Moll, 2007).

The Director at Tick Tock expressed special concern about the diets of children at the center and the prevalence of overweight among the preschoolers attending the Center. Parent involvement at Tick Tock had also been a challenge for staff in the past and nutrition and health outreach was no exception. As the Director pointed out, efforts were made by Center staff to disseminate nutrition and health information in the Center's monthly newsletter. But these efforts did not result in effective family engagement or parent involvement. The challenge of parent involvement at Tick Tock may be due to the fact that there are differences in the ways that different groups interact with schools (Chrispeels & Rivero, 2001). There is evidence that minority status, low levels of education, immigration status and poverty adversely affect the degree to which parents from these groups interact with the school system (Carasquillo & London, 1993).

Early childhood education, however, is a significant and unique time in a child's life in which their experiences and environments have a great influence on development. Mistry et al. (2002) described the significance of the rationale for intervention at the preschool level, stating that:

Social, cultural and economic determinants of health shape the context of early experiences and environments and are particularly salient in early childhood when the roots of lifelong health and development are being established. Poorly constructed systems have an impact on health in early life, and these effects may be magnified as children grow into adulthood. Establishing strong systems in early childhood by meeting the foundational needs of all children may avoid costly and less effective solutions required to redress disease later in life (p. 1688).

Therefore, Tick Tock was the perfect space to explore the intersectionality of poverty, school nutrition outreach, immigration status, parent involvement and culture. Nutrition education interventions that are sensitive to culture and family needs may provide a means to influence dietary practices to prevent the deterioration of health among second-generation immigrants. Parental input, family and home-based nutrition interventions have been shown to be valuable and effective in promoting healthy weight and lifestyle behaviors (Flores, Maldonado & Duran, 2012; Golley, Hendrie, Slater & Corsini, 2011; Knowlden & Sharma, 2012). Engaging parents is a viable way to promote healthy behaviors in children (Golley, et al., 2011) and involving Latino parents in school based interventions increases the likelihood of success in health programs (Holub, et al., 2013).

Holub, et al. (2013) suggested that these types of interventions are successful because they "embrace an important cultural aspect, the family unit" (p. 535).

One popular and successful method of providing home-based nutrition and health information is through the use of newsletters (Harmon, Grim & Gromis, 2007; Merga & Hu, 2016; Taylor-Davis, et al., 2000). Newsletters have been shown to promote change in knowledge attitudes and behaviors in some groups (Lancaster, Smiciklas-Wright, Ahern, Achterberg & Taylor-Davis 1997; Taylor-Davis, et al., 2000). Providing acceptable, appealing nutrition newsletters may provide one nutrition intervention method that may be useful in addressing the challenge of preserving cultural practices, promoting health and preventing the decline in health as Latino immigrant families acculturate. Therefore, my general goal through this project was to gain better understanding of effective ways to convey nutrition and health information to parents by examining the process of developing and evaluating a family-based, culturally sensitive nutrition newsletter tailored to the needs of parents and directed toward parent involvement and family-engagement.

Situational Context and Background

In January 2013, I visited the Tick Tock Early Learning Center in Kennett Square, PA. The director and I spent several hours observing the daily activities of the children and staff at the day care center. Out of our discussion, emerged several issues facing the staff and children at the center and in the local community. We discussed the food and nutrition related challenges faced by the director and her staff. We discussed the cultural characteristics of the families and the challenges specific to them. Based on my informal, preliminary interview with the director, it became apparent that it was difficult for the

Center to provide high quality nutrition education at this site because of the lack of parent involvement for the majority of families at Tick Tock and the lack of available culturally appropriate food as a result of current state and federal nutrition policies. These challenges were a concern and priority for the Director.

The cultural make-up of the children and families at Tick Tock presented a unique set of challenges. Center data indicates that Tick Tock serves 91 children, 90% of which are of Latino/Hispanic heritage, predominantly of Mexican decent. According to Center data, 61% of the children qualify for the free-price food program and 28% qualify for the reduced price food program. In addition, 73 of the 91 children (67%) can be described as English Language Learners (ELL) or English as a Second Language (ESL), while the rest are described as English first language. Some families are Spanish monolingual, some are functionally or fluently bilingual and choose to use Spanish exclusively in the home, some are functionally or fluently bilingual and choose to use English in the home but their children are learning some Spanish from relatives or peers or school. Many of the 8 to 13 year olds, Hispanic surname children attending Tick Tock are almost fluently bilingual at least orally for their age and stage of development but revert to Spanish for communication with emotion-laden content. There are 25 staff members, 19 of which are bilingual. The Center also provides food for all attending children and participates in the Child and Adult care food program. Breakfast, lunch and an afternoon snack are served at no additional charge. The Center strives to provide healthy meals and snacks to serve as healthy eating models for the children. The director and her staff value health and expressed an interest in promoting nutrition and health (Director, personal communication).

In most Tick Tock families, both parents are working outside of the home and have very little time to visit the school during the daytime hours. Many parents work long hours, and drop off and pick up times are not conducive to educational efforts. The lack of parent involvement, primarily due to factors beyond the parents' control, mirrors parental involvement issues for Latino and other minority communities across the US (Hill & Taylor, 2004). The Center staff struggle with the task of providing nutrition education in a consistent, frequent manner and are constantly searching for ways to involve the parents in ways that empower them and make them feel as if they are playing a bigger role in their children's educational experience.

The director and I decided that we could expand nutrition outreach and involvement for the parents and children at the Tick Tock. During our discussions, it became apparent that there were many assets and resources to draw upon at the Center and within the local community and the center is thriving and successful in many ways. They are well respected in the community, have dedicated staff and have been offering their services to this community for over 50 years (Tick Tock Director, personal communication). Historically, the center has struggled with outreach for nutrition education and in addition to the abovementioned challenges, a major barrier for parents according to the director continues to be parent involvement. It has always been difficult to bring parents in to the center for reasons other than parent-teacher conferences. This created a problem for activities that involve parents during working hours. The director also told me that many of the parents are employed at jobs that are not only low-wage, but offer no paid vacation days or sick days and have very little flexibility to leave work to go to the child's school and return to work. In addition, missing work means less pay,

which is counterproductive for the family in general. For all of these reasons, the potential for developing effective, portable nutrition education materials that can be sent to the home was deemed a worthy effort.

It became quite clear after many discussions with the director and Center staff members that an approach that provided useful nutrition information that promoted parent involvement was needed. Therefore, this study was designed around the following research questions: 1) What are the specific interests, food- and nutrition –related issues, challenges and barriers facing the parents and staff at Tick Tock Early Learning Center? and 2) Based on the existing limitations of parent involvement in this population, is a tailored, culturally culturally-sensitive newsletter an acceptable form of nutrition education outreach for Latino preschool families? The primary objectives of this project were: 1) to identify challenges and explore education outreach and food-related issues facing preschool Latino families and 2) to examine the process of the development and evaluation of a culturally sensitive, family-based nutrition education newsletter that promotes family engagement and healthy eating.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL PERSPECTIVES

The next four sections describe the theoretical framework and the research that guided this study. In the first section, the Latino Paradox is described. Next the literature related to cultural capital and parent involvement in the context of the Latino Paradox is reviewed. Following is a section that briefly explains the importance of tailoring nutrition communication. The final section explores the implications for the current project.

The Latino Paradox

The Latino Paradox (also known as the Latino Mortality Paradox) has been piquing the interest of nutrition and public health professionals for over a decade and is an underlying premise in the area of Latino/Hispanic health (Goldman, 2016).

Essentially, the Latino Paradox suggests that despite lower socioeconomic status (SES), first generation Mexican immigrants experience better health, for particular outcomes, than their US-born counterparts (Hunt, Schneider & Comer, 2002; Singh & Yu, 1996; Sundquist & Winkleby, 1999; Vega et al., 1998; Viruell-Fuentes, 2007; Wei et al., 1996). However, as Mexican immigrants acculturate, their health often deteriorates and eating habits and diet have been identified as one factor contributing to their poor health (Ayala et al., 2008). This phenomenon serves as the primary framework underlying this project.

The Latino paradox, diet and health. Diet and eating behaviors play an important role in overall health. This fact has become particularly evident when it comes to the issue of immigrant health and the effects of acculturation and integration into US society. The US food environment is an obstacle course for new immigrants and many challenges and barriers face first-generation immigrants. However, the effects of the

interaction between cultural health and dietary practices and the US food environment needs to be unpacked and examined in a way that exposes which factors and issues are amenable to intervention and remediation.

Ayala et al. (2008) conducted a systematic review of the association between diet and acculturation among Latinos in the US. The review included studies that examined dietary intake as measured by validated instruments and relevant dietary behaviors. One important aspect of this study was that it showed several consistent relationships between diet and acculturation despite the ways in which acculturation was measured. For instance, those who were less acculturated used fat in food preparation and drank more milk than those who were more acculturated. On the other hand, those who were more acculturated consumed more snacks, fast food and added trans fats in place of traditional food sources

Also, although past research has suggested differences in dietary fat intake and percent energy from fat between more and less acculturated individuals, Ayala et al. (2008) concluded that there was no relationship between these two variables and acculturation. In fact, less acculturated individuals consumed more rice, fruit and beans and less sugar and sugar-sweetened beverages than did their more acculturated counterparts. These findings both support and contradict previous evidence; however, in general, the key overarching finding was that a "differential influence of acculturation on diet, requiring greater specificity in dietary interventions by acculturation status" (Ayala et al., 2008, p. 1342) is warranted.

A second key study examined the relationship between acculturation and overweight-related behaviors among adolescent Latino immigrants. Dietary habits were

healthier and smoking was lower in foreign-born immigrants. Gordon-Larsen, Mullan Harris, Ward & Popkin (2003) examined data from the National Longitudinal Study of Adolescent Health to investigate which measures of acculturation were important and how the process of acculturation affected overweight and associated outcomes. Four key variables were examined related to the process of acculturation to the US, i.e., overweight, acculturation factors, structural factors, and proximate determinants (such as diet, physical activity and smoking). Findings suggested that foreign-born Latinos consumed more rice, fruits and vegetables (i.e., traditional Latino cuisine) than their US-born counterparts. In this context, the cultural capital of healthy traditional eating patterns is valuable and is healthier than the current diet of the US born population, which includes highly processed foods, sugary drinks and a plethora of snack foods.

Health practices, such as physical activity are also affected by acculturation status. As foreign-born immigrants acculturated, physical activity decreased and low intensity activities, such as playing video games, increased. However, as the authors pointed out "differences in physical activity and inactivity patterns were not as striking, and perhaps less malleable, as those for dietary patterns" (Gordon-Larson et al., 2003, p. 2030). The findings of this study also noted that smoking rates increased the longer Mexican adolescents lived in the US and that the obesogenic environment in the US directly influences health in this population and, in fact, there may be a generational effect.

Moreover, the interaction of diet, physical activity and smoking habits plus the structural factors such as education and income, may help explain the development of overweight in Latino adolescents as they spend more time in the US. Gordon-Larson et

al. (2003) found that in general, higher rates of obesity may be seen among lower SES groups who have fewer opportunities for physical activity and high accessibility to high-fat energy-dense food. If, in fact immigrants are not able to move out of these obesogenic food environments, they might be less likely to adopt and sustain healthy behavior patterns. However, cultural food and dietary patterns and the availability of healthy traditional foods and cuisine may neutralize the adverse effects and even counteract the adverse effects of living in unhealthy US food environments. (Gordon-Larson et. al., 2003).

Overall, based on this small sample of research, there is evidence to support the influence of acculturation, structural factors, time, and other culturally systemic features, on the health of immigrants. The loss of healthy, traditional dietary patterns and health practices in conjunction with less healthy eating habits, physical inactivity patterns and less healthy lifestyle patterns, such as smoking, may be contributing to the Latino health paradox.

The Latino Paradox and cultural capital. As the literature suggests, sociocultural factors play a major role in the phenomenon of the Latino Paradox. Viruell-Fuentes (2007) explained that poorer health outcomes are seen the longer immigrants are in the US and this may be related to socio-cultural factors, particularly the loss of social networks and traditional health behaviors. These social networks and health behaviors that are inherently part of the Mexican culture appear to have a protective effect on the health of first-generation immigrants. But as people acculturate, the family support system often weakens and the social network dissipates. These cultural factors that are relatively protective are often lost and overall health declines (Viruell-Fuentes, 2007; Abraido-Lanza, Dohrenwhen, Ng-Mak, & Turner, 1999; Scribner, 1996).

There has also been criticism in the literature of the use of acculturation as the pivotal construct within the context of the Latino paradox because it reduces it to something that is internal to the individual, thereby implying that cultural traits are "inherent to members of a particular group, instead of envisioning culture as a system that is socially constructed "(Viruell-Fuentes, 2007, p. 1525). The danger of this perspective is that if most or all of the burden is put upon the individual (as either the cause or solution to problematic health problems), health/nutrition professionals, may run the risk of not only blaming the victim, but the culture itself may be looked at as the "source of dysfunction" (Santiago-Irizarry, 1996, p. 6).

Viruell-Fuentes (2007) addressed the de-contextualization of culture and attempted to expand the explanation of diminished health outcomes seen in second-generation immigrants beyond the acculturation process. In this study, first generation and second-generation Mexican immigrant women were interviewed. The process of integration into US society was examined beyond the individual-centered acculturation process. Key findings of the study suggested that "othering" and discrimination may be contributing structural factors leading to the deterioration of health outcomes in second generation immigrant women (Viruell-Fuentes, 2007, p. 1533). This study highlighted the need to explore the cultural system as well as individual practices influencing the loss of protective health factors. Tailored interventions that change structural, environmental as well as individual circumstances must be better understood and may be a positive factor

that may remediate any decline in health as new immigrants enter the process of acculturation.

Furthermore, as Viruell-Fuentes (2007) critically asserted, the focus on cultural factors has been "at the expense of drawing attention to the structural constraints within which individuals operate" (p. 1525). Therefore, interventions must at the very least, acknowledge the structural determinants affecting health and more ideally, work with and within the structural contexts of this population's cultural milieu (Holub, et al., 2013). Tailoring nutrition interventions that create social connections and incorporate traditional dietary and health practices may be a valuable approach to improving health practices for this population (Holub et al., 2013; Kreuter, Strecher & Glassman, 1999).

The notion of an interaction between individual and cultural characteristics, and the cultural context in which the process of acculturation is taking place can be examined within the framework of cultural capital theory. The term cultural capital originated with Bourdieu examining social class reproduction in mid-20th century France (Bourdieu, 1977). However, the concept has been extensively transformed from a concern with social class in a society that was, at least when the term originated, racially homogeneous, to a concern with race in the multi-cultural context of the United States (Winkle-Wagner, 2010).

Originally, cultural capital was described as generationally transmitted and Bourdieu explained academic attainment as reserved for the elite or dominant class, arguing that schools valued and reinforced upper class values and behavior (Bourdieu & Passeron, 1977). Therefore, when middle and upper class children enter school with a set of characteristics and behaviors, they are well accepted by teachers, and valued by the

educational system. Based on the original meaning, low-income and minority children do not have cultural capital and therefore, they are marginalized in the dominant class school system. Yosso (2005) used critical race theory to challenge cultural capital as a deficit theory and proposed that low-income and minority groups possess valuable cultural capital and emphasized the need for an ongoing commitment to acknowledging and valuing the multiple strengths of various cultural groups. The next section describes the forms of cultural capital and its application to this study.

The forms of cultural capital. In his paper entitled, The Forms of Capital (1986), Bourdieu discussed three types of capital—economic capital, social capital and cultural capital. Only cultural capital will be discussed here, but the three abovementioned concepts can be viewed as interrelated. According to Bourdieu (1986), cultural capital can take three different forms: the embodied state, the objectified state and the institutionalized state. Horvat (2003) suggested that Bourdieu wanted to show that it is not necessarily true that social conditions dictate one's fate and lot in life. What he thought was more important was the interaction (or that exchange) between agency and structure (i.e., cultural capital) that perpetuates privilege in society. Since improving parent involvement and family engagement at Tick Tock is one of the goals of this study, below, I briefly discuss the forms of cultural capital and their relationship to these terms in the next section. Following the description, I provide a summary diagram (Figure 1) that depicts the application of cultural capital to the Tick Tock context.

Embodied capital. In its most fundamental form, Bourdieu (1986) described embodied capital as "linked to the body" and accumulation of capital in this form, as described by Bourdieu, is called culture or cultivation (p. 244). Cultural capital is partly

unconscious (or habitual) and is acquired early on in life. In his description of *embodied cultural capital* Bourdieu borrowed a related concept, "*habitus*" which has been described as simply, culturally learned performances, e.g., taken-for-granted bodily practices, ways of thinking, dispositions, or taste preferences, in short, manners, habits, physical skills, and styles (Bourdieu, 1986, p. 244). Habitus can also be understood as a person's way of thinking (or mentality); it is a product of socialization. Moreover, embodied cultural capital entails work or effort on the part of the person who assimilates and incorporates this capital, and as Bourdieu stated, the work of acquiring this capital "is work on oneself (self-improvement), an effort that presupposes a personal cost, an investment, above all of time, but also of that socially constituted form of libido, *libido sciendi*, with all the privation, renunciation, and sacrifice that it may entail (Bourdieu, 1986, p.244)."

Parent involvement and the concept of *habitus* was addressed by Annette Lareau (1987) in her qualitative study of parent-teacher interactions, which compared a working-class school with an upper-middle-class school. In both of the schools examined by Lareau, the benefits of parental involvement were emphasized, but showed that the working-class parents were clearly uncomfortable in school meetings and viewed teachers as experts to whom they entrusted their children. In the upper-middle-class school, parents comfortably interacted with teachers in a style described by one of the parents as a "cocktail party without the cocktails" (Lareau, 1987, p.78). In other words, the shared habitus of teachers and middle and upper-middle class parents facilitated the educational process. A parent's habitus influences their involvement, and investment in,

the schooling of their children. The importance of parental embodied capital is emphasized by Bourdieu's suggestion that:

The most powerful principle of the symbolic efficacy of cultural capital no doubt lies in the logic of this transmission....It follows that the transmission of cultural capital is no doubt the best hidden form of hereditary transmission of capital, and it therefore receives proportionately greater weight in the system of reproduction strategies, as the direct, visible forms of transmission tend to be more strongly censored and controlled" (Bourdieu, 1986, p. 246).

Very often working class parents, immigrants and minority parents' cultural capital may not match the values or expectations of the school (or health care system) with which they interact (Lareau, 2003). Habitus, therefore can manifested as agency. In Bourdieu's (1990) words:

The habitus, as a system of dispositions to a certain practice, is an objective basis for regular modes of behaviour, and thus for the regularity of modes of practice, and if practices can be predicted...this is because the effect of the habitus is that agents who are equipped with it will behave in a certain way in certain circumstances" (Bourdieu, 1990b:77; cited Reay in 2004, p.433).

The "regular modes of behavior" discussed in Bourdieu's definition may function to maintain unequal rewards from the social institution (i.e., the school or health care system) and possibly create new inequalities by suggesting that the schools reward such behavior (e.g. parental involvement or lack thereof). In her book, *Unequal Childhoods*, Annette Lareau (2003) used in-depth interviews and observational methods to examine

middle (including upper middle), working class and poor families and showed that "inequality permeates the fabric" of current American culture (p. 3).

One of Lareau's many illustrative examples of how this inequality functions in schools explicitly showed how parental habitus affects and drives child rearing behavior with specific relevance to schooling. For instance, middle class parents act (or activate their cultural capital) to develop the talents of their children in a concerted fashion, a term Lareau called "concerted cultivation" (Lareau, 2003). Specifically, middle class child rearing behaviors are characterized by discussions between children and parents and organized activities that are established and controlled by parents. Working class and lower class parents, on the other hand, believe that the parents' responsibility is to assist the "accomplishment of natural growth" (Lareau, 2003). The children have more control over their own leisure activities and play freely outdoors with friends and family that usually live near them. The inequality, however, emerges with the parents' actual interaction with the schools that usually promotes and rewards the concerted cultivation approaches used by the middle class parent.

Lareau's (2003) research also showed that the middle class children, through the transmission of their parents' practices, developed a sense of entitlement that can be used by these children in school. They thereby learn to "question adults and address them as relative equals" (Lareau, 2003, p.2). Working class and poor children, whose parents' child rearing practices were not typically aligned with institutional standards, developed a habitus that manifested as "distance, distrust, and constraint in their institutional experiences" (Lareau, 2003, p.3). This may very well be compounded by race and ethnicity. Therefore, as this example suggests, parents, at home and at school, through

parent involvement activities may invest, mobilize and transmit their cultural capital to their children, who may or may not "invest" this acquired cultural capital in the education system. Based on my discussions with the director, parent interaction with teachers is limited to drop off, pick up and parent-teacher conferences and work constraints precludes additional parent-school interaction.

Objectified capital. The objectified form of cultural capital cannot be understood or utilized without acknowledging its relationship to the embodied cultural capital or the habitus. Bourdieu (1986), in his description of cultural capital in its objectified form noted that: "the cultural capital objectified in material objects and media, such as writings, paintings, monuments, instrument, etc., is transmissible in its materiality" (p.246). In other words, this form of capital is not of the body, as is habitus, but is outside the body. Things or possessions owned by people are objectified capital that could be invested. An example of objectified capital in the context of education can be the material things that parents can give to their children, such as books, computers, travel experiences, etc.

Field, on the other hand, cannot be separated from the concept of habitus and embodied capital because they are all in play within the social reproduction framework. So it seems that the embodied capital (i.e., habitus in all of its forms) and objectified capital (e.g. cultural or economic goods) are brought to life in the field. As Winkle-Wagner (2010) noted, "A field is not universal: many fields exist. A field is class based and often takes the objectifiable form of a school or a family. It is only within a particular field that cultural capital holds value, produces an effect, or even exists" (p. 7). In the case of the school or health care settings, each context (or field) is unique in both

the embodied capital of the participants and the value of the exchanged capital. This point is essential to this project in that Latino families have cultural capital that is not necessarily valued in the American school system or the US health care system. In particular, the cultural capital of low-income minority parents and families in the field of the American school is not as highly valued as the white, middle class Anglo cultural capital described by Lareau (2003). According to the director, the Mexican immigrant parents have little prior experience with American schools and are hurried when dropping off or picking up their children and also do not have time or the ability to be at the school during the day or after school for volunteer opportunities.

Institutionalized capital. The third form of cultural capital characterized by Bourdieu is the institutionalized form of cultural capital. In his description of institutionalized capital, Bourdieu asserted that, "the objectification of cultural capital in the form of academic qualifications is one way of neutralizing some of the properties it derives from the fact that, being embodied, it has the same biological limits as its bearer....By conferring institutional recognition on the cultural capital possessed by any given agent, the academic qualification also makes it possible to compare qualification holders and even to exchange them" (Bourdieu, 1986, p.248). In this context, he asserted that the value of institutionalized cultural capital (e.g., academic qualifications) can only be evaluated in relation to the labor market. One can surmise, then, that this is the context in which the exchange value of cultural capital is constructed in plain sight.

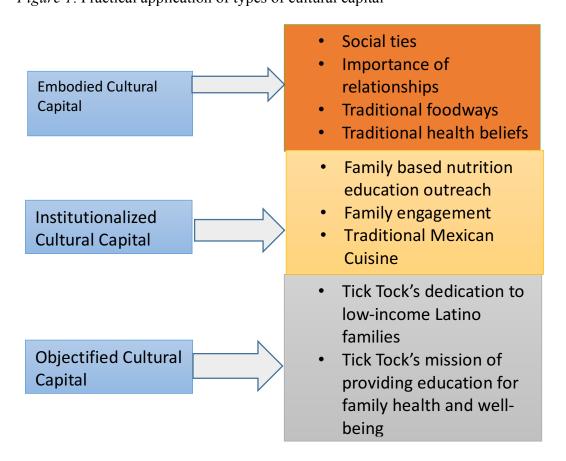
Furthermore, central to cultural capital theory is the idea that cultural capital is used "as a basis for exclusion from jobs, resources, and high status groups" (Lamont & Lareau,

1988, p.156). In fact, one of the strengths of Bourdieu and Passeron's (1977) argument of social reproduction is that it is structural.

Therefore, rather than interpret the behaviors of schools with regard to practices such as counseling and placement, curriculum implementation and ability groups as discriminatory, Bourdieu and Passeron (1977) would deem them institutionalized. Clearly this notion of institutionalized capital and the exchange of students' cultural capital in the context of the school, as noted by Lamont and Lareau (1988), provides us with a "more powerful framework for explaining the 'taken-for-granted routines' of daily life" (p.155). This explanation may relate directly to the daily school experience for teachers, parents and students and the value of cultural capital exchange in the classroom and between school personnel and parents. This also relates to the exchange value of the healthful practices of Mexican immigrants and traditional Mexican cuisine. As the Latino Paradox suggests, these everyday patterns for Latino families are healthy and should have value in the school and healthcare context. Preserving these practices and changing the structural context so that parents are involved in the protection of their culture and the prevention of the adoption of unhealthy eating patterns and food that are easy to access in the US food environment. Figure 1 depicts the cultural capital of parents, staff and children at Tick Tock.

In the case of Tick Tock, the Latino families have cultural capital in the form of their traditional cuisine and health practice that is not necessarily supported or valued as cultural capital in US society. The staff is dedicated to making nutrition and health priorities for the Center and the director stated that the food and culture of their families is valued by them. Traditional Mexican cuisine is healthier than the contemporary

American diet (Ayala, 2008). This study attempted to test if newsletters for Tick Tock parents can help utilize the traditional cultural capital of parents and help schools recognize the value of this capital. Parental involvement has been a challenge for Tick *Figure 1*. Practical application of types of cultural capital



Tock and I also wanted to examine whether newsletters could get parents more involved at home. In the next section, I discuss the connection between parent involvement, health and cultural capital.

Parent Involvement and Health

Feeding children is the responsibility of many. Parents, health professionals, the government, as well as schools, all play a role in reducing health risks and promoting healthy behavior in children. In 2014: 43% of US children 3 years old, 66% of children 4

years old and 85% of children 5 years old were enrolled in preprimary schools (kindergarten and preschools). Enrollment was lowest for Hispanics (32%) compared to non-Hispanic blacks (39%) and non-Hispanic whites (41%) (National Center for Education Statistics, 2014). Many US children consume breakfast and lunch at school; and those who do, consume almost half of their total daily calories at school (Briefel, Wilson & Gleason, 2009). As previously mentioned, Tick Tock provides food for all attending children and participates in the federal Child and Adult Care Food Program (Food & Nutrition Service, 1989). Breakfast, lunch and an afternoon snack are served at Center for no additional charge.

The Institute of Medicine (2005, 2011) acknowledged that the school environment can influence US children's diets and also recommended that parents become involved in the promotion of healthy eating behaviors for their children. The value and importance of parent involvement in children's education is well established (Chrispeels & Rivero, 2001) and parents can play a significant role in the formation of healthy or unhealthy eating habits and can serve as role models as their children develop attitudes toward food and healthful eating behaviors (Johnson, 2000; Moore et al., 1991). Parents can influence their children's eating habits either directly (e.g. through demands or restrictions) or indirectly (i.e., through modeling and monitoring). Programs that build parental skills to promote healthy eating in children have been successfully implemented (Arredondo et al., 2006; Greening, et al., 2006; Bright Futures, 2011). In addition, both parents and staff in early childhood programs share the responsibility of teaching and modeling healthy eating habits, often playing different roles (Johnson, Ramsay,

Armstrong, Branen & Fletcher, 2013), but should partner to improve the chances of success for nutrition education interventions.

The benefits of parent involvement (even at comparable levels of involvement) have been shown to be of greater in quality for affluent non-Hispanic white Anglo parents compared to Latino, African-American and Asian-American parents, low-income and single-parent households (McNeal, 1999). Parents with low levels of education may be less comfortable and less confident interacting with teachers and administration because of their own school experiences. In fact, some racial/ethnic groups may be more comfortable with home educational involvement rather than school involvement (Lee & Bowen, 2006).

Lee and Bowen (2006) concluded that with respect to parent involvement in schools, "cultural capital is the advantage gained by middle-class, educated European American parents from knowing, preferring, and experiencing a lifestyle congruent with the culture that is dominant in most American schools" (p.198). Lareau (2001) asserted that individuals with less institutionally valued cultural capital face constraints that result in unequal access to institutional resources. But, she also argued that we must look at and value culturally relevant forms of cultural capital and not only connect or label "valuable" cultural capital as middle and upper-class, well-educated Anglo parents (Lareau, 2001).

Both family and work situations can make it easier to be involved at school in ways, and at times that are valued by the school. Many low-income or working class parents may find it more difficult to visit the schools for volunteer opportunities, parent-teacher conferences and other school activities (Kim, 2009). This has certainly been the

case for the parents and staff at Tick Tock. In addition, lack of transportation, lack of childcare or lack of flexible work schedules may prohibit some parents from participating in school-related activities (Tick Tock Director, personal communication). Although, not an issue at Tick Tock, Latino parents in other settings may, in some circumstances, confront the additional barrier of the lack of availability of translators (Heymann & Earle, 2000; Hill & Taylor, 2004; Pena, 2000).

Other disadvantages that may play a role in the parent-educator interaction include the misperceptions by school personnel that characterize parents as having different cultural capital than the dominant group, as uncaring. Furthermore, parents who cannot visit the school do not benefit from the "social, informational, and material rewards gained by parents who enact the school involvement roles valued and delineated by school staff" (Lee & Bowen, 2006, p. 198). However, to counter this from a cultural capital perspective, low-income minority and ESL parents can bring social and behavioral advantages to the school environment, such as their strong sense of family and social connection, traditional foods and cuisine, healthier lifestyle practices and bilingualism. These may be untapped resources that schools can incorporate to improve parental involvement and overall health of the school system (Ickes, 2016). For the Latino family, this is cultural capital that can be embraced and exchanged in the school environment and can potentially have a positive impact on the parent-school interaction. Giving parents the tools to help them engage in their children's learning in a nonthreatening manner, such as nutrition education (e.g., a newsletter) can help level the playing field and promote the retention of traditional eating patterns and health beliefs

while improving parental involvement (Abraido-Lanza, Echeverria & Florez, 2016; Miedel & Reynolds, 2000).

Based on the parental involvement literature, Epstein (1993) suggested that "students at all grade levels do better academic work and have more positive school attitudes, higher aspirations, and other positive behaviors if they have parents who are aware, knowledgeable, encouraging, and involved (p. 1141)." Several studies have shown that parents benefit from programs that focus on improving their children's eating habits (Arredondo, et al., 2006; Greening, et al., 2006). One study, in particular, (Sussner, Lindsay, Greaney & Peterson, 2008) developed and tested innovative strategies to promote healthy eating and physical activity among Latino children. The Pediatric Overweight prevention through Parent Training Program (PTT) combined evidencebased interventions with a social learning based parent training program to promote healthy eating and physical activity among low-income Latino families. Results showed that "improving parenting strategies as early as possible to prevent the upward trajectory of weight is a promising intervention to reduce obesity in the high risk population of Latino children" (Sussner et al., 2008 p. 57). Many of these programs have targeted certain populations and provided limited intervention programs that may or may not have continued after the intervention ended. A key factor, especially for minority populations, is a sustainable intervention program (Trost & Loprinzi, 2011). Therefore, based on current evidence, a newsletter that invites parents to interact with their children around food and nutrition in an appealing manner may be a viable approach. The next section emphasizes the need to consider culture in the development of nutrition communication materials.

Tailored Nutrition Communication.

Nutrition education is a key to affecting the public's knowledge, attitudes and behavior (Contento, 2016). For the purposes of this research, nutrition education is defined as:

any combination of educational strategies, accompanied by environment supports, designed to facilitate voluntary adoption of food choices and other food- and nutrition-related behaviors conducive to health and well-being and delivered through multiple venues, involving activities at the individual, institutional, community, and policy levels (Contento, 2016, p.13).

Nutrition education outreach is an important part of a comprehensive preschool program and new and innovative family based nutrition education interventions have been promoted as a valuable component of school-based nutrition education programs (AND, formerly the American Dietetic Association, 2006; Peralta, Dudley & Cotton, 2016). In addition, nutrition education programs that incorporate meaningful parental involvement have had a positive impact on dietary change and an important component of these programs is direct parent involvement that stimulates conversations between children and parents (Golley, et al., 2011; Hingle, O'Connor, Dave & Baranowski, 2010; Veracini, Leonardi, Girotti & Thrasher, 2014). For younger children, parental involvement that is sustainable and relatively intense has been shown to enhance classroom instruction (Contento, 1992). Specifically, for the Latino population, tailored, family-based, culturally sensitive interventions have been shown to be very successful (Mier, Ory & Medina, 2010).

Johnson, et al. (2013) suggested that overcoming the barriers of limited time and risk of parent defensiveness calls for a non-threatening method of informing parents, while getting them involved in their child's learning process at the same time. Tailored nutrition communication is more effective in promoting healthy eating and in order to utilize the cultural capital of the target audience, it is necessary to provide audience driven materials (Ayala, et al., 2001). Parent involvement in the form of print materials can promote family engagement, are portable and can be read by parents, at home, with their children (Kipping, Jago & Lawlor, 2012). Newsletters, in particular are cost effective and flexible and have been successfully used to disseminate nutrition information in many areas including promoting health information (Harmon et al., 2007; Lutz et al, 1999; Merga & Hu, 2016; Taylor-Davis et al., 2000) and as a component of health education programs (Davis, et al., 2012; Garden-Robinson, Whigham & Wang, 2013). In fact, they have been shown to be a preferred method of receiving nutrition information by adults (Blackford, 2013).

Few studies have evaluated newsletters directly. Past research has evaluated nutrition newsletters for seniors (Atwood et al, 1991; Lancaster et al., 1997; Taylor-Davis et al, 2000;), adolescents (Davis et al, 2012), food stamp recipients (Harmon et al, 2007) and parents (Essery, DiMarco, Rich & Nicols, 2008; Henneman & Franzen-Castle, 2014) with respect to acceptability and effectiveness. Johnson et al. (2103) actually looked at parent daycare interaction improvement with newsletters as a component. There are no studies that specifically involve Latino parents in the development of a nutrition newsletter for preschool children.

The communication process is key to effective nutrition education and print materials. Therefore, to frame the development and evaluation of the newsletter, I employed principles from communication theory (Ayala, et al, 2001; Gillespie & Yarbrough, 1984; McGuire, 2012; Prochaska, 2013; Skinner, 1999) and the communication model developed by Gillespie & Yarbrough, 1984). As shown in Figure 2, the communication model is based on communication theory and includes three main components inputs, intervening process and outcomes (Gillespie, 1984; Gillespie, 1987). Effective nutrition communication considers the characteristics of the receiver and educator inputs, the message and the medium, as well as the interaction of these components of communication (Gillespie, 1987). Components that were utilized and assessed in this study are in bolded boxes and a brief explanation of each component is provided below Figure 2.

According to the model, there is a dynamic interconnection between inputs, intervening process and outcomes. Acceptance of the message on various domains, such as cognitive, affective, behavioral intention and behavior, is influenced by the inputs and intervening processes. I evaluated parental and staff acceptance using this model.

Audience inputs are assumed to be knowledge, skills, culture, habits, beliefs and attitudes that may or may not affect their perception and response to the materials. More specifically, Latino parents have knowledge, values and skills (i.e., cultural capital) that are valuable and can be utilized to promote active participation in their children's education (Chrispeels & Rivero, 2001; Delgado-Gaitan, 1991). The educator or communicator of the message designs the message and therefore their characteristics are considered to be inputs. The interaction of these inputs is key and influences outcomes.

The intervening processes are parental attention to the newsletter and communication between the child and the parent when interacting with the newsletter. For the purpose of this study, cognitive and affective acceptance were assessed using a parent evaluation that focused on preferences of format, content and appearance of the newsletter and the family engagement process. Audience acceptance (both cognitive and affective) is more

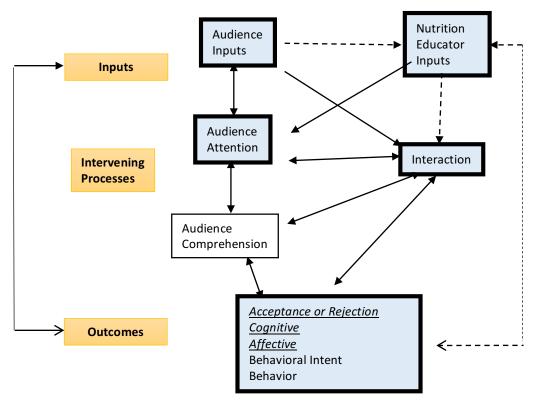


Figure 2. Communication Model (Adapted from Gillespie & Yarbrough, 1984)

likely to occur if the message reinforces previously held beliefs and attitudes (Hochbaum, 1981). Hence, the formative strategies used to gather information about audience preference (i.e., inputs) was necessary to theoretically improve outcomes. Behavioral intent and behavior changes were not measured and are beyond the scope of this research.

Implications

The Latino Paradox is a phenomenon that reveals the fact that when Latino immigrants first come to the US, they are healthier than their American counterparts. There is evidence that this group possesses cultural capital that protects them from various conditions. However, adopting an American lifestyle and eating more of an American diet that includes more processed, high sugar, high fat and high sodium foods facilitates the deterioration of Latino immigrants' health the longer they live in the US and the more they acculturate. Another negative consequence of acculturation is loss of social networks and more isolation. These are protective factors that may be lost by many Latino immigrants.

The director and staff at Tick Tock and I were concerned that aspects of the Latino Paradox are affecting their preschool families. I see the value of the traditional Mexican diet, high in vegetables and unprocessed as well as the value of family ties and social support and networks. The director told me that they needed help reaching parents with nutrition information in a meaningful way. Therefore, the task was to develop a communication method that: 1) was appealing to parents and children in content, form, style and language; 2) was culturally-sensitive using cultural content familiar to Latino families that capitalizes on their valuable health- and socially-related characteristic (or cultural capital); 3)promoted parent involvement to strengthen and preserve family engagement; and 4) through action research, empowered both the staff and parents to embrace healthy food and nutrition behaviors. The effort should also be attentive to sustainability of the communication. The next section describes the methods used to develop and evaluate a nutrition newsletter for Tick Tock parents, children and staff.

CHAPTER 3

METHODS

Participants

A convenience sample of staff and parents were recruited by the Director of the preschool on a voluntary basis to participate in both the quantitative assessment (i.e., perspectives survey) and the qualitative assessment (i.e., semi-structured interviews and/or focus groups). Informed consent was obtained from both parents (i.e., parental informed consent) and staff (i.e., staff informed consent). The data collection was conducted at the Tick Tock Early Learning Center in Avondale, PA. A letter of support from the Director of Tick Tock Early Learning Center is attached (Appendix G).

Procedures

This action research utilized formative research techniques and survey methods and consisted of four distinct phases: 1) a predevelopment (formative research) stage; 2) a development stage; 3) an evaluation stage and 4) a sustainability project stage. Action research, as defined by Sagor (2000) is "a disciplined process of inquiry conducted *by* and *for* those taking the action. The primary reason for engaging in action research is to assist the "actor" in improving and/or refining his or her actions" (Ch. 1, What is action research section, para. 2). Action research, according to Sagor (2000), is relevant to the researcher and the participants and the focus is determined by those involved in the research. In this study, the focus of the study was determined by the director, staff and researcher and directly involved the parents in the development and evaluation of a newsletter that will be utilized to improve nutrition education outreach for parents, children and staff at Tick Tock. In addition, this study provided information that

can guide research in developing more effective nutrition communication. Sagor's (2000) seven-step process for implementing action research is described elsewhere but was used in the design of this study. The four phases of this study are described below.

Phase 1. A quantitative, paper and pencil survey instrument was developed and administered to parents and staff. The parent perspectives survey (Appendix B) was a 17-item multiple response questionnaire, which included closed-ended questions that examined demographics (Items 1-5), food patterns (items 6-14) and preferred food and health topics and preferences for learning about healthy eating (items 15-17). Both English (Appendix B) and Spanish (Appendix C) versions were made available. The staff perspectives survey (Appendix D) included eight items, both closed-ended and openended questions that asked about their concerns about the diets of children at the center, challenges observed for families regarding food and nutrition and preferred content and methods of nutrition outreach for the center. The goal of the pre-development phase was to identify current food and nutrition related issues, food-related challenges and barriers to healthy food acquisition and healthy diets.

Phase 2. Food-related issues and nutrition education outreach preferences were selected from the specified priority issues identified by parents and staff in Phase 1. Based on the findings of the pre-survey, a tailored nutrition education newsletter for Latino families was developed. The newsletter was developed using design criteria outlined by Hoffman (2004) and Contento (2016). The newsletter was made available in both English (Appendix E) and Spanish (Appendix F) versions. A newsletter template is provided in Appendix G.

Phase 3. The tailored nutrition newsletter was evaluated for usefulness by parents and staff of the Center. A paper and pencil survey instrument was used for parents in English (Appendix H) and Spanish (Appendix I) and staff (Appendix J) that included both quantitative and qualitative items. The goal of the evaluation phase was to test the acceptability and preferences for future development of a tailored newsletter series that will, in the future, accompany the Center's existing newsletter for parents and children. A nutrition handout (Whole Grains Council, 2005) that provided the nutrition topic of whole grains was included for parents and children to read and for parents to discuss with their children. This handout was available in English (Appendix K) and Spanish (Appendix L).

Phase 4. The newsletter's format, content and other characteristics determined by the findings of this research was incorporated into a pre-service undergraduate nutrition curriculum. A newsletter development assignment was developed (Appendix M) for a junior level nutrition education course. For the assignment, undergraduate junior nutrition students design a newsletter for diverse audiences that will serve as a form of community service. The newsletters will be tailored toward families at Tick Tock Early Learning Center and for other groups in the community, yet to be determined. This study received approval from the Institutional Review Board at West Chester University and Arizona State University.

Survey Instruments

The affective and cognitive domains were assessed in Phase 1 and Phase 3. All survey instruments were administered as paper and pencil surveys in both English and Spanish versions. The surveys were developed specifically for this study, but utilized

modified items from Taylor-Davis (1996). Each survey instrument is briefly described below.

Phase 1 Survey Instruments. There were two questionnaires administered in Phase 1. One questionnaire was administered to parents with children attending Tick Tock and the other was administered to the staff at the Center.

Parent Perspectives Survey. This survey (Appendices B and C) consisted of 17 closed-ended questions that asked about four types of information: demographics, food patterns, preferred nutrition/health topics and preferred medium for receiving nutrition messages.

Staff Perspectives Survey. This survey consisted of eight items (Appendix D). Five of the items were closed-ended and three were open-ended questions. The closed ended questions mirrored the parent perspective questionnaire with questions about preferred nutrition/health topics and the medium best suited for delivering nutrition/health messages to families at Tick Tock.

Phase 3 Newsletter Evaluation Instruments. Two questionnaires were specifically developed for this research. The purpose of these surveys was to elicit evaluative responses from parents and staff regarding, content, format and style of the newsletter. The parent survey also asked about parent-child interaction with the newsletter.

Parents Newsletter Evaluation Survey. Parents were asked to read the newsletter (Appendix E and Appendix F) and then, with their child, they were asked to read the What is a Whole Grain Handout (Whole Grains Council, 2005) (Appendices K and L) and ask parent-guided questions to their child in a section entitled "Lets' Learn

Together." Parents were then asked to complete a 25-item questionnaire (Appendix H and Appendix I) that used a Likert scale ("strongly agree" to "strongly disagree") to assess newsletter content, format and design style. Example questions included: "I was able to read the print in the newsletter easily" and "I liked the colors in the newsletter." Also assessed was whether the parent read and interacted with their child using the newsletter. Example items included: "I think my child learned information about nutrition from the newsletter" and "I did the Kids Korner activity with my child and asked them the questions."

Open-ended questions were used at the end of the survey. These questions allowed the participants to write their responses in their own words without restrictions from the researcher. These items elicited information about the most favorite and least favorite characteristics of the newsletter

Staff Newsletter Evaluation Survey. Staff members were asked to read the newsletter (Appendix E) and the Whole Grains handout (Appendix K) and complete a 23-item questionnaire (Appendix J) to assess newsletter content, format and design style. The staff survey was very similar to the parents' survey, but excluded parent-child questions and asked questions relative to how useful the newsletter would be for families at the Center. Example items included: "The question section in the Kids Korner could be used to reinforce ideas that the children learn in school" and "I believe that the newsletter will provide valuable information for the families at the center."

Data Analysis

This study employed a survey method design with both quantitative and qualitative components. Quantitative research relies on numerical data (Charles &

Mertler, 2002) and in a post-positivist manner, chooses measureable variables and instruments to address research questions or test hypotheses. The numerical data can provide valid and reliable information to a certain extent. On the other hand, qualitative research is "an inquiry process of understanding" where the researcher develops a "complex, holistic picture, analyzes words, reports detailed views of informants and conducts the study in a natural setting (Creswell, 1998, p. 15)." Using qualitative methods, knowledge claims are based on the constructivist perspective (Guba & Lincoln, 1982) and allows the researcher to construct knowledge based on data collected from people who are part of (and living in) the research setting. Data analysis is based on participants' perspectives and worldviews. Researchers choose approaches, as well as variables and units of analysis, which are most appropriate for finding answers to determined research questions (Tashakkori & Teddlie, 1998). In essence, quantitative and qualitative methods are compatible and the data (both textual and numerical), either at the same time or sequentially can help better (and more deeply) understand the research problem. Quantitative data were analyzed using SPSS software program. Descriptive statistics was used to describe the data. Qualitative analysis was guided by grounded theory approach (Charmaz & Mitchell, 2001) and a qualitative method of content analysis was used to analyze open-ended questions.

Each open-ended question response was read for emerging common themes. A coding frame was developed to describe thematic content. Specifically, a sequence of steps outlined by Cathain & Thomas (2004) were used to analyze all open-ended questions. First, a subset of the comments was read. Next, a coding theme to describe the

thematic content of the comments was developed and finally, codes were assigned to all comments manually (Cathain & Thomas, 2004, p. 5).

CHAPTER 4

RESULTS

Phase 1

Table 1

Parents. Several areas were examined in the parent perspective questionnaire: demographics, food patterns and perspectives on what nutrition content they would like to learn about and how they prefer getting their nutrition information. Table 1 describes the demographic characteristics of the parent participants. Twenty-two parents out of 70 families responded to the survey or a response rate of 31.4%. It was difficult to recruit parents since pick-up and drop-off times are not conducive to distributing surveys. Therefore, surveys were administered by a bilingual staff member at parent conferences.

Summary Characteristics of Parents at Tick Tock Early Learning Center (n=22)

Characteristics	Mean $+/-SD$ or $n(\%)$
Gender	
Female	18(81.8)
Male	3(13.6)
Country of Origin	
Mexico	16(72.7)
Guatemala	2(9.1)
USA	2(9.1)
Puerto Rico	2(9.1)
Years lived in US (n=10)	12.9+/-6.2
Number of children in household	2.3+/-1.2
Number of adults in household	2.9+/-1.7

Most of the respondents were female (81.8%). Mexico was the country of origin for about three quarters of the participants (72.7%) and half of the participants were in the US for an average of about 13 years. Parents also answered several questions regarding their food patterns. Table 2 shows the food-related responses that target variety of diet, food security and obstacles to eating meals that they would prefer to serve. Participants

indicated that they ate an average of four to five servings per day from each of the food groups per week, this indicates a high variety of foods. However, they were not asked Table 2

Tick Tock Parent Food-Related Responses (n=22)

Tick Tock Parent Food-Related Responses (n=22) Characteristics	Mean +/-SD or n(%)
Number of times eaten/week	1110uii - / 5D 01 ii(/0)
Vegetables	4.2+/-2.0
Fruits	4.8+/-2.2
Proteins	5.0+/-1.9
Dairy	5.3+/-2.0
Grains	5.5+/-2.2
Fast Food Meals	
Less than 1/week	4(18.2)
1/week	16(72.7)
2+/week	2(9.1)
Diet similar to home country	12(59.1)
Household Food Status	
Enough of the kinds of food we want	7(31.8)
Enough, not always the kinds of food we	13(59.1)
want	2(9.1)
Sometimes not enough to eat	1(4.5)
Often not enough to eat	
Obstacles to providing preferred meals	
None	14(63.6)
Not enough money for food	5(22.7)
Kinds of food I want are not available	2(9.1)
Not enough time for shopping or cooking	2(9.1)
Too hard to get to the store	1(4.5)
No working stove available	1(4.5)
Not enough time to prepare meals at	3(13.8)
home	
Concern about food security	1/4.5
Often	1(4.5)
Sometimes	14(63.6)
None	6(27.3)
No answer	1(4.5)

what types of foods from each group were eaten and therefore, the quality of the food items cannot be determined from the data. A little over half of the participants stated that they eat a diet similar to the way they ate in their home country, which may indicate

evidence of acculturation and a decline in health of the diet and adoption of a US diet for about half of the participants. This is relevant to the issue of the Latino Paradox, since almost half of the sample is not eating a traditional diet. Fast food is eaten once per week by about three fourths of Hispanic families (72.7%) at Tick Tock, compared to 53% of US Latinos. (Dugan, 2013).

The challenge for almost all of these families was not quantity of food, but access to and obtaining foods that they want to eat. About 15% of the families reported not getting enough food either sometimes or often. About one third (27.3%) reported no concern, while the majority of families (63.6%) were only concerned some of the time. These findings indicate that food quantity is not a challenge for these families, but obtaining the kinds of foods that they prefer to eat is of concern. These findings indicated that many of the families in this sample have low food security, defined as "reports of reduced quality, variety or desirability of diet. Little or no indication of reduced food intake" (United States Department of Agriculture, 2015, p. 1).

Parents were asked about their interests and preferences with respect to food and nutrition topics and how they want to learn about them. Table 3 provides a summary of parent responses. A majority of parents were most interested in obesity (68.2%) and diabetes (50%) and almost two-thirds of parents indicated that they were interested in healthy recipes (68%), health cooking (59.1%), while just under half (45.5%) wanted to learn more about healthy eating for the family. Most of the parents (81.2%) wanted healthy recipes and 45% wanted to receive information in nutrition newsletter. About one third (36.4%) of the parents were interested in healthy cooking lessons and only one quarter (27.3%) wanted to learn from videos.

Perspectives of Parents (n=22) at Tick Tock Early Learning Center

Table 3

ng Center	
n(%)	
15(68.2)	
13(59.1)	
10(45.5)	
7(31.8)	
2(9.1)	
15(68.2)	
11(50.0)	
2(9.1)	
18(81.8)	
10(45.5)	
8(36.4)	
6(27.3)	
	n(%) 15(68.2) 13(59.1) 10(45.5) 7(31.8) 2(9.1) 15(68.2) 11(50.0) 2(9.1) 18(81.8) 10(45.5) 8(36.4)

Staff. At the time of data collection for Phase 1, there were 20 staff members at the Center. Of the 20, 13 (65%) responded to the survey. Approximately 85% of staff respondents were female. All staff at the Center speak and read English. Table 4 depicts staff characteristics and staff responses to the quantitative section of the survey. The majority of staff (76.9%) was not concerned about the diets of the children at the Center. The majority of the staff (61.5%) preferred healthy recipes as method of nutrition education, while over one-third (38.5%) wanted newsletters and cooking lessons. Only 23% of the staff wanted to provide nutrition education using videos. Parents and staff preferences were similar. Based on the findings of parent and staff perspectives survey, the decision was made to develop a newsletter as the delivery method. With respect to food topics, about 77% of the staff indicated that healthy cooking was a needed nutrition topic for these families, followed by health eating for the family (53.8%). Food shopping

and healthy recipes (46.2%) were equally popular nutrition topics with healthy fast food choices, rated important by less than one third of the staff.

Summary Characteristics for Staff (n=13) at Tick Tock Early Learning Center

Table 4

Characteristics	n(%)				
Gender					
Female	11(84.6)				
Male	2(15.4)				
Concerned about children's diets	3(23.1)				
Interested in providing for families					
Healthy Recipes	8(61.5)				
Nutrition Information Newsletter	5(38.5)				
Cooking Lessons	5(38.5)				
Nutrition Videos	3(23.1)				
Food topics needed for families					
Healthy Cooking	10(76.9)				
Healthy Eating for the Family	7(53.8)				
Food Shopping	6(46.2)				
Healthy Recipes	6(46.2)				
Healthy Fast Food Choices	4(30.8)				
Nutrition and Health Topics of Interest					
Diabetes	10(76.9)				
Obesity	10(76.9)				
Heart Disease	7(53.8)				

Qualitative responses about challenges of feeding children and health-related challenges facing Tick Tock families revealed several overarching themes. According to staff, the biggest challenges facing the families with respect to nutrition and health are time and money. "Working long hours" and "working late" are obstacles for parents in both preparing and serving healthy foods. Types of foods served and fast food or junk food were also viewed as challenges for parents by the staff, with time and lack of money noted as the reasons. One staff member commented that parents "give kids what they will eat, just so they do not waste food." Income seemed to trump culture, with only one of

the staff members commenting that "we serve a Hispanic culture, they cook with a lot of oil and fried foods."

Overweight and obesity were major concerns for the staff, especially overweight at such a young age. On the other hand, the fact that Tick Tock cooks and serves breakfast, lunch and snacks, on site and these foods are provided by the Center was noted. Therefore, staff perceived that children were eating a wide variety of foods while at the Center. One staff member suggested the trying new foods was an issue and noted that "when children don't see the adults trying new things, they may refuse to also try."

Phase 2

Newsletter Development. Johnson, et al. (2013) suggested, overcoming the barriers of limited time and risk of parent defensiveness calls for a non-threatening method of informing parents, while getting them involved in their child's learning process at the same time. The newsletter was designed to invite parents to engage with the content and encouraged parents to interact with their children by reading and completing a children's section. The newsletter was developed in English (Appendix E) and translated to Spanish (Appendix F). The newsletter was one page (front and back) and the handout was limited to one page to keep participant burden at a minimum. Each component of the newsletter design and development process are described below.

Content Organization and Format. The planning of the newsletter design was guided by the recommendations presented by Contento (2016). The following guidelines were used:

- 1. Keep the words simple (less technical terms)
- 2. Use the active voice rather than the passive voice

- 3. Write strong sentences
- 4. Keep paragraphs focused
- 5. Aim for the right reading level
- 6. Be professional and accurate
- 7. Use a positive tone
- 8. Be consistent in vocabulary (Contento, 2016, p. 526)

Health-related information. Based on the fact that 90% of the families are Latino (predominantly Mexican immigrants) and the Phase 1 survey results from both parents and staff, the decision was made to focus the content on healthy recipes and Type 2 diabetes. The priority of Type 2 diabetes for content by both parents and staff is supported by the literature (Kollannoor-Samuel, Segura-Pérez, Chhabra, Vega-López & Pérez-Escamilla, 2016). Latinos suffer from higher rates of diabetes than either non-Hispanic whites or non-Hispanic blacks and Mexicans/Mexican Americans have higher rates of diabetes than Latino/Hispanics in general (Center for Disease Control, 2013).

Cultural sensitivity. Cultural sensitivity is a term that is herein, used interchangeably with cultural appropriateness and is defined for the purpose for this study as "the extent to which the design, deliver, and evaluation of nutrition education and health promotion programs incorporate the ethnic or cultural experiences, beliefs, traditions, and behaviors of a given group as well as relevant historical, social, and environmental forces" (Contento, 2016, p. 580). The cultural sensitivity model developed by Resnicow, Baranowski, Ahluwalia and Braithwaite (1998), identifies the components relevant to tailoring culturally sensitive programs and materials. Surface structure components such as content, message and preferred delivery method and deep structures

are items such as core values. The design and development of the nutrition newsletter for Tick Tock used input from both staff and parents with regard to content and was evaluated by parents and staff with regard to acceptability, style, format and content. This input was used to complete the tailored development of the newsletter and provide a template for future newsletters. Figure 3 provides the surface structure and deep structure components used in the development of the newsletter based on the results of the staff and parent surveys and the literature on tailored nutrition education.

Nutrition Education Outreach for Early Learning Center

SURFACE STRUCTURE COMPONENTS

- Materials & messages matching observable superficial characteristics of a target population (content includes healthy recipes and diabetes content)
- Channels to deliver messages (newsletter)
- Setting to deliver materials and messages (newsletter originating from the Center, not an outside source)
- Settings to recruit participants (newsletter distributed by the Center staff; staff perspectives also taken into account)
- Ethnicity, gender, age, language of recruiters and delivery agents (parents were recruited by center staff, 76% of which are bilingual and bicultural)

DEEP STRUCTURE COMPONENTS

- Cultural, social, historical, environmental, & psychological forces that influence the target health behavior in the proposed target populations (characteristics considered were trust, value of family, value of social support, work ethic, limited parental time for school interactions)
- Perceptions related to religion, family, society, economics, and the government and how these perceptions might influence the target behavior (trusted staff endorses intervention, family engagement and parent-child interaction valued)
- Type of stressors faced by the target population (lack of time, historical barriers to school involvement, dependency on American food environment, lack of access to traditional foods, low-income)
- Ethnic identity (traditional foods, staple foods, Mexican cuisine)

Figure 3. Key components highlighted in the development of the newsletter. (Adapted from Mier et al., 2010)

The newsletter was designed to interest both parents and children. The front of the newsletter was designed for parents and includes a section on diabetes (one of the topics

identified as important by parents and staff) and a healthy recipe that parents can make. The recipe includes staples of the traditional Mexican diet, such as corn and soup (one-pot meals). The back of the newsletter has a section that includes questions about an educational handout. Parents were asked to read the handout with their children and then ask the children the questions. The purpose of this section was to engage parents and children in the material (i.e., importance of whole grains) and tie the information to the family recipe. In addition, a kid-friendly recipe promoting whole, fresh vegetables was included. Parents and children were encouraged to prepare and try the recipe.

Reading Level. Reading level was assessed for both the newsletter in English and the handout in English. The Flesch-Kincaid grade level for the English version of the newsletter was 4.1 (appropriate when literacy level is unknown) (Contento, 2016) and for the handout was 7.1. However, the latter was most likely overestimated because of the lengthy ingredient label with many words that were three or more syllables. Spanish version reading levels were not determined.

Phase 3

Parent responses. Of the 80 families, 4 parents/families (5%) responded to the survey. All of the parent participants were Mexican and Spanish speaking. There were three categories of responses including: format, attitude and usefulness. All of the parents reported reading all of the newsletter with their children.

Format responses. All of the parents liked the main recipe section of the newsletter most and all parents either agreed or strongly agreed that they were able to read the print in the newsletter easily. Most (75%) of the parents liked the picture/images, but one parent did not like the picture/drawings in the newsletter. All parents

agreed/strongly agreed that they liked the colors used in the newsletter and did not think that the pages of the newsletter looked too crowded.

Attitudes and affective responses. Overall, the newsletter was well received by the parents. Table 4 provides the response frequencies to items that asked about attitudes about and acceptability of the newsletter. All of the parents agreed/strongly agreed that they enjoyed reading the newsletter and found the information in the newsletter interesting. A majority (75%) strongly agreed that they valued the information provided Table 5

Frequencies of Affect and Attitude Responses of Tick Tock Parents

Item	Strongly Agree n (%)	Agree n (%)	No Opinion n (%)	Disagree n (%)	Strongly Disagree n (%)
I enjoyed reading the newsletter	2(50)	2(50)	1(0)	0 (0)	0(0)
I was interested in the information in the newsletter	2(50)	2(50)	0(0)	0(0)	0(0)
I have a more positive attitude about nutrition since reading the newsletter	2(50)	2(50)	0(0)	0(0)	0(0)
Reading the newsletter increased my interest in nutrition and health	2(50)	2(50)	0(0)	0(0)	0(0)
The newsletter talked about things that were important to me	3(75)	1(25)	0(0)	0(0)	0(0)

in the newsletter and half (50%) strongly agreed and half (50%) agreed that they were more interested in nutrition and health after reading the newsletter. All of the parents felt more positive about nutrition after reading the newsletter.

Parents also responded to a set of questions about their experience reading the newsletter with their children. All of the parents read the newsletter with their children talked about the newsletter information with their children and asked the trivia questions to their children. Most importantly, parents reported that their children learned the information presented in the newsletter.

Table 6

Frequencies of parent responses to questions about reading the newsletter with their child

Item	Strongly Agree n (%)	Agree n (%)	No Opinion n (%)	Disagree n (%)	Strongly Disagree n (%)
I enjoyed reading the newsletter with my children	2(50)	2(50)	0(0)	0(0)	0(0)
I talked about the information I read in the newsletter with my child	3(75)	1(25)	0(0)	0(0)	0(0)
I did the Kids' Corner activity and asked them the questions	2(50)	2(50)	0(0)	0(0)	0(0)
My child and I enjoyed talking about the questions in the Kid's Corner	2(50)	2(50)	0(0)	0(0)	0(0)
I think that my child learned information about nutrition from the Kid's' Corner activity	1(25)	3(75)	0(0)	0(0)	0(0)

Parents also evaluated the newsletter for its overall usefulness (Table 6). All of the parents had an overall positive reaction to the newsletter, newsletter was a good way for them to get information about nutrition. All of the parents disagreed (75%) or strongly disagreed (25%) that "newsletters were not necessary because there is enough nutrition information available from other places." This demonstrates that parents are willing to

get nutrition information from a school newsletter and believes it is useful, regardless of the vast amount of information from other sources. All of the parents strongly agreed that they would make at least one of the recipes in the newsletter and intended to save the newsletter for future reference. This is encouraging because the parents' responses indicated that the newsletter can be a trusted, practical way for them to learn about nutrition and that it is likely that they would actually prepare healthy recipes if provided by the newsletter. Overall, the newsletter can serve as a reliable source of nutrition information.

Table 7

Frequencies of Parent Responses to Questions About Usefulness of Newsletter

Item	Strongly		No		Strongly
	Agree	Agree	Opinion	Disagree	Disagree
	n (%)	n (%)	n (%)	n (%)	n (%)
The newsletter told me things I wanted to know about nutrition and eating	3(75)	0(0)	0(0)	1(25)	0(0)
Nutrition newsletters are not necessary because there is already enough nutrition information out there.	0(0)	0(0)	0(0)	3(75)	1(25)
The newsletter was a good way for me and my family to get information on nutrition	2(25)	2(25)	0(0)	0(0)	0(0)
I intend to save the newsletter so I can refer to it in the future.	2(25)	2(25)	0(0)	0(0)	0(0)
I intend to make at least one of the recipes in the newsletter	4(100)	0(0)	0(0)	0(0)	0(0)

Staff responses. Of the 23 staff members, 13 (52%) responded to the survey. All of the staff read and speak English, but half of the staff are bilingual. There were three categories of responses including: format, attitude and usefulness.

Format. Almost half of the staff (47%) liked the main recipe section of the newsletter most, followed by the nutrition information about type 2 diabetes (33%). All of the respondents stated that they were able to read the print in the newsletter easily and liked the picture/images in the newsletter. Most respondents (92%) liked the colors used in the newsletter and about one quarter (23%) of respondents thought that the pages were too crowded.

Attitudes and Affective Responses. Overall, the newsletter was well received by the staff. Table 7 provides the response frequencies to items that asked about attitudes

Table 8

Frequencies of Affect and Attitude Responses of Tick Tock Staff

	Strongly		No		Strongly
Item	Agree	Agree	Opinion	Disagree	Disagree
	n (%)	n (%)	n (%)	n (%)	n (%)
I enjoyed reading the newsletter	11 (15.4)	10(76.9)	1(8.7)	0 (0)	0(0)
I was interested in the information in the newsletter	2(15.4)	11(84.6)	0(0)	0(0)	0(0)
I have a more positive attitude about nutrition since reading the newsletter	0(0)	8(61.5)	5(38.5)	0(0)	0(0)
Reading the newsletter increased my interest in nutrition and health	0(0)	6(46.2)	7(53.8)	0(0)	0(0)
The newsletter talked about things that were important to me	0(0)	9(69.2)	4(30.8)	0(0)	0(0)

and acceptability of the newsletter. Almost all (91%) of the staff enjoyed reading the newsletter and 100% of staff found the information in the newsletter interesting. A majority (69.2%) valued the information provided in the newsletter and almost half (46.2%) of the respondents stated that they were more interested in nutrition and health after reading the newsletter. Over half (61.5%) felt more positive about nutrition after reading the newsletter. Staff also evaluated the newsletter for its overall usefulness (Table 5). All of the staff agreed that the newsletter will be useful for families as a way to get nutrition information and the majority of staff members (76.9%) thought that the

Frequencies of Staff Responses for Usefulness of Newsletter

Table 9

Item	Strongly		No		Strongly
	Agree	Agree	Opinion	Disagree	Disagree
	n (%)	n (%)	n (%)	n (%)	n (%)
I believe the newsletter will provide valuable information for families at the center	3(23.1)	10(76.9)	0(0)	0 (0)	0(0)
The newsletter told me things I wanted to know about nutrition and eating	3(23.1)	9(69.2)	1(7.7)	0(0)	0(0)
Nutrition newsletters are not necessary because there is already enough nutrition information out there.	2(15.4)	1(7.7)	4(30.8)	6(46.2)	0(0)
The newsletter was a good way for me to get information on nutrition	0(0)	10(76.9)	3(23.2)	0(0)	0(0)
I intend to save the newsletter so I can refer to it in the future.	1(7.7)	6(46.2)	4(30.8)	2(15.4)	0(0)

newsletter was a good way for them to get information about nutrition. About 23% of the staff felt that newsletters were not necessary because there is enough nutrition information available from other places. Almost half (53.9%) of the staff intend to save the newsletter for future reference.

Phase 4

Very often, nutrition education interventions do not continue after the implementation. The sustainability of nutrition education outreach for this Center is important because of the lack of staff time to develop separate nutrition newsletters. For this project, an undergraduate assignment for a nutrition education course was developed to provide students with the opportunity to learn how to design print materials for diverse groups and to provide a pool of nutrition newsletters for the staff at Tick Tock to include with their monthly Center newsletter. The newsletter assignment (Appendix M) consists of criteria that models the newsletter used in this study. Students are encouraged to do formative research on the audience (i.e. Latino families), follow criteria for producing effective print materials and using creativity to attract and hold the interest of the audience. This assignment can also become a part of the student's portfolio for post-graduate use when applying to dietetic internships.

CHAPTER 6

DISCUSSION

Nutrition education outreach is a challenge for educators in many settings. Tick

Tock Early Learning Center is no exception. This research set out to answer questions
about the food- and nutrition—related issues, challenges and barriers facing the Latino
parents and the staff at Tick Tock Early Learning Center. The purpose of asking the
intended audience their perspectives was to tailor nutrition education materials so that
they directly meet the needs of the specific audience, where they are at. One of the major
challenges for staff at this particular center with respect to nutrition education outreach
was the lack of a viable method of nutrition information dissemination and a lack of
parent involvement. Therefore, the aim was to create a tailored, culturally sensitive
newsletter developed not only to provide a form of nutrition education for the families,
but to promote parent involvement through family engagement with the newsletter. This
study succeeded in creating a tailored, culturally sensitive newsletter that was well
received by both parents and staff.

In this section, I examine the process of developing a newsletter for Tick Tock families. For each phase of the project, I address the successes and the challenging issues identified throughout. This method of evaluation provides information for future initiatives that wish to provide nutrition education for low-income, immigrant preschool families.

Formative Strategies

The formative strategies used in this research were helpful in the design process and indicated that parents preferred their information in the form of newsletters and were

primarily interested in the topics of obesity and diabetes. Staff responses mirrored those of the parents. Since obesity and diabetes are two of the chronic diseases most prevalent in the Latino population (Center for Disease Control and Prevention, 2015), these findings indicated that participants were aware of the importance of these conditions and acknowledged the need for more information about these conditions. Newsletters (the preferred delivery method for parents in this study) have been shown to be a cost-effective, portable way to disseminate nutrition information (Ayala, et al., 2008) and Phase 1 findings indicated that parents supported the fact that newsletters can be a valuable method for both providing information and getting parents involved in the learning process.

Findings also indicated that parents and staff were highly receptive to the content and format. The formative strategy used in Phase 1 of this study supports the work of Ayala et. al., (2001) that showed that using formative techniques to tailor nutrition communication materials for Latino families can "improve receptivity to behavior change information" (Ayala et. al., 2001, p.86). A formative approach shows promise.

Specifically, using input from parents and staff to in the development of tailored culturally sensitive nutrition education materials that promote parent involvement practices and family engagement for Latino families is a viable approach.

Development

Lee & Bowen (2006) encouraged creative approaches to overcoming many barriers faced by low-income, minority parents, including transportation, work schedules, discomfort in the school environment, and, perhaps most importantly, negative perceptions of cultural differences by school personnel. Lee & Bowen (2006) suggested

that creating opportunities for outside of the school could lead to the same benefits as atschool interactions. Using nutrition newsletters was a preferred method of delivery for Tick Tock parents. The newsletter was sent home to alleviate time constraints facing parents and to promote parent involvement and family engagement.

Nutrition education materials can be designed in a culturally sensitive manner. For the purposes of this study, cultural sensitivity was defined as "the extent to which the design, delivery, and evaluation of nutrition education and health promotion programs incorporate the ethnic or cultural experiences, beliefs, traditions, and behaviors of a given group as well as relevant historical, social and environmental forces (Contento, 2016, p. 580)." The audience driven approach to nutrition education material design and development succeeded in this study and gave voice to Tick Tock parents and teachers as demonstrated by the acceptability of the content, format and style. The newsletter was designed to reflect the preferences of both staff and parents that were obtained from surveys given to parents and staff. For the development stage, response rates were acceptable and the information from these surveys was successfully incorporated into a colorful newsletter that aligned with criteria for effective newsletter development (Contento, 2016). Conducting the surveys in the context of parent-teacher conferences may have helped obtain responses. Although valuable information was gleaned by the formative survey, more information would have been helpful in designing the newsletter. For instance, asking about what types of foods parents prepared at home, recipes, time available to work on newsletters, etc. may have been a more efficient way of designing the materials to avoid later necessary modifications. In addition, a focus group would have been valuable to get feedback for a draft newsletter, but the director informed me

that parents at the center did not like focus groups. Overall, the survey method with staff interaction worked well for this project. This approach may be useful in developing effective methods of nutrition outreach with variable results with different groups. One other possibility would be to work with teachers' existing lesson plans and incorporate lesson material into the newsletter. Then, parents and children can work together on content that is connected to school work. This may give more meaning to the newsletter content.

Evaluation and Sustainability

Lee and Bowen's research (2006) concluded that addressing inequalities in the levels of parental involvement can help promote children's success in school and both the identification and reduction in barriers for groups such as minorities (e.g., Latinos), low-income and less educated parents should be a priority for programs that can help get these groups more involved in school. Parent involvement has been a challenge according to Tick Tock staff. The staff has had difficulty in the past getting parents to respond to surveys, return materials and provide feedback. In the evaluation phase, response rate was dismal when surveys were sent home with the children and parents were asked to return them, which is in contrast to when surveys were administered to parents during parent teacher conferences.

One explanation is that newsletters are not an effective way to reach Latino parents with nutrition information. There may be alternatives based on what their preferences were when asked in phase 1 of this project. One possibility would be to incorporate nutrition and health content into a recipe book filled with recipes collected from parents. This would create a sense of community and contribution and if presented

in a creative way, nutrition content may be received with more enthusiasm. The challenge in the evaluative phased was getting the parents to return the surveys and whether parents read or interacted with the newsletter is not known.

According to the director, Tick Tock parents were very agreeable when approached verbally and in person to read the newsletter and return the survey, and showed genuine intent to honor staff requests. But for reasons unknown to the staff, the response rate for materials sent home has been historically low and this attempt was no different. Even though parent response rate was poor, the newsletter was well received by the few parents who did respond. This indicates that simply sending a newsletter home with parents was not effective. There may be several reasons for this. Parents may have intended to read the newsletter and respond, but may have inadvertently thrown it away or put it down to read at a later time. They may have read it and didn't respond out of distrust for the research process and may have not wanted to sign the informed consent because the researcher was unknown to them.

One possible solution to the challenges faced during this process for future research is creating nutrition education materials that purposively connect curriculum to nutrition and health newsletters and present it as homework. This may improve parent response rates and subsequently parent involvement if the newsletter sent home is part of the children's academic lessons. Content, although reflective of what parents' preferred, was not enough to make most parents follow through with completing the survey. Follow-up qualitative research that probes into the reasons for not responding may shed light on why parent involvement and response rate is so low to the methods used here. Future research should examine in more depth, receiver inputs and audience

characteristics such as self-efficacy and decision making before designing outreach materials. Based on these findings, it is unknown if it is the newsletter, the process of administration, or characteristics of the parents that were obstacles to obtaining a more robust response rate. These aspects were not investigated, but are indicated for future research.

Parent involvement is an important factor in nutrition education outreach in that it promotes family engagement around food, nutrition and health. Lee and Bowen (2006) suggested that with respect to parent involvement in schools, "cultural capital is the advantage gained by middle-class, educated European American parents from knowing, preferring, and experiencing a lifestyle congruent with the culture that is dominant in most American schools" (p.198). Getting parents involved in sharing traditional recipes and creating opportunities for parents to share, such as recipe books and cooking demonstrations might enhance parent involvement. Educational sessions involving this type of sharing is another possibility for future outreach efforts. Food and nutrition information can be enforced at home through the interaction between the parent and the child by including more fun activities (as suggested by staff) that are also educational and tied to the curriculum. This information can build upon the lessons learned in the school environment across the curriculum and hands-on activities tied to health, science and other subjects can be explored. In addition, preparing healthy food together may enhance the value of nutrition and brings attention to the connection between food and health. Capitalizing on the cultural capital of Latino families such as traditional recipes (or healthy versions of traditional recipes), social and family ties and community events may be positive approaches to nutrition outreach. In the case of Tick Tock, staff are sensitive

to cultural characteristics and care deeply about reaching parents with important health and nutrition information. The Tick Tock setting values the culture of the parents, but more effort is needed in investigating the reasons for lack of parent involvement at the center in general.

Another concern of the Tick Tock staff that was addressed here was the sustainability of nutrition outreach. Although more evaluation of the newsletter is needed, incorporating development of newsletters as an assignment into an undergraduate nutrition course helps undergraduate nutrition students develop skills creating nutrition print materials and provides a continuous supply of newsletters to the Center. This aspect of the research was well received by staff.

Overall the newsletter was successful in piquing the interest of parents and staff with respect to nutrition information and most of the participants intended to try the recipes. Parents reported reading the newsletter and answering questions with their children, which supports the fact that the newsletter can be used as a tool for family engagement around the topic of food and nutrition. More exploration is needed as to how to optimize parent-child interaction, improve effectiveness of the information in the activity and level of learning, as well as increase acquisition of knowledge and behavior change. This study provided a basic level of understanding of how participants receive inputs and how the message and medium influence the affective and cognitive domain (Gillespie, 1984). Further refinement and potential uses for newsletters can be gleaned from more in-depth data collection methods such as interviews or focus groups.

These findings are only the beginning of our efforts at this preschool and the continual provision of a family based newsletter may help promote health eating for

Latino families in the long run. This research did not set out to test the effectiveness of the newsletter for increasing knowledge or change behavior, but was limited to exploring a process that may be helpful in creating more culturally sensitive nutrition education materials that incorporate input from the people they intend to serve. The newsletter itself should be only one part of a more comprehensive effort by the preschool staff, the nutrition educator, parents and children. Most of the literature that examined parent involvement and tailored nutrition communication looked at newsletters as part of a more comprehensive nutrition and/or physical activity program with adults (Atwood, et al., 1991; Harmon et al., 2007), schools (Kipping, et al., 2012) and preschools (Johnson, et al., 2013). Stand-alone newsletters have limited potential, but can help increase interest in nutrition and health and can provide important information in a culturally sensitive manner. More research is needed that builds upon the existing literature about print material development because they are cost-effective and most often the most practical way of reaching people. The process followed in this study may provide a process model for developing future newsletters.

Limitations of the Study

This study was limited by several factors. Very little demographic information was collected in the parent perspective survey, except for country of origin, years in the US, number of children/adults in the household, and gender of parent completing the survey. Stratifying the sample by potentially meaningful factors, such as number of years in the US (if the sample size was larger), would possibly provide important information as to perception of nutrition and health concerns, barriers to obtaining healthy foods, etc. The newsletter evaluation survey did not collect demographic information. Again,

demographic information would make it possible to further tailor the newsletter to meet specific needs of the audience. Therefore, results are not reported separately by demographic data.

This study of one preschool in one community cannot be generalized to all preschools or all predominantly Latino preschools. However, the purpose of this study is to examine the feasibility and usefulness of a tailored approach to designing nutrition outreach, specifically, nutrition newsletter to better serve a particular group. Although the model could be generalized, the specific content, style, and design, needs to be specific and tailored to the nutrition education site. Another challenge in this study was direct participant contact. This was limited by the fact that most parents work long hours and drop of and pick up times are rushed and not feasible for educational interventions. Hence, the Center's need for an intervention that respects the families time and cultural values while providing optimum education outreach and providing opportunities for increased parental involvement. Also, the research was not Spanish speaking or a staff member at the center and staff members were relied upon to administer and collect the surveys in both Phase 1 and Phase 3. The parents reported that they read the newsletter with their children and asked questions; however, the study did not evaluate the quality of this interaction or the degree of interaction. Also, response rates were low and the challenge of getting parents to complete surveys and provide feedback is imperative. One potential solution is to be more explicit with the explanation of why and how the feedback will be used, thereby creating a sense of ownership among parents and staff. Also, asking children for feedback may help parents see the relevance and connection of the material to their children's academic work.

Another area of this research that could be strengthened is instrument development and data collection methods. The perspective survey instruments excluded key questions that would have gleaned more information that would help better tailor the newsletter. Also missing from the survey in Phase 1 were specific questions about parent's confidence about working with their children on nutrition topics at home. The evaluation instruments asked relevant questions, but they too could have included more questions about how comfortable the parents were asking their children questions about nutrition and how much they learned from the handout and newsletter. In retrospect, this would have strengthened the model in that it would have provided nuanced information that would potentially improve the effectiveness of the newsletter. In addition, testing effectiveness, possibly in a pre-posttest design may bring the process to closure.

Since this research focused on examining the perceptions of Mexican-American, Spanish speaking only parents, another limitation was the researcher's reliance on a translator for all print materials. Fortunately, the translator is a dedicated staff member at the Center and was very involved in the study from the beginning.

Implications for Research and Practice

Very often, nutrition education materials are designed as a one-size-fits-all product that uses general characteristics of a certain group, which assumes homogeneity based on race/ethnicity, gender, etc. With the approach used in this research, the materials are designed specifically for the audience and the development process is nuanced. In addition, this study used the evidence that parent involvement and family engagement enhance the learning experience for children.

This model of formative strategies, development, evaluation and sustainability can be used for developing tailored nutrition communication that can be used for other target audiences, other forms of nutrition education materials and in different contexts. It is the specificity and relevance to the audience in their local environment that makes this model less of a one size fits all approach and incorporates the perspectives of the audience into the message that make the materials a better fit.

In conclusion, this study provides evidence that newsletters can be effective in the affective domain by increasing interest in nutrition and health and providing an enjoyable way for parents and children to interact with family-based nutrition educational materials. Clearly the newsletter developed for this study was useful to both parents and staff and further iterations of this process can create a format for a newsletter that connects the academic lesson plans taught at the preschool to the nutrition and health information that can help families improve eating habits while conserving traditional dietary components.

Sustainability of nutrition interventions must be considered so that they become part of the everyday academics at all levels of education. A one-size-fits-all approach can miss the opportunity to incorporate the needs and perspectives of the audience, thus increasing the risk of missing key issues and concerns for each particular target audience. It is important to build upon the existing literature by evaluating nutrition communication methods with the specific needs of the audience in mind, creating materials based on input from the target audience and finding ways to continue dissemination of creative, interesting, effective materials on a continued basis. To be most effective, research should examine the cultural system and its effects on diet and health to optimize health interventions, investigate the rehabilitation of structural systems within our society and

support the sustainability of health as immigrant groups work their way through the acculturation process.

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APPENDIX A

TICK TOCK EARLY LEARNING CENTER LETTER OF SUPPORT



1694 Baltimore Pike Avondale, PA 19311 Tel: (610) 268-8134 Fax: (610) 268-8136 ticktock@kennett.net

December 5, 2013

To West Chester University:

As Director of Tick Tock Early Learning Center, Avondale, Pa, I am pleased to offer my support to the research project being initiated by Gina Pazzaglia, PhD, RDN of West Chester University.

Tick Tock is a nonprofit child care center and preschool that has been serving the children of low-income workers in southern Chester County for the past 50 years. The children we serve are 18 months through 14 years of age and attend either full day or our part time before and after school program. About 95% of our 100 enrolled children qualify for free or reduced price meals and about 85% are children with an Hispanic surname whose families have recently immigrated or are migrant workers in local agriculture. We offer an English language immersion setting, a preschool with a PA Keystone STAR 4 rating, and a loving, nurturing environment with an emphasis on health and nutrition.

Tick Tock is committed to collaborating with a wide variety of partners including nonprofits, government agencies, educational institutions, and service clubs. We are excited to work with West Chester University in a research capacity and expect a large percentage of our families will participate. We look forward to research outcomes that will benefit our local community and others.

This research will provide valuable information and outreach to not only our organization, but to our preschoolers and families as well as our Latino community. This letter commits my support to assisting with the recruitment of parents and staff to complete paper and pencil surveys and participate in focus group sessions and interviews (45-60 minutes) about food and nutrition related practices. We would also assist in the development (i.e. acting in, advising, content, translation) of the culturally relevant, family-based nutrition education video and the recruitment of parents for the evaluation of the video. This evaluation will involve completing a pre- and post-viewing paper and pencil survey. The video will help expand our capacity for nutrition education outreach and parent involvement for our preschool families.

\$outhern Chester County Day Care Association • A United Way Agency

If you have questions, please contact me at 610-268-8134; ticktock@kennett.net

Sincerely,

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APPENDIX B

PHASE 1 PARENT PERPECTIVES SURVEY – ENGLISH VERSION

Parent Perspectives Survey

Thank you for a few minutes of your time to answer questions about your food and nutrition opinions. This survey is <u>anonymous</u>. Please answer openly and honestly. Thank you for your input, your answers are very important to us!

1. You are: Male □ Female □	
2. Country of Origin	
3. How long have you lived in the United States?	
4. Total # of children (under 18) living in the home	_
5. Total # of adults living in the home (INCLUDE YOUR	SELF)
6. How many times a week do you eat these foods?	
Vegetables Fruits Proteins (meat, beans, fish, etc.) Dairy (milk, cheese, etc.) Grains (bread, tortillas, rice, etc.) 7. Where do you buy your groceries for your family?	
8. Do you buy <u>fast food</u> (for example, McDonalds, Burgeretc.) for your family? Yes \square No \square	r King, Wendy's. Pizza
9. If yes, how often do you and your family eat <u>fast food</u>? Once a week \Box Twice a week \Box week \Box	More than twice a
10. Do you eat a similar diet now that you did in your hor	me country? Yes 🗆 No 🗆
11. Which of these statements best describes the food eate past 12 months? Enough of the kinds of food we want to eat	en in your household in the
Often not enough to eat	(continued on next page)

12. Are there <u>obstacles</u> to providing the meals you prefer for you and your family? Yes \square No
13. If you said yes to question 12, which of the following is a reason why YOU and YOUR FAMILY don't always have enough or the kinds of food you want. (check all
that apply)
Not enough money for food
Kinds of food I want are not available
Not enough time for shopping or cooking□
Too hard to get to the store
On a diet
No working stove available
Not able to cook or eat because of health problems \Box
Foods from your home country are not available
Not enough time to prepare meals at home
Other
14. In the past 12 months: "I worried whether our food would run out before we got
money to buy more." Often true
all□
15. What food topics do you want to learn more about? (check all that apply)
Food shopping□
Healthy recipes□
Healthy fast food choices□
Healthy cooking
Healthy eating for the family□
Other
16. What nutrition and health topics do you want to learn more about?
Diabetes
Obesity□
Heart disease□
Other
17. Which of the following ways would you like to learn about healthy eating?
(Circle all that apply) Nutrition information newsletter□
Nutrition videos
Healthy Cooking lessons
Healthy recipes
Other (continued on next
page

Thank you for completing our survey! If you have any questions, please call Tick Tock at 610-268-8134.

This section will be separated from the survey to preserve anonymity.

Would you be willing to participate in an interview related to the questions asked in the survey? A \$25.00 gift card will be given for participation.

If yes, please provide your contact information below	V.
Name	
Phone	

APPENDIX C

PHASE 1 PARENT PERSPECTIVES SURVEY- SPANISH VERSION

Encuesta Perspectiva de Padres

Ésta encuesta ayudará a que el personal de Tick Tock Early Learning Center sirva mejor a usted y sus hijos. Gracias por tomar unos minutos de su tiempo para responder preguntas sobre sus opiniones de alimentación y nutrición. Ésta encuesta es <u>anónima</u>. Por favor responda abiertamente y honestamente. ¡Gracias por su aporte, sus respuestas son muy importantes para nosotros!

1. Es usted: Masculino ☐ Femenino ☐
2. País de Origen
3. ¿Cuánto tiempo lleva en los Estados Unidos?
4. Total # de niños (menores de 18) viviendo en el hogar
5. Total # de adultos viviendo en el hogar (INCLUYENDOLO A USTED) 6. ¿Cuántas veces a la semana come éstos alimentos? Vegetables Frutas
Proteínas (carnes, frijoles, pescado, etc.) Productos lácteos (leche, queso, etc.) Granos (pan, tortillas, arroz, etc.)
7. ¿Dónde compra la comida para su familia?
8. ¿Compra <u>comida rápida</u> (por ejemplo, McDonalds, Burger King, Wendy's. Pizza etc.) para su familia? Si 🗆 No 🗆
9. En caso afirmativo, ¿con qué frecuencia usted y su familia comen comida rápida? Una vez a la semana□
Dos veces a la semana□
Más de dos veces por semana□
10. ¿Lleva una dieta similar a la que tenía en su en país? Si \square No \square
11. ¿Cuál de éstas afirmaciones mejor describen los alimentos ingeridos en su hogar en los últimos 12 meses?
Suficiente tipos de alimentos que queremos comer
Suficiente pero no siempre el tipo de comida que queremos
A veces no hay suficiente que comer
No sé

12. ¿Hay obstáculos para proporcionar las comidas que prefiere para usted y su familia? Si □ No □
13. Si usted dijo si a la pregunta 12, ¿cuál de las siguientes es una razón por que USTED y su FAMILIA no siempre tienen suficiente o las clases de alimentos que quieren? (marque todas las que apliquen) No hay suficiente dinero para comida
No hay una estufa funciónable
14. En los últimos 12 meses: "Me preocupaba si nuestra comida se acabarían antes de tener dinero para comprar más". Frecuentemente cierto□ A veces cierto□ No es cierto□
15. ¿Sobre qué temas alimenticios desearía aprender más? (marque todo lo que aplique) Comprar comida
16. ¿Sobre qué temas de nutrición y salud desearía aprender más? Diabetes
17. ¿Le gustaría aprender sobre como comer sano de las siguientes maneras? Boletín informativo de nutrición□ Videos sobre nutrición□ Clases para aprender a cocinar saludable□ Recetas saludables□

¡Gracias por completar nuestra encuesta! Si usted tiene alguna pregunta, por favor llame a Tick Tock Early Learning Center al 610-268-8134.

Esta sección se separará de la encuesta para preservar el anonimato.

¿Estarías dispuesto a participar en una entrevista relacionada a las preguntas formuladas en la encuesta? Se dará una tarjeta de regalo de \$25.00 por la participación

En caso afirmativo, por favor proporcione su información de contacto más en los
englones de abajo.
Nombre
Teléfono Teléfono

APPENDIX D

PHASE 1 STAFF PERSPECTIVES SURVEY

Staff Perspectives Survey

This survey is part of a research study that aims to help the staff at Tick Tock Early Learning Center better serve the children and families attending Tick Tock. Thank you for a few minutes of your time to answer questions about your food and nutrition opinions. This survey is anonymous. Please answer openly and honestly. Thank you for your input, your answers are very important to us!

honestly. T	hank you for yo	our input, your answers are very important to us!	
1. You are	Male	Female	
families at ⁻ Nutri Nutri Cool	Tick tock? ition information ition videos king lessons Ithy recipes	services would you be interested in providing for the newsletter	
3. Do you h Yes No	ave any conce	erns about the diets of the children attending Tick Too	:k?
4. If yes, plo	ease list those	concerns.	
5. In your o feeding the		nallenges do families at Tick Tock face with regard to	
6. In your o	pinion, what he	ealth related challenges do children at Tick Tock face	?
Food Heal Heal Heal Heal	d shopping Ithy recipes Ithy fast food ch Ithy cooking Ithy eating for th		

8. W	hat nutrition and health topics do you want to learn more about	?
	Diabetes	
	Obesity	
	Heart disease	
	Other	

Thank you for completing our survey!

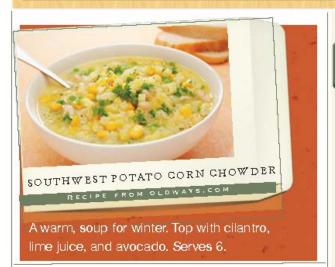
If you have any questions, please call Tick Tock Early Learning Center at 610-268-8134.

APPENDIX E

TICK TOCK TALK NUTRITON NEWSLETTER – ENGLISH VERSION

FAMILY NEWSLET TER

TICK TOCK TALK



INGREDIENTS:

- 4 Yukon Gold potatoes, cut into small cubes, skin on
- 2 tablespoons olive oil
- 1 large onion, chopped
- 2 cloves garlic, minced
- 3 cups low-sodium chicken broth
- 1 12- ounce bag of frozen corn
- 1 can green chiles
- 1/2 teaspoon cumin

INSTRUCTIONS:

- In a stockpot, heat olive oil over medium heat and add onion. Saute for 3-4 minutes, then add cumin, white pepper, garlic, and stir. Add potatoes and saute for 2 more minutes.
- Add chicken stock and bring to a boil. Reduce to simmer and stir in corn and chiles. Simmer for 15 minutes or until potatoes are tender.
- Puree half of the contents of stockpot in a blender and add back to pot or mash by hand. Stir in milk and simmer.
 Add salt and pepper to taste.

Type 2 Diabetes

High Blood Sugar and Insulin Problems

Diagnosis

- Prediabetes fasting blood glucose of 100-125 mg/dl.
 This can be changed.
- Diabetes fasting blood glucose higher than 126mg/dl

Symptoms and Facts

- Cause tiredness
- · Can hurt eyes, kidneys, heart
- · Very important to see a doctor

Statistics:

- 12.8% of Hispanics have diabetes
- American diet is high in sugar and fat
- Less time for cooking and taking care of self

Prevent with Lifestyle:

- Stay at a healthy weight
- · Exercise, dance, and move
- Eat plenty of fruits, vegetables, and whole grains
- Avoid sugary drinks (soda/ juice)

Call 1-800-DIABETES





Let's Learn Together



Trivia Questions Parents ask the questions. Kids answer the questions.

- 1. Is brown rice or white rice a whole grain?
- 2. How many parts make up a whole grain?
- 3. What are the parts of the whole grain?
- 4.Which one of the following is <u>not</u> a whole grain (circle it)?

 Popcorn Oatmeal Corn White rice
- 5.Look at the soup recipe on the front of this newsletter. Which of the ingredients is a whole grain?
- 6. What is your favorite whole grain?



VEGGIE DIP AND CRUNCH

Yogurt Dip - Salsa or Ranch Style

Ask a grown up to help you make a yummy dip for raw veggies like carrot sticks, celery sticks, broccoli trees, and other super crunchy snacks.

Ingredients:
½ cup plain yogurt
AND
½ cup salsa
OR
1 Tablespoon Ranch seasoning mix



Directions:

Stir yogurt and salsa or yogurt and ranch seasoning together (or one dish of each) for a healthy and tasty veggie dip.

APPENDIX F

TICK TOCK TALK NUTRITION NEWSLETTER – SPANISH VERSION

CARTA DE NOTICIAS UNO

TICK TOCK HABLA

COMIDO Y COCINANDO POR SALUD



- 4 papas cortadas en cuadritos, con cascara
- 2 cucharadas de aceite de oliva
- 1 cebolla grande picada
- •2 dientes de ajo triturados
- 3 tazas de pollo bajo en sodio
- 1 bolsa de 12 onzas de maíz congelado
- 1 lata de chiles verdes
- ½ cucharadita de comino
- 1/2 cucharadita de pimienta blanca
- 1 taza de leche

INSTRUCTIONS:

- r.En una olla, calentar el aceite de oliva a fuego medio y agregar la cebolla. Sofreir durante 3-4 minutos, luego agregar el comino, pimienta blanca, ajo y revuelver. Añadir papas y mezclar durante más de 2 minutos.
- I.Añadir el caldo de pollo y hervir. Reducir a fuego lento y agreguar el maíz y chiles. Cocinar a fuego lento durante 15 minutos o hasta que las papas estén cocidas.
- 2.Moler en la licuadora la mitad del contenido de la olla hasta hacerlo puré y regresar el puré a la olla. Agregue la leche y cocinar a fuego lento. Añadir sal y pimienta al gusto.

Diabetis Tipo 2

Problemas de Presión alta y problemas de Insulina

Diagnosis

- Prediabetis La glucosa en ayunas de 100-125 mg/dl. Esto puede cambiar.
- Diabetis La glucosa en ayunas superior a 126mg/dl

Symptomas y Factores

- · Causa cansancio
- Puede dañar los ojos, el riñón, y el Corazón
- Es muy importante ver al Doctor

Estadisticas:

- 12.8% de los hispanos tienen diabetis
- La dieta americana es alta en azúcar y grasa
- Menos tiempo para cocinar y cuidar de sí mismo

Prevenir con el estilo de vida:

- · Mantener un peso saludable
- Haga los ejercicios, baile, y muévase!
- Muchas frutas, verduras y cereal integral
- Evitar bebidas azucaradas (refrescos y jugo)

Llamar 1-800-DIABETES





Vamos a aprender juntos



Preguntas de trivia.

Los papás hacen las preguntas. Los niños responden a las preguntas.

- 1.¿Es el arroz blanco o arroz café, grano integral?
- 2.¿Cuántas piezas componen un grano integra
- 3.¿Cuáles son todas las partes de un grano integral?
- 4.¿Cuál <u>no es</u> un grano integral?

Palomitas de maíz Avena Maíz Arroz Blanco

- 5. Mira la receta de la sopa en frente de la carta de noticias, que ingrediente es un grano integral?
- 6.¿Cuál su grano entero favorito?



Crujiente Aderezo de vegetales

Yogurt - Salsa o estilo Ranch

Pedir a un adulto por ayuda para hacer una deliciosa salsa para vegetales crudos como zanahorias, apio. Ingredientes:

1/2 taza de yogurt sin sabor

Y

½ taza de salsa

0

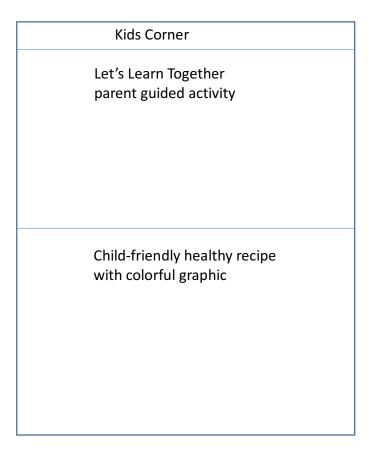
1 Cucharada de sazón mixto para Ranch Direcciones:

Mezclen el yogurt y la salsa o el yogurt y el sazonador para ranch (o un plato de cada uno) para una salsa de vegetales saludables y sabrosas

APPENDIX G NEWSLETTER TEMPLATE

Newsletter Title	
Theme/monthly	
Theme/monthly Healthy recipe with colorful graphic	Nutrition topic of interest

Front of newsletter



Back of newsletter

APPENDIX H

PARENT NEWSLETTER EVALUATION INSTRUMENT – ENGLISH VERSION

Newsletter Evaluation Survey (For Parents)

Directions:

The following questions ask for your opinion about the Tick Tock Talk Newsletter. Please read each statement and answer by placing a check (\sqrt) next to your answer. Please choose <u>only one</u> answer for each statement. Please answer all of the questions. We ask that you also look at the newsletter with your child (children) that attend Tick Tock if possible. Thank you.

1.	Did you read the newsletter with your child (children)?
	Yes No
2.	Did you read the newsletter by yourself?
	Yes No
3.	How much of the Tick Tock Talk newsletter did you read?
	None
	Only a little
	Some
	Most
	All
4.	Which section in the newsletter did you and your child like the most? (Please check only one answer)
	Nutrition and Health information
	Nutrition and Treattin Information Main recipe (on front of newsletter)
	Children's recipe (on back of newsletter)
	Kid's Corner activity
	No preference
	No picterine
	Other answer
	Ouler answer
5.	I was able to read the print in the newsletter easily.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree
6.	I enjoyed reading the newsletter.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree

7.	I enjoyed reading the newsletter with my children.
	Strongly Disagree
	Disagree No Opinion
	No Opinion
	Agree
	Strongly Agree
8.	I liked the pictures/drawings in the Tick Tock Talk newsletter.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree
a	I intend to save the newsletter so I can refer to it in the future.
٥.	Strongly Disagree
	Strongry Disagree
	No Opinion
	Agree
	Agree Strongly Agree
10	. I intend to make at least one of the recipes in the newsletter.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree
4.4	
11	.I like the colors in the newsletter.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree
12	. The Tick Tock Talk newsletter told me things I wanted to know about nutrition
	and eating.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree

13. I talked about the information I read in the newsletter with my child/children.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
14. I could not get through the newsletter.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
15. I was interested in the information in the newsletter.
Strongly Disagree
Disagree No Opinion
Agree
Strongly Agree
16. I have a more positive attitude about nutrition since reading the newsletter.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
17 Deading the Tiels Teels Tells newsletter increased my interest in nutrition and
17. Reading the Tick Tock Talk newsletter increased my interest in nutrition and health.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
18. Nutrition newsletters are not necessary because there is already enough nutrition
information out there.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree

19. The Tick Tock Talk newsletter talked about things that were important to me. Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
20. The newsletter was a good way for me and my family to get information on nutrition.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
21. The pages of the newsletter looked crowded.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
22. How would you describe your overall reaction to the Tick Tock Talk newsletter.
Positive
Neutral Negative
Negative
00 1 11 4 7 11 7 7 7 7 7 7 7 7 7 7 7 7 7 7
23. I did the Kids' Corner activity with my child/children and asked them the
questions.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
24 My shild/shildren and Lanisyad talking shout the questions in the Vide' Corner
24. My child/children and I enjoyed talking about the questions in the Kids' Corner
Strongly Disagree Disagree
No Opinion
Agree
Strongly Agree

25. I think that my child/children learned information about nutrition from the Kids' Corner.
Strongly Disagree
Disagree
No Opinion
Agree Agree
Strongly Agree
26. What did you like the best about the Tick Tock Talk newsletter?
27. What did you like the <u>least</u> about the Tick Tock Talk newsletter?
28. If you could change the newsletter in any way, what would you do?
29. What other information would you like included in the newsletter?
30. Is there anything else you would like to tell us about the Tick Tock Talk newsletter?

31. What are the 5 most common meals that you prepare and eat at home?

Thank you for your participation!
Please fill out the name card and send it in with this survey and the informed consent. You will have a chance to win a \$50.00 grocery card.

APPENDIX I

PARENT NEWSLETTER EVALUATION SURVEY – SPANISH

Evaluación De La Carta De Noticias (Para Padres)

Direcciones:

En las siguientes preguntas se pide su opinión sobre la Carta de Noticias El Tick Tock Habla. Por favor, Lea cada frase y marque (\sqrt) junto a su respuesta. Por favor elija sólo una respuesta por cada frase. Por favor, conteste todas las preguntas. Le pedimos que lea la carta junto con su hijo(s) que asiste al Tick Tock

1.	¿Usted leyó la carta de noticias con su hijo (hijos)? Si No
2.	¿Usted leyó la carta de noticias por si misma? Si No
3.	¿Qué tanto leyó de la carta de noticias ElTick Tock Habla? NadaSolo un pocoAlgoCasi todaToda
4.	¿Cuál sección de la carta de noticias le gusto más a usted y a su hijo? (Por favor solo marque una de las respuestas)
5.	Pude leer la carta de noticias fácilmente. Totalmente en desacuerdo En desacuerdo Sin opinión De acuerdo Totalmente de acuerdo
6.	Disfrute leyendo la carta de noticias. Totalmente en desacuerdoEn desacuerdoSin opiniónDe acuerdoTotalmente de acuerdo

7. He d	isfrutado leyendo la carta de noticias.
	Totalmente en desacuerdo
	En desacuerdo
	Sin opinión
	De acuerdo
	Totalmente de acuerdo
8. Me g	gustaron las fotos/dibujos en ela carta de noticias el Tick Tock Habla.
	Totalmente en desacuerdo
	En desacuerdo
	Sin opinión
	De acuerdo
	Totalmente de acuerdo
9. He g	uardado la carta de noticias para un futuro.
	Totalmente en desacuerdo
	En desacuerdo
	Sin opinión
	De acuerdo
	Totalmente de acuerdo
10. Inter	nte preparar al menos una de las recetas de la carta de noticias
	Totalmente en desacuerdo
	En desacuerdo
	Si opinión
	De acuerdo
	Totalmente de acuerdo
11. Me g	gustaron los colores de la carta de noticias.
	Totalmente en desacuerdo
	En desacuerdo
	Sin opinión
	De acuerdo
	totalmente de acuerdo
12. La ca	arta de noticias del Tick Tock me enseño cosas que quería aprender sobre
	entos y nutrición.
	Totalmente en desacuerdo
	En desacuerdo
	Sin opinión
	De acuerdo
	Totalmente de acuerdo

13. He hablado sobre la información que leí en el boletín de noticias con mis hijos.	
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	
14. No pude leer completamente la carta de noticias.	
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	
15. Estaba interesada(o) en la información de la carta de noticias.	
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	
16. Tengo una postura más positive después de haber leído la carta de noticias.	
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	
17. Leer la carta de noticias El Tick Tock Habla aumento mi interés por la nutrición salud.	n y
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	
18. Las cartas de noticias no son necesarias por que ya hay mucha información	
disponible sobre nutrición.	
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	

19. La carta de noticias El Tick Tock Habia hacia referencias de cosas que	eran
importantes para mi	
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	
20. La carta de noticias fue una oportunidad para que yo y mi familia nos	
informáramos sobre nutrición.	
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Be dedeldo Totalmente de acuerdo	
rotumente de dederdo	
21. Las páginas de la carta de noticias se veían amontonadas	
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	
22. Como describe en general la carta de noticias El Tick Tock Habla.	
Positivo	
Neutral	
Negativo Negativo	
22 IIi. 1	:-(-)
23. Hice las actividades y preguntas recomendadas en la página con mi hi	JO(S).
Totalmente en desacuerdo	
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	
24. Mi hijo(s) y yo disfrutamos cuando hablamos sobre las preguntas en la	a pagina
Totalmente en desacuerdo	1 0
En desacuerdo	
Sin opinión	
De acuerdo	
Totalmente de acuerdo	
rounnence de dederdo	

25.	Creo que mi hijo(s) aprendió sobre la información de nutrición de la página. Totalmente en desacuerdo En desacuerdo Sin opinión De acuerdo Totalmente de acuerdo
26.	¿Qué fue lo que <u>mejor</u> que aprendió de la carta de noticias El Tick Tock Habla?
27.	¿Que fue lo que menos le gusto de la carta de noticias El Tick Tock Habla?
28.	¿Si hubiera algo que pudiera cambiar de la carta de noticias, que cambiaría?
29.	¿Qué otra información le gustaría que se hubiera incluido en la carta de noticias?
	¿Hay algo más que quisiera decirnos sobre la carta de noticias El Tick Tock Habla?
24	

31. ¿Cuáles son las 5 comidas más comunes que preparan y comen en casa?

¡Gracias por tu participación!

Por favor complete la tarjeta y envíela junta con la encuesta y el consentimiento Firmado. Usted tendrá la oportunidad de ganar una tarjeta de supermercado de \$50.00

APPENDIX J

STAFF NEWSLETTER EVALUATION SURVEY

Newsletter Evaluation Survey (For Staff)

Directions:

The following questions ask for your opinion about the Tick Tock Talk Newsletter. Please read each statement and answer by placing a check ($\sqrt{}$) next to your answer. Please choose *only one* answer for each statement. Please answer all questions. Thank you.

1.	Did you read the newsletter with any children at the center? Yes No
2.	Did you read the newsletter by yourself? Yes No
3.	How much of the Tick Tock Talk newsletter did you read? NoneOnly a littleSomeMostAll
4.	Which section in the newsletter did you like the most? (Please check only one answer) Nutrition and Health information Main recipe (on front of newsletter) Children's recipe (on back of newsletter) Kid's Corner activity No preference Did not like any of it Other answer
5.	I was able to read the print in the newsletter easily. Strongly Disagree Disagree No Opinion Agree Strongly Agree
6.	I enjoyed reading the newsletter. Strongly Disagree Disagree No Opinion Agree Strongly Agree

7.	I believe the newsletter will provide valuable information for families at the
	center.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree
8.	I liked the pictures/drawings in the Tick Tock Talk newsletter.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree
9.	I intend to save the newsletter so I can refer to it in the future.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree
10	Lintand to make at least one of the regimes in the neweletter
10	I intend to make at least one of the recipes in the newsletter.
	Strongly Disagree
	Disagree No Opinion
	No Opinion
	Agree
	Strongly Agree
11	. I like the colors in the newsletter.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree
12	2. The Tick Tock Talk newsletter told me thing I wanted to know about nutrition
	and eating.
	Strongly Disagree
	Disagree
	No Opinion
	Agree
	Strongly Agree

13 . I talked about the information I read in the newsletter with others.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
14. I could not get through the newsletter.
Strongly Disagree
Strongry Bisagree Disagree
No Opinion
Agree
Strongly Agree
Suchigity rigide
15. I was interested in the information in the newsletter.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
16. I have a more positive attitude about nutrition since reading the newsletter.
Strongly Disagree
Strongry Bisagree Disagree
No Opinion
Agree
Strongly Agree
Subligity Agree
17. Reading the Tick Tock Talk newsletter increased my interest in nutrition and
health.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
18. Nutrition newsletters are not necessary because there is already enough nutrition
information out there.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree

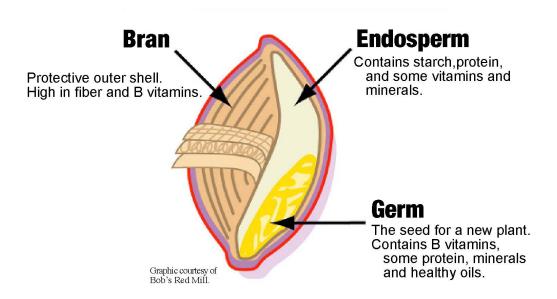
19. The Tick Tock Talk newsletter talked about things that were important to me.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
20. The newsletter was a good way for me to get information on nutrition.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
04 771
21. The pages of the newsletter looked crowded.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
22. How would you describe your overall reaction to the Tick Tock Talk newsletter.
Positive
Neutral
Negative
23. The question section in the Kids' Corner could be used to reinforce ideas that the
children learn in school.
Strongly Disagree
Disagree
No Opinion
Agree
Strongly Agree
24. What did you like the best about the Tick Tock Talk newsletter?
25. What did you like the <u>least</u> about the Tick Tock Talk newsletter?
20. What are you like the least about the flow fock fair newsletter:
26. What did you think about the questions in the Kids' Corner of the newsletter?

- 27. If you could change the newsletter in any way, what would you do?
- 28. What other information would you like included in the newsletter?
- **29**. Is there anything else you would like to tell us about the Tick Tock Talk newsletter?

APPENDIX K

WHOLE GRAIN HANDOUT - ENGLISH

What is a Whole Grain?



All grains, when they grow in the field, have three parts: the bran, germ and endosperm, as shown in the illustration here. Whole grains or foods made from them contain all the essential parts and naturally-occurring nutrients of the entire grain seed. Enriched ("white") flour contains only the endosperm, while whole grain flour contains extra protein, fiber, vitamins and minerals that are found only in the bran and germ. All three parts are important!

The following are considered whole grains, when all three parts – the bran, germ, and endosperm – are included:

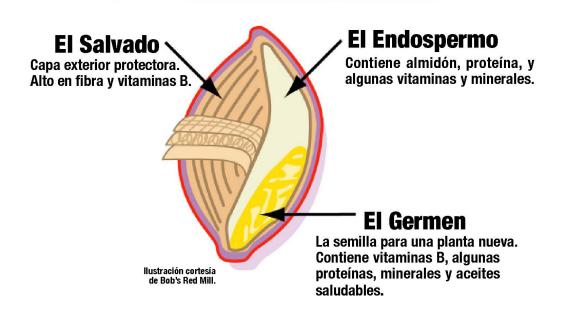
Amaranth, Barley (hull-less or hulled), Brown and Colored Rice, Buckwheat, Bulgur, Corn and Whole Cornmeal, Emmer, Farro, Kamut® grain, Millet, Oatmeal and Whole Oats, Popcorn, Quinoa, Sorghum, Spelt, Triticale, Whole Rye, Whole or Cracked Wheat, Wheat Berries, and Wild Rice.



32005, The Whole Grains Council/Oldways Preservation & Exchange Trust. For more information on whole grains, visit www.wholegrainscouncil.org.

APPENDIX L WHOLE GRAIN HANDOUT – SPANISH

¿Que es un Grano Entero?



Todos los granos que se cultivan en el campo se conforman de tres partes: el salvado, el germen y el endospermo, como vemos en la ilustración. Tanto estos granos, como los alimentos integrales que se preparan con ellos, contienen todos los nutrientes esenciales de la semilla entera de grano. La harina enriquecida ("blanco"), contiene sólo el endospermo, mientras que la harina integral contiene la proteína adicional, la fibra, las vitaminas y los minerales que se encuentra sólo en el salvado y el germen. ¡Todas tres partes son importantes!

Los siguentes se consideran integrales, pues contienen las tres partes del grano – el german, el salvado y el endospermo:

El Amaranth, la Cebada, el Arroz integral o colorado, el Trigo, Bulgur, el Maíz y la Harina de Maíz, el Emmer, el Farro, el Kamut®, el Mijo, la Avena, las Palomitas de maíz, la Quinoa, el Sorgo, la Espelta, el Triticale, el Centeno, el Trigo Agrietado, y el Arroz Silvestre.



) 2006, The Whole Grains Council / Oldways Preservation & Exchange Trust.

Para mas informacion sobre granos enteros, visite nuestra pagina web: www.wholegrainscouncil.org.

APPENDIX M

NEWSLETTER ASSIGNMENT

UNDERGRADUATE NUTRITION EDUCATION COURSE

Newsletter Assignment

Please type your answers directly into this document.

Objectives:

By completing this assignment, students will be able to:

- 1. Describe the characteristics of the intended audience.
- 2. Design a newsletter that is tailored to the intended audience, provides accurate, evidence-based information aligned with sample template.
- 3. Create an audience-driven newsletter that provides interesting information with a parent-guided interactive component.

This is a fun assignment that will help the community. This will be used in a predominantly Latino/Hispanic preschool and will be part of their nutrition education outreach program. The format is standardized, so you just have to use your creativity with the content and appearance. Use the following format and then "let it flow." Use Chapter 16 in your text as a reference for best practices when designing print materials.

You have a sample template attached to this assignment. You must follow the format of the sample newsletter template as consistency for the families is important.

Part A. Complete the following items:

- Learn about your audience. Your text (pp. 532-535) is a good reference, but you should do research on this audience. They are mostly Mexican-American.
 - a. List the characteristics of this cultural group that you will use to develop your newsletter.
- 2. Decide on a month that you would like to do. The theme of your content should match that month.
 - a. What month did you choose? What is the theme of your newsletter that is related to that month?
 - b. What headings and subheading will you use? Why?
- 3. Based on surveys of the parents and staff at this preschool, they have several priority issues, including promoting healthy weight/obesity and Type 2 diabetes. Remember, use your research to explore nutrition topics related to these conditions. For example, healthy shopping on a budget, healthy fast food choices.

- a. Which health issue did you choose?
- b. How are you approaching this health issue? From what direction are you approaching this topic.
- 4. You will need to include each of the following content as sections (see sample):
 - a. A culturally relevant recipe (use principles of current national dietary recommendations.

Name of recipe:

b. A specific content topic

What are your headings and subheadings?

- c. <u>Nutrition education handout to accompany newsletter for parent</u> guided questions.
- d. <u>Parent guided section:</u> (no more than five questions or one activity that parents and children can do together. You may combine questions and other type of activity. This section must be approved by instructor. Also you must relate this section to the accompanying educational handout). Remember this is related to the Center's lesson plan, which will be provided in class.
- e. A kid-friendly recipe that the family can do together.

What is the name of your recipe?

Remember to use the sample as a model. You can be creative with content and appearance (colors, font, etc.) but be sure to follow the best practices for designing print materials and stick with the format of the sample. Remember to pay attention to reading level.

Part B. Your newsletter.

Be sure to Dropbox a copy of your newsletter or this assignment cannot be graded. If both the questions and the newsletter are not Dropboxed together, the assignment will be graded as late as per syllabus.

Rubric provided on next page. Read the rubric before you begin the assignment.

CATEGORY	5 points	4points	3 points	2 points
Writing/Organization	Each section of content in the newsletter has a clear title, supporting details. Follows sample format	Each section of content has a title and supporting details.	Each section of content has important details but lacks a strong title or distinct sections	Section content is not well organized.
Articles - Interest	The content contains appropriate & evidence-based facts, figures, and/or word choices that make the newsletter exceptionally interesting to readers. Culturally relevant, healthy recipes, and content	The content contains appropriate & accurate facts, figures, and/or word choices that make the newsletter interesting to readers. Culturally relevant, healthy recipes, and content	The content contains some appropriate/accurate facts or figures but is marginally interesting to read or not culturally relevant	The content does not contain appropriate facts or figures that might make it interesting to read or contains one or more inaccuracies or misinformation. Or not culturally relevant
Writing Mechanics and text format	No spelling, capitalization, punctuation or grammar errors remain after one or more people (in addition to the typist) read and correct the newspaper. Text size and font are appropriate, consistent, not distracting and visually appealing. All sections are references. Writing is clear and concise.	No more than two spelling, capitalization, punctuation or grammar errors remain after one or more people (in addition to the typist) read and correct the newspaper. Text size and font are appropriate, somewhat consistent, not distracting and visually appealing. Not all info referenced. Writing is clear and concise.	No more than 3 spelling, capitalization, punctuation or grammar errors remain after one or more people (in addition to the typist) read and correct the newspaper. Text size and font are not appropriate at times, not consistent, not distracting and visually appealing. Missing references. Writing is not clear and concise.	Several spelling, capitalization, punctuation or grammar errors remain in the final copy of the newspaper. Text size and font are very distracting. Writing is not clear and concise.
Layout - Headlines & Captions	All sections have headlines that capture the reader's attention and accurately describe the content. All graphics relate to/complement content and appropriately describe the people and action in the graphic. Adequate white space.	Most sections have headlines that accurately describe the content and are appropriate. All graphics relate to/complement content or audience. Some organization issues. Not enough white space.	Some sections have headlines that accurately describe the content. Some graphics relate/complement content. Many organizational issues.	Sections do not have adequate headlines OR graphics do not relate to content or audience.
Graphics	Graphics are in focus, are well cropped and are clearly related to the content.	Graphics are in focus and are somewhat related to the content.	Some of the graphics are clearly related to the content.	Graphics are not clearly related to the content OR no graphics were used.
Total points				
/25 max				

APPENDIX N

INSTITUTIONAL REVIEW BOARD APPROVAL DOCUMENT ARIZONA STATE UNIVERSITY



EXEMPTION GRANTED

Eric Margolis

Human Communication, Hugh Downs School of 480/965-0131

ERIC.MARGOLIS@asu.edu

Dear Eric Margolis:

On 6/5/2014 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Educacional Nutricional Portatil: Development and
	Evaluation of a Nutrition Video for Latino Families
Investigator:	Eric Margolis
IRB ID:	STUDY00001049
Funding:	None
Grant Title:	None
Grant ID:	None

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- Video Release Consent Form WCU, Category: Consent Form;
- HRP 503a Gina Pazzaglia revisions , Category: IRB Protocol;
- Pre-viewing video survey outline, Category: Measures (Survey questions/Interview questions/interview guides/focus group questions);
- Post-viewing video survey outline, Category: Measures (Survey questions/Interview questions/interview guides/focus group questions);
- Survey Parent Perspectives, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);
- Survey Staff Perspectives, Category: Measures (Survey questions/Interview questions / interview guides/focus group questions);
- Letter of Support Preschool, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc);

- Approval form IRB West Chester Pazzaglia, Category: Other (to reflect anything not captured above);
- WCU Human Subjects Parent Perspectives survey, Category: Other (to reflect anything not captured above);
- WCU Human Subjects Staff Consent Form, Category: Other (to reflect anything not captured above);
- WCU Human Subjects Staff Perspectives survey, Category: Other (to reflect anything not captured above);
- WCU Human Subjects Parent Consent Form, Category: Other (to reflect anything not captured above);
- WCU Human Subjects App Gina Pazzaglia, Category: Other (to reflect anything not captured above);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (1) Educational settings, (2) Tests, surveys, interviews, or observation on 6/5/2014.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Gina

Pazzaglia

Gina

Pazzaglia