Contextual Teaching and Learning in the Home Economics Classroom

by

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Abstract

This teacher inquiry study explores how contextual teaching and learning strategies can be used to revitalize the home economics curriculum by strengthening the connection between teacher, student, and the curriculum. Lesson plans were remodeled to incorporate authentic assessment, inquiry learning, problem-based learning, and project-based learning, strategies that fall under the contextual teaching and learning umbrella. The action research cycle of plan, act, observe, and reflect was used to monitor the impact that these instructional strategies had on my professional practice in the areas of addressing student diversity in learning, student engagement and motivation, as well as transfer of knowledge.

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CHAPTER ONE: WHERE MY JOURNEY BEGAN

Introduction

When I began teaching I never expected that my journey from start to present would be so full of change. I anticipated my experience in the classroom to bring about a greater level of confidence and capability, however I did not foresee that the entire way that I want to *be* in the classroom would change in the dramatic fashion that it has. This desire to make changes to my professional practice is the result of the journey that I have been on through the Home Economics: Human Ecology and Everyday Life (HEEL2) cohort over the past two years.

My Path to this Place

I have always felt a strong connection to food, and being in the kitchen. Growing up, I was surrounded by family members who showed love for their family and friends by preparing meals for them. It was inevitable that I too would feel the same, and find comfort not only in preparing food, but also wanting to share my love for cooking and its benefits with others. With a little bit of coaxing and encouragement, the home economics teacher in me was discovered. The foods room has become the place that I can share my love for food and nutrition, and connect with my students on a personal level to teach them skills and knowledge that will serve them their entire lives. I value being able to not only educate them in the practical skill of food preparation but also share with them how food can connect people through the simple act of cooking and sharing a meal together. Food is a window into world cultures. By providing my students with the opportunity to discover the uniqueness of foods from all over the world they can travel to many places without ever leaving the classroom. My classroom is a venue for preparing my students to navigate the modern 'foodscape' to build empathy and understanding for other food cultures, reflect upon current food and nutrition knowledge, issues, and

contemporary lifestyles (Slater, 2013), as well as gain a broader understanding of how our food makes it from the farm to our fork.

I was fortunate to have had a tremendous start as a home economics teacher. I completed the teacher education program at the University of British Columbia and had the benefit of a very positive teaching practicum. My sponsor teachers during my 13-week practicum were both educated in home economics. Their deep understanding of home economics education and years of classroom experience showed in the exemplary teaching practices that they modeled for me. For example they both valued the relationships that they formed with their students, and their classroom instruction was dynamic and inclusive of all types of learners. They offered me support not only by sharing their classroom resources with me, but more importantly in my opinion, their wisdom and advice on the day to day goings on in a foods and nutrition classroom that would make my classroom practice more effective. This wisdom included matters such as the importance of being organized with groceries, tips for how to create lab groupings, and the importance of balancing the theory and practical nature of home economics.

I was also fortunate to have had the opportunity to work with other amazing professionals who were able to mentor me and build on the skills that I had acquired during my practicum. I believe that it was this support network that carried me through the first couple of years in the classroom. In the early days of my career, my primary objective in the classroom was to get through the demonstration and/or lab that I was running, keep everyone safe, and hope that the cleanup got done that day. My thinking did not extend beyond simply “surviving” the day. I most certainly wanted my students to enjoy their time in the foods lab, and hopefully go home and share what they had made in class. However, my main focus in the classroom was on developing

technical skills. Critical thinking skills, problem solving, or how the skills students acquired in my class could be applied to their lives outside of school were hardly touched upon.

Those beginning years in the classroom turned into ten and my practice as a classroom teacher settled into a very comfortable, predictable routine. This was partly due to constraints on my department around space and access to the foods and nutrition labs, and also in part to the theory-demonstration-lab format that I had been following. I began to realize that I was no longer challenged by what I was doing in the classroom. When I looked around at my students I saw that they enjoyed the practical applications of the course, but they were completely disengaged from all other parts of the curriculum. I needed to take my classroom practice beyond a technical, transmissive approach and make it more representative of what I valued the most about teaching home economics. I began to ask myself questions such as, "How can I ensure that the curriculum that I am delivering in the classroom is based on what I value as being part of a quality education in home economics?" and "How can this curriculum come alive to meet the needs of my students?" As I was beginning to change and evolve as a classroom teacher I was realizing that my students were also demanding that the home economics curriculum be delivered in such a way that it connects with their world (Reynolds, 2006). I observed on numerous occasions that it was becoming increasingly difficult to keep my students engaged in the demonstration, theory, lab sequence that I was using on a regular basis in my classroom. I was also finding it challenging to engage them in teacher chosen topics introduced as part of the course to meet the prescribed learning outcomes of the course. I was getting the sense that they wanted to have more choice in determining the topics and recipes covered in class. So I began to make small changes in my practice. For example, rather than teaching Canada's Food Guide to Healthy Eating in a transmissive manner, reviewing the food groups, serving size, and examples of foods

that fit into each group, I had my students complete a "Menu for a Day" assignment. Students outline the nutritional requirements for those living in their household and create a meal plan for their family for the day that meets each family members daily nutritional needs. An assignment such as this allowed students to analyze their own eating habits as well as those of their family members as well as giving them an appreciation for the complexities of meal planning. Small changes like this were the start of me moving the curriculum from the transmission of knowledge to applying that knowledge to students' everyday lives, however I saw these changes as small fixes. I did not have a comprehensive map or specific plan to make stronger connections between what was being taught in the classroom and the students' everyday lives.

Investigating Contextual Teaching and Learning

Keeping the home economics curriculum meaningful and relevant for my students is one of the fundamental tasks facing me at this point in my career. In searching for ways to make my teaching more relevant, I came across an article by Smith (2010), titled "Instructional Strategies in Family and Consumer Sciences: Implementing the Contextual Teaching and Learning Pedagogical Model" and I became interested in the notion of contextual teaching and learning (CTL), and the possibilities it holds for revitalizing home economics curriculum for teacher and student.

Relating home economics curriculum to real life situations becomes an essential aspect of curriculum and instruction. According to the Position Statement on *Home Economics in the 21st Century* created by the International Federation of Home Economics, "as a curriculum area that facilitates students to discover and further develop their own resources and capabilities to be used in their personal life, by directing their professional decisions and actions or preparing them for life" (IFHE, n.d). When implemented as part of the curriculum, contextual teaching and

learning practices have the potential to reflect this understanding of home economics (Shamsid-Deen & Smith, 2006). According to Shamsid-Deen and Smith (2006), home economics curriculum should draw upon the context of the situation, and help students connect ideas so that they can construct new solutions to real-world problems.

The rationale for using contextual teaching and learning strategies is that today's young people have difficulty using knowledge they are required to learn to solve diverse, complex problems in other settings, both in school and outside of it (Lynch, 2006). When subject material becomes predictable and stale, problems arise for both the student and the teacher. Contextual learning and teaching strategies (CTL) can be used to enhance a traditional Home Economics classroom by enabling students to see the valuable connections between what they are learning in school to home, work, and their community. CTL strategies also allow for increased student engagement, achievement, and mastery of subject matter (Smith, 2010). Problem-based learning (PBL), project-based learning (PjBL), inquiry-based learning (IL), cooperative learning (CL), and authentic assessment (AA) are examples of instructional approaches that help students make meaning out of their school subjects (Lynch, 2006). By keeping a fresh and relevant curriculum that has direct links to students lives and healthy living, home economics teachers can ensure the subject remains relevant and core in schools.

Contextual teaching and learning strategies can strengthen and enhance the delivery of a contemporary home economics curriculum by taking students beyond technical skill development, to learn practical and critical thinking skills that equip them to handle the increasing complexities of daily life. CTL can create a structure systematic structure with which to focus instruction. Not only does it give the teacher a guide by which to plan their lessons, but it also allows for students to engage with the curriculum in ways that are meaningful for them.

Decontextualized instruction may be difficult for students to connect to because they do not have an understanding of how the material may be useful and meaningful, thereby students fail to engage with the material and the material fails to increase intrinsic motivation (Perin, 2011). I want to create a classroom environment that is energized, and recognizes the diversity of my students and their interest, in addition to providing them with opportunities to take on a more active role in the learning process.

My teacher inquiry action research project will be documented in six chapters. In this chapter I have outlined how my career as a home economics educator began, why I became interested in CTL strategies, and why I think these approaches to instruction should be used in the home economics classroom. In chapter two, I provide a comprehensive literature review that will allow for better understanding of CTL strategies (see Appendix A for examples and definitions) and how they can be used in the classroom to connect students with curriculum. Chapter three is a breakdown of my research methodology and includes my research question, method, and the significance and implications of my self-study. In chapter four I include an outline of the CTL strategies that I implemented in my classroom and report on the implications that this had for my students and myself. I present the strategies I tried, by using the action research cycle of plan, act, observe, and reflect. In chapter five, I bring my paper to a conclusion, reflecting upon the process of teacher inquiry action research, what I learned about myself as a teacher, and what I learned about CTL. I also make recommendations for future study in this area.

CHAPTER 2: A LITERATURE REVIEW

Introduction

In order to gain a deeper understanding of the research that has been done around the topic of CTL within the mainstream classroom as well as in the home economics classroom and the implications that it can have on teaching and learning, I conducted a wide-ranging literature search for academic research journals in the following databases: ERIC, the UBC library database, Google Scholar, and Academic Search Complete. I focused my search on articles published within the last 20 years to try and obtain the most recent research conducted on CTL as possible, and used search terms such as, "contextual teaching and learning", "contextualizing teaching and learning", "student-centered learning", and "student engagement and motivation". Upon review of the current literature on contextual teaching and learning, I have been able to identify two overarching themes that are consistent throughout the articles. The first common theme throughout the literature was how to define CTL, what are the common characteristics of CTL, what pedagogical theories inform CTL, and what instructional strategies best satisfy this approach to teaching and learning. The other themes fall under the second general theme of educational benefits of CTL. They include the claim that CTL strategies address student diversity in learning, allow for increased student engagement and student motivation, and increase in the transfer of knowledge from one setting to another. I will use these themes as subheadings for my discussion of the literature.

How is Contextual Teaching and Learning Defined in the Literature?

Definitions of CTL vary throughout the literature, depending upon the focus taken by the author(s). Sears (2003) describes CTL as a concept that helps teachers relate subject matter to real-world situations. She goes on to explain how CTL motivates learners to take charge of their

own learning and to make connections between knowledge and its application to the various contexts of their lives: as family members, as citizens, and as workers. Shamsid-Deen and Smith (2006) present the argument that transfer of learning is one of the ultimate aims of the teaching process. Often contextual learning is contrasted with what it is not, that is, not lecturing, not transmitting information and knowledge to passive students, not teacher centered, and not "banking: style education. When information is presented transmissively, a student's ability to apply the information to a real-life situation is limited. "The chances of enabling students to transfer learning from one teaching setting to another and/or real life situations may increase when teachers use contextual teaching and learning practices" (Shamsid-Deen & Smith, 2006, p. 14). Berns and Erickson (2001) focus on CTL as an instructional process, stating that in order for instructional processes to be CTL, learning must be extended across disciplines so that students gain a real-life perspective and can see how the knowledge and skills gained in the classroom can relate to their lives both now and in the future. Others focus on the purpose of learning and promoting greater understanding of the topics being taught. For example Johnson (2002) defines CTL as a system of instruction based on the philosophy that students learn when they are able to see meaning in academic material by connecting academic material with the context of their daily lives, that is, with the context of their personal, social, and cultural circumstances. Johnson (2002) claims CTL enhances brain development and has beneficial effects on memory and understanding. It also enhances motivation because it gives students a reason for learning. In an article that addresses taking CTL from research to practice Ambrose, Davis and Ziegler (2013) state that most of the literature on CTL focuses on instruction in formal educational programs and the integration of skills with real-world material that is meaningful for learners. Ambrose, Davis and Ziegler (2013) also emphasize the importance of the physical

context in which the learning takes place; for example learning while on the job. While the definition of CTL varies from author to author a common theme running throughout the literature is that in order for students to gain the richest educational experience possible it is of utmost importance to connect teaching and learning to students' lived experiences. CTL assumes that students are competent and have knowledge, and their life experiences have given them that knowledge, much like the Fund of Knowledge theorists (Gonzalez, Moll & Amanti, 2006) and the goal is to tap into that knowledge and add to it. The principles and practices of CL are to: a) enable teachers to relate subject specific content to settings where it is used in everyday life, b) help students transfer knowledge and problem solving skills to situations outside of the school context c) prepare students for future careers, and continued learning (Lynch, Padilla, Harnish, & DiStephano, 2001).

Theories that Inform Contextual Teaching and Learning

The concept of teaching students in a context that is as close to real life as possible, with the students' interests and needs at the center of education is consistent with the constructivist approach to teaching and learning.

Green and Ackerman (1995), questioning the way constructivism is used ubiquitously but not sufficiently elaborated, contend that constructivism is more metaphor than theory. Many claim it as a philosophy. For example, Fogerty (1999) says that it is a philosophy that is linked to the work of such theorists such as John Dewey and those who advocate progressive schooling, where learning is embedded in experience and inquiry; Jean Piaget and discovery learning; Lev Vygotsky and his theories in the social processes of meaning making; Reuven Feurstein's theory of mediated learning; Howard Gardner's conceptualization of multiple intelligences; and the brain research of Mirian Diamond.

Others claim it is an epistemology, a theory of knowledge, a philosophical explanation about the nature of knowledge. Based on the assumption that meaning or knowledge is actively constructed in the human mind and that the world is knowable through the interaction of knower and experienced phenomena, knowledge is deemed to be both individually constructed activity and a communal social practice. The cognitive processes camp tends to focus on the individual's mental processes and knowledge construction; the social constructivist camp suggests that knowledge is socially constructed and mediated by context (social, cultural, historical, institutional, etc.).

Still others describe it as theory of learning. For example, Brooks and Grennon Brooks (1999) describe it as "a theory of learning that describes the central role that learners' ever-transforming mental schemes play in their cognitive growth" (p. 18). Richardson (2003) confirms this in stating,

> The general sense of constructivism is that it is a theory of learning or meaning making, that individuals create their own new understandings on the basis of an interaction between what they already know and believe and ideas and knowledge with which they come into contact. (pp. 1623-1624)

However, Richardson's (2003) most salient point is that constructivism as a theory of learning, is not a theory of teaching or teaching practice. It is this general sense of constructivism as a theory of learning that informs CTL.

According to constructivist learning theory, students learn best by constructing meaning through interacting and interpreting their environments (Brown, 1980). Students are 'knowing' beings that construct knowledge that is personally meaningful. Constructivism challenges the technical-rational approach to teaching that many students feel disconnected from. As teachers, we must work in the liminal space between curriculum and student, to bring the two together in a meaningful way. Contextual teaching and learning strategies are a way to bridge this gap.

The contemporary view of CTL is grounded in the work done in the 1900s by theorists such as John Dewey who advocated for progressive education that tied together a child's interests and experiences with academics and practical learning opportunities (Lynch, 2006). Kincheloe, Slattery and Steinberg (2000) echo the continued value of Dewey's work in their writings on CTL, where they state that student experience is an essential element of the learning process. By disregarding the living context of each student, schooling creates an atmosphere of drudgery and boredom, and saps the desire to learn. Ambrose, Davis and Ziegler (2013) also support the notion of constructivist learning theory informed by Dewey as a foundation for CTL. This is in contrast with an objectivist tradition of learning that suggests that knowledge exists independently of the learner and, "learning consists of transferring that knowledge from outside to within the learner" (Ambrose, Davis & Zieger, 2013, p. 37). Socialization, situated learning, and distributed learning are all examples of theories and themes that relate to CTL (Berns & Erikson, 2001), but Ambrose, Davis, and Ziegler (2013) argue that constructivism provides the best foundation for understanding contextualized learning as it occurs in the literature.

Characteristics of Contextual Teaching and Learning

A contextual teaching and learning (CTL) environment is characteristically different from a traditional learning environment. These differences can be attributed to the roles and responsibilities of the teacher, the student, and the methods of assessment (Smith, 2010). Shamsid-Deen and Smith (2006) characterize a CTL environment as one in which students learn in as realistic a manner as possible, and emphasize the importance of learning by doing. For example, in home economics foods and nutrition courses, planning a meal based on a real life situation, such as a limited budget or a special diet would be more realistic than making muffins. Learning the effects of heat on protein by conducting an experiment is an example of learning by

doing. Teachers connect academic subjects to real world situations in order to give meaning to curriculum that can sometimes feel disconnected from student's lives outside of the classroom. Berns and Erickson (2001) state that in order for an instructional process to be considered CTL it must be multi-disciplinary in nature and allow students to gain a real-life perspective. When learning about food products in Home Economics, students examine ingredients to learn where they come from and under what conditions they are produced (Social Studies), they learn how to half, and double recipes and convert imperial measure to metric measure (Mathematics), they learn to read and follow a recipe (English), as well as learning the chemistry and physics behind baking and cooking (Science). Lynch (2006) characterizes CTL by describing its attributes through a student-centered lens. This involves allowing students to influence the content, activities, materials, and pace of learning. For example, allowing students to choose the recipes to demonstrate their understanding od the topic being studied. In a CTL environment, "ultimately, student must take responsibility for their own learning and that they do aspire and can be motivated to become independent, self-regulated, lifelong learners" (Lynch, 2006, p. 4).

Why Contextual Teaching and Learning?

My interest in exploring contextual teaching and learning strategies has been sparked by a desire to make my classroom practice more engaging and meaningful for my students both in the classroom and in their lives outside of school. CTL practices have proven useful in general educational settings to enhance the curriculum and meet the needs of learners. The assumptions and practices of both traditional methods of teaching and CTL are compared in Table 1.

Table 1. *Assumptions and practices of contextual and traditional teaching methods* (Adapted from Smith, 2010).

Assumptions & Practices of Contextual Teaching and Learning	**Assumptions & Practices of Traditional Teaching**
Students are actively engaged	Students are passive recipients
Students view learning as relevant	Students regard content as having no relevant application
Students learn from one another through cooperation, discourse, teamwork, and self-reflection	Students work in isolation. Peer review and/or discussion is absent
Learning is related to "real world" and/or simulated issues and meaningful problems	Learning is abstract and theoretical
Students are encouraged to take responsibility for the monitoring and development of their own learning	The teacher is considered the sole arbiter of student learning
Appreciating students' diverse life contexts and prior experiences are fundamental to learning	Little or no consideration is given to the experiences and backgrounds of students
Students are encouraged to become active participants in the improvement of society	Students are not encouraged to become involved in social improvement
Student learning is assessed in multiple ways	Learning is assessed in singular, standardized format
The perspectives and opinions of students are valued and respected	Student perspectives are unsolicited or undervalued
Teacher acts as a facilitator of student learning	Teacher controls and dictates aspects of the instructional environment

CTL practices can also be used to enhance contemporary home economics curriculum. Home economics is a discipline that is closely related to real life (Shamsid-Deen & Smith, 2006). Home economics educators are dedicated to helping individuals help themselves through a better understanding of family and community life as well as seeking to improve the quality of instruction being delivered (Family and Consumer Sciences Education, 2016). Relating home economics curriculum to real life situations and problem solving are major CTL practices, and are embedded within contemporary home economics curriculum (Shamsid-Deen & Smith, 2006). Redick (1998) found that the curriculum draws upon the context of the situation and help

students connect ideas so that they can develop new solutions to real-world problems. In a study conducted by Lynch and Harnish (2003) that included a home economics teacher, the authors reported that students gained a better understanding of and retained the subject matter longer when CTL strategies were implemented. Based on these findings within the literature, it can be theorized that CTL practices can be used to strengthen and enhance the delivery of a modern home economics curriculum that is meaningful and engaging for students, by helping them to apply information learned within a classroom setting to other educational settings and their lives outside of school (Shamsid-Deen & Smith, 2006).

Delivering curriculum that stays true to a CTL model requires the teacher to think and function in different ways. In a CTL environment, the teacher functions as a facilitator of learning, rather than an expert relaying knowledge. While it is still the teachers' responsibility to provide a clear set of learning objectives, their role in the classroom shifts to being a guide and facilitator of students' personal learning experiences.

In a CTL environment students are often encouraged to explore and inquire into curriculum based topics based on their interests and to work cooperatively on problems (Ward & Lee, 2004). In a home economics classroom setting, this could take the form of a project to get a school garden up and running, or an inquiry project on the rights and working conditions of textile workers in developing countries. Johnson (2002) argues that moving to a CTL approach also requires changing methods of assessment and evaluation. This term "authentic assessment" is used to describe a way of evaluating students by assessing their ability to apply knowledge and skills to the types of situations that they are likely to encounter in the "real-world" as opposed to traditional paper-and-pen tests.

Problem-based learning (PBL), project-based learning (PjBL), inquiry-based learning (IL), and cooperative learning (CL) are common examples of instructional strategies that support the contextual teaching and learning. Smith (2010) identifies these four strategies as being particularly compatible with the home economics curriculum.

PBL is an instructional approach that challenges students to seek solutions to real-world problems by themselves or in groups, rather than learning through traditional methods. PjBL is an in-depth investigation of a real-world topic that is of interest to students. IL is an approach to teaching that encourages learners to ask questions and making discoveries in search of new learning. In CL, student's work together in small groups to maximize their own and each other's learning. Authentic assessment (AA) is another instructional strategy that falls under the contextual teaching/learning umbrella. While Smith (2010) does not explore how it can inform Home Economics education, I believe that AA can have a significant impact on connecting students with the curriculum because the emphasis is on applying what they have learned, rather than memorizing facts for a test.

The Educational Benefits of Contextual Teaching and Learning

Contextual teaching and learning strategies help students connect curriculum to real-life situations, master subject matter, and improve achievement (Smith, 2010). In my review of the literature the benefits that I identified as closely aligning with my interests around CTL were an increase in student engagement and motivation, student diversity in learning, and transfer of knowledge.

Student engagement and motivation.

How do we inspire children to want to learn? Some students possess a wealth of autonomous internal motivation. Others, who do not have this internal drive or who struggle to

find meaning in school are more challenging for teachers to engage in learning. Utilizing CTL strategies can have innumerable benefits for students. In the literature reviewed for this paper, the most frequently mentioned benefit of CTL was the connection between CTL and student engagement and motivation. Many studies determined that student engagement in learning was improved when contextual teaching and learning strategies were implemented at the classroom level. Marzano and Pickering (2010) and Meltzer and Hamann (2004) stress that in order for students to be engaged in their learning they must be part of a responsive classroom that includes authentic connections between tasks and the students lives. Hains and Smith (2012) also found that when students felt in control of their learning and were able to connect their learning to life outside of school there was a natural increase in motivation. Corso, Bundick, Quaglia, and Haywood (2013) state that the degree to which students think, feel, and act engaged in school plays a vital role in their chances for academic and life success. In other words, the more that students perceive the content of a class to be relevant to them personally, the more likely they are to be engaged by it. A study by Saavedra and Opfer (2012) that explored twenty-first century skills required for student success found that the relevance of a specific topic is clearer to students when they understand how it fits within the larger context. Contextual teaching and learning strategies can be implemented within a classroom setting to allow students to make these personal connections to curriculum. When student are able to connect long-term goals to their current efforts they are more likely to engage with curricular content (Saavedra & Opfer, 2012). Ambrose, Davis, and Ziegler (2013) outlined a framework for operationalizing contextual teaching and learning strategies within the classroom. For teachers to help students become more motivated to learn skills and engage with material, they recommend connecting the

new skills to real-world tasks that are meaningful to the students makes the new skill easier to understand and more valuable to the students.

A shift from passive learning to engaged learning can be made through curriculum that connects students to the everyday. Engaged learners are responsible for their own learning; strategic in their learning process; collaborative with others; and energized throughout the learning process (Koh, Tan, & Ng, 2012). This new direction also requires a shift from traditional methods of assessment. AA is a CTL strategy that allows students to demonstrate their knowledge in more authentic, real-to-life contexts. AA embraces the idea that there is not a one size fits all approach to assessment, and that learning happens at different times and in different ways for all students. Traditional testing may only show that a student is a good test taker. AA shows the students' ability to think critically while applying skills to real-world problems (Dutt-Donner & Maddox, 1998).

Student diversity in learning.

The goal of contextualization is to create conditions for more effective learning, expressed through increased mastery of skills, increased achievement and retention of coursework, and the transfer of skills learned within a school context to life goals (Perin, 2011). By acknowledging that all learners come to class with their own unique life experiences, a contextual teaching approach offers students a variety of ways to learn in a meaningful way and demonstrate what they have learned (Lynch, 2006). In her article on personalized contextual instruction, Voltz (2003) presents personalized contextual instruction as a way of enhancing the traditional classroom to respond to student diversity. Students are able to connect school with their everyday lives because instruction is embedded in real-life activities that explore a theme tailored to their individual learning characteristics (Voltz, 2003). Voltz also found the contextual

teaching approach assisted students with learning difficulties as well as students who did not thrive in a conventional classroom. Egbert and Roe (2014) suggest that classroom tasks do not typically consider students as individuals, yet when small shifts towards creating a more authentic classroom experience occur through contextual teaching practices, student participation and sense of belonging increased. A teacher's instructional approach must begin with knowledge of the learner, if the goal of the learning environment is to best suit the needs, aptitudes, and interests of each student. Keefe and Jenkins (2005) argue that teachers must put their students first by identifying, strengths and weaknesses, and thereby organize instruction more efficiently and effectively as a response to learner diversity.

Transfer of knowledge.

Macaulay (2000) states that the ultimate aim of education is for students to be able to apply or transfer what they learn. "Transfer refers to a phenomenon in which something learned in one situation is carries over to another" (Shamsid-Deen and Smith, 2006). Problems occur when the student is unable to identify what knowledge is needed to address problems that come up outside of a classroom setting. The chances of enabling students to transfer learning from one teaching environment to another, or to real life situations may increase in a classroom that emphasizes contextual teaching and learning (Shamsid-Deen and Smith, 2006). Smith (2010), found that this active engagement in learning would increase the likelihood of student learning and mastery of the subject matter. In her article on contextual learning and higher order learning and transfer, Miller (2006) presents the idea that contemporary education begins with knowledge as its foundation. The greatest learning occurs in the transfer of learning to applications and new situations. "A new teaching model is needed to prepare a different type of graduate, a graduate who can operate independently, work within a group situation, solve problems, and make group

decisions" (Miller, 2006, p. 1). A CTL model of instruction places students in an active role of applying and using subject matter. Contextual learning requires students to learn in a variety of different environments through various instructional strategies. When students learn by doing they have a better understanding of content knowledge because they can relate what they learn to what they already know. They experience greater knowledge retention, and are able to utilize this knowledge in a variety of settings (Miller, 2006). Saavedra and Opfer's (2012) study on twenty-first century teaching and learning practices identified students' ability to transfer knowledge from one setting to another as a fundamental skill necessary for success in a changing educational landscape.

Teacher driven instruction does not prepare learners to transfer what they learn to other disciplines or to other areas of their lives. "Transfer is hard to learn and student need support and practice to ensure that it happens" (Saavedra & Opfer, 2012, p. 10). CTL as an instructional process responds to the needs of a new economy that Lynch (2000) suggests is a major influence on the educational system. CTL provides the means by which to prepare students with the educational and technical skills that they need for successful employment in various careers or professions (Berns & Erickson, 2001) and for everyday life. Shamsid-Deen and Smith (2006) conducted a study that sought to determine how the level of knowledge that family and consumer sciences teachers had on the concept of contextual teaching and learning, impacted the occurrence of contextual teaching and learning practices in their classes. It was found that when contextual teaching and learning practices were used by classroom teachers the chances of students transferring learning from one teaching setting to another and/or to real life situations were increased.

Conclusion

While the concept of contextual teaching and learning is relatively new to the field of education, there is support for adopting these practices into our teaching as has been presented in this chapter, the knowledge and skills that students take away with them from being a part of a home economics program are skills that they will be able to utilize their entire lives. Contextual teaching and learning strategies such as problem-based learning, inquiry learning, service learning, and authentic assessment can be utilized to strengthen and enhance the delivery of a contemporary home economics curriculum and help students become active agents in their own learning. Utilizing such innovative practices as those embodied in the contextual teaching and learning concept can help to position home economics educators as educational leaders (Shamsid-Deen & Smith, 2006).

How can my classroom instruction effectively allow students to see the connections and application of what we are doing to their lives now and in the future? This is the research question of my teacher inquiry. The classroom is a diverse environment with many different types of learners. Students come to class with their own unique story, interests, learning style, and life goals. The ability to connect with, and meet the needs of all learners in one classroom, with one type of instruction is not always effective. In chapter three I outline my inquiry process and then in chapter four I present my findings.

CHAPTER 3: RESEARCH METHODOLOGY

Introduction

In chapter one, I set the context of my paper by describing my early years as a home economics teacher and the motivating factors that drove me to decide to pursue post-graduate work focused on introducing the use of CTL strategies within the home economics classroom. In chapter two, I reviewed literature that presented the definition and characteristics of CTL as well as the educational benefits of incorporating CTL strategies into regular classroom practice. In this chapter, I outline the focus of my action research study, the research methodology, data collection methods, as well as how I analyzed the data.

Statement of the Problem

Creating an environment that allows students to learn in the most meaningful, realistic way is a goal of all teachers who use contextual teaching and learning (Shamsid-Deen & Smith, 2006). The studies and literature that I reviewed on the topic of contextual teaching and learning provide evidence in support of incorporating teaching and learning strategies into classroom practice. However, I was unable to find many practical example of how contextual teaching and learning practices can be implemented in the home economics classroom. This is an avenue that I have explored in my action research.

Research Question

1. In what ways can I integrate contextual teaching and learning strategies in my teaching and what is the effect?

Research Methodology

My interest in inquiring into the topic of contextual teaching and learning strategies, and how they can be implemented as part of my practice, has everything to do with my desire to grow as a teacher and provide the best possible instruction for my students. Action research, or research into my own practice, provides the theoretical framework by which I hope to make meaningful changes to my professional practice. I believe that home economics education provides skills for life yet, if I cannot enable my students to see the connections between home economics curriculum and their lives then how will it survive as a viable elective option for them at my school?

I locate my research in the interpretivist research paradigm as I seek to understand the CTL approach to teaching and the impact of its use in my teaching practice. An interpretivist approach to my research question involves examining the implications that contextual teaching and learning strategies have on myself as the classroom teacher as well as my students. Interpretivists attempt to understand situations from the point of view of those experiencing the situations and are concerned with what will assist them in doing so (Peterat & Smith, 2001). To put myself at the center of the research process is to acknowledge the potential of interpretive inquiry as embodying aspects of research as praxis (Miller, 1989), as I seek to incorporate authentic learning opportunities within my classroom instruction to make my curriculum more relevant and engaging.

Method

My intent in conducting action research is to become a more reflective practitioner (Vaines, 1997). “Action research is change research, a nonlinear, recursive, cyclical process of study designed to achieve concrete change in a specific situation, context, or work setting to

improve teaching/learning" (Pike, 2009, p. 30). As a research method, action research provides me with the opportunity to identify the aspect of my classroom practice that I would like to improve upon, systematically make changes to my instruction, gather data on the changes made, and reflect upon the impacts of the contextual teaching and learning strategies that I have implemented have had any impact on both myself as the classroom teacher and my students. My goal in this self-study approach to action research is to enable me to reflect on my classroom practice to improve it, to develop a more energetic and dynamic environment for teaching and learning, and to build upon and acknowledge my own expertise (Pike, 2009).

I chose two blocks of Foods and Nutrition 11/12, which I taught in the winter/spring of 2016 to implement contextual teaching and learning and monitor closely the results. My research question is open-ended to allow for a broad exploration of the topic, and I utilize what would be considered customary teaching practices, such as remodelling lesson plans to reflect contextual teaching and learning strategies, exit slips, and course evaluations, as part of my action research

I used three different methods of data collection in order to achieve triangulation and address issues of reliability (Peterat & Smith, 2001). "Triangulation can be defined as a process by which, when a situation is investigated using a number of different methods, each methods partly transcends its limitations, by functioning as a point of comparison with the others" (Dean, 2001, p. 75). I typically have my students complete a "getting to know you" information sheet at the beginning of each course and for these two courses I added in a few more questions that related to the way that they like to learn. I also typically have students complete a course evaluation at the end of the term. This time I included a few questions to get their response to the new teaching strategies I used.

I implemented the use of various contextual teaching and learning strategies throughout my remodeled lessons and monitored the effects that they have on my students. I had he option of using the following strategies with my Foods 11/12 classes: contextual teaching and learning strategies such as authentic assessment, inquiry learning, problem-based learning, and project-based learning cooperative learning, project based learning. I kept a journal to document the impact of the changes that I make to the way that I deliver the curriculum in my class. My journal was also used to track specific events and critical incidents that occurred throughout the course of the semester as a result of any changes that I implemented. This triangulation of data was used to help me to arrive at a reliable conclusion about the overall implications of incorporating contextual teaching and learning strategies into my home economics classroom.

"One of the defining characteristics of action research is that the research be presented and open for public critique or scrutiny" (Peterat & Smith, 2001, p. 23). Considerable thought was given to how the research was reported. I approached the writing through an 'integrative' lens that allowed me to take into consideration the context, experiences, and discourse that framed my study (Eyre, 2001).

Significance and Implications

Home economics curriculum that is seen as meaningful by our students should allow them to acquire the skills they need to lead healthy, fulfilling lives. Contextual learning and teaching strategies have been proposed as a way to enhance a traditional home economics classroom by enabling students to see the valuable connections between what they are learning in school to home, work, and their community (Smith, 2010). While there is evidence that contextual teaching and learning strategies benefit all students, there has been little research conducted on how contextual teaching and learning strategies can be implemented in a home

economics classroom. My intent was to gather data that provide me with a direction in order to revitalize and rejuvenate my own professional practice by using various contextual teaching and learning strategies.

In this chapter I have described my graduating project as a self-study/teacher action research inquiry into the use of contextual teaching and learning to revitalize and rejuvenate my own teaching practice. Teacher action research follows a cyclical pattern of plan, act, observe and reflect. In the next chapter, I report on how I implemented contextual teaching and learning and what I learned in the process.

CHAPTER FOUR: REPORT OF FINDINGS

Introduction

I begin this chapter with a brief overview of the action research cycle that I followed in making changes to my professional practice. Then I describe the contextual teaching and learning strategies that I implemented and report on the impact that I observed within the classroom.

The Process of Action Research

Like other forms of research, action research contributes to new knowledge and provides evidence in support, as well as linking new knowledge with that which already exists (Dean, 2001). As Dean (2001) states it is the *action* that is taken as a result of the research that has an impact. The action research process that I followed can be described as a series of four steps: planning, action, observing, and reflecting. The Alberta Teachers' Action Research Guide (2000), describe how action research lends itself to a spiral of cycles with the researcher reflecting on each stage of the process. When the results of the first action have been studied, the researcher then plans the next series of actions. Each reflective phase yields more information about the issue and increases the researcher's understanding. Sometimes the information gained allows for the researcher to make revisions to their essential question(s). The reflective process is essential in moving the practitioner from one stage to the next; thus action is based on reflection.

Throughout the course of the semester I "experimented" with integrating CTL strategies and methods in my teaching. I used the notion of remodeling to guide me. I gradually made changes to my practice and have categorized the changes as: Moving towards Authentic Assessment Practices, An Introduction to Inquiry Learning, Problem-based Learning, and

Project-based Learning. I will report my findings within each of these headings using the four stages of action research: plan, act, observe, and reflect.

Authentic Assessment

Often the method of assessment in contextual teaching and learning is described as authentic. This is meant to distinguish it from traditional assessment such as testing and fill in the blank worksheets. To become more authentic assessment activities are described as ones that are more connected to real-world tasks and allow students to demonstrate meaningful application of the knowledge and skills they have learned. One of the early advocates was Grant Wiggins (1989a; 1989b; 1990). He suggested that there are four characteristics of authentic assessment:

1. The task should be representative of performance in the field.
2. Attention should be paid to teaching and learning the criteria for assessment.
3. Self-assessment should play a great roll.
4. When possible, students should present their work publicly and defend it (1989a).

Authentic assessment was one of the CTL strategies that I implemented in my classroom as a shift away from more traditional forms of assessment such as fill in the blank worksheets and unit quizzes/tests. “Authentic assessment invites students to use academic knowledge in a real-world context for a significant purpose,” (Johnson, 2002, p. 165). Johnson (2002) identified portfolios as one of the most popular forms of authentic assessment in education.

Plan.

Portfolios are something that I had done with my classes in the past but it involved creating a book of recipes. Students’ word-processed all of the recipes that they did throughout the course of the entire semester and created a title page, printed out their work and handed it in. Looking back, it wasn’t really an assessment portfolio. There was no opportunity for them to

reflect, show personal growth, and reflection, or create a collection of work that could be used to pursue employment or post-secondary in the field of culinary arts/hospitality and tourism.

When I reflect back it is not surprising that students found this the worst part of the course. I received comments from students like, “what is the point of this?” “Why do I need to re-type something that is already typed out?” “…but this recipe is something that I will never make again.” Many students left the portfolio assignment until the last week of the semester and then struggled to complete it, and others did poorly as they had misplaced recipes, or they photocopied a friend’s and handed them in as their own. In my mind the portfolio assignment given to my classes in this format was of no benefit to them and it was ineffective as an assessment tool. I needed to find a way to make the portfolios that I was doing with my students a part of the ongoing classwork that we were doing on a daily basis.

Act.

For the purposes of my self-study I had my students create a portfolio that showcased their growth and was an application of their skills and knowledge. In order for their portfolio to be considered authentic I provided them with an opportunity to reflect on the work that they had done throughout the course of the semester and to engage in self-assessment. I had typically used self-assessment for their lab work but this was based on their performance on a daily basis and not as detailed as reflecting on their performance over time. I believe that these are two skills that my students need to manage in the real world. Mueller (n.d.) states that when students are part of a classroom environment that emphasizes improvement, progress, effort and the process of learning rather than grades they are more likely to have a positive attitude towards learning. When I asked my students to regularly examine how they succeeded, what could be improved

upon, and goals for the future, they were developing skills that will serve them in school and beyond.

I required my students to create a portfolio with one primary focus in mind such as: post-secondary enrollment, employment purposes, or home use. My students were asked to select three recipes or assignments per unit that demonstrated their growth in the course. Growth could be described as improved preparation techniques, organization, plating, understanding of a food related concept, an assignment/ project they were proud of, or a favourite recipe. The focus of their portfolio determined what they chose to include in the portfolio. Students were asked to reflect upon how the items they chose to include demonstrated their growth. We used class time ongoing over the course of the semester so students were able to document their growth and progress as it was happening, rather than having the portfolio be something that was put together at the end of the semester.

Observe.

Once my students were able to focus on the purpose behind their class portfolios I observed that they were enthusiastic about putting the time into creating them. It was rewarding to have them ask me which items they should include and show pride in their classroom work that I had not noticed with the previous format of the assignment. I observed that most students were able to complete the assignment and found it to be useful once they left my class. A student self-reflection was handed in with the final class portfolio where my students were able to highlight their own personal growth. I learned that while a paper and pencil test can be used as an assessment tool, capturing what my students know at that particular moment in time, the class portfolio was an opportunity for them to showcase their strengths and growth as individual students.

Reflect.

The changes that I made to the portfolio assignment allowed students to create something that was meaningful for them. Prior to changing this portfolio assignment I would have been hard pressed to answer the question, "Why are we doing this?" if asked by a student. It is important for me to have my students see the value in assigned work if I want to continue to engage them with the curriculum and keep them motivated to learn. Being able to answer, "Why?" is supported by Egbert and Roe (2014), in their research on student engagement and keeping curriculum meaningful for students. Having students complete a learning portfolio fosters a classroom environment that is responsive to student needs and allows students to make authentic connections between tasks and students' lives. Many senior students commented that they were able to use their class portfolios when applying for employment, post secondary, as well as part of their graduation transitions requirement for graduation.

Inquiry Learning

Inquiry learning is an approach to teaching and learning that places students' questions, ideas and observations at the centre of the learning experience. Inquiry learning is a multifaceted activity that involves making observations, posing questions, examining multiple sources of information to see what is already known and what new information can be gained. Underlying this approach is the idea that teachers and students are partners in the learning process, challenging, testing, redefining and enacting understanding and further questioning (Scardamalia, 2002). The inquiry process begins with students noticing something that sparks their interest and stimulates them to want to learn more (Smith, 2010). For students, the inquiry process often involves open-ended investigations into a question or a problem engaging them in evidence-based reasoning and creative problem solving. For teachers, the inquiry process is

about being responsive to students' individual learning needs, and working in conjunction with them to sharing in the learning experience by accepting mutual responsibility for planning, assessment for learning and the advancement of individual understanding of personally meaningful content and ideas (Fielding, 2012).

Plan.

As our provincial curriculum in British Columbia is changing to allow for more inquiry-based learning, I wanted to see how my student would respond to an inquiry unit that I titled "Farm to Fork". I used a four-step checklist, as outlined in Smith (2010) in planning out the, "Farm to Fork" unit. Those steps include: developing essential understandings, identifying specific objectives, locating resources, and question development (initial, guiding, and follow-up). I began by developing an essential understanding of what I wanted my students to know and be able to do. I identified specific learning objectives, located a variety of learning resources that that were able to access for their own research purposes, and then I provided my students with an 'initial" question that they used to stimulate their own inquires.

Act.

The "Farm to Fork" unit allowed my student to inquire into a particular animal rearing process and to follow that from the farm to their fork. Students explored the poultry industry, the beef industry, the dairy industry, and the fishing industry in British Columbia. Upon completion of their inquiry project students presented their findings to the class. As a follow-up to the class presentations students planned a series of three foods labs of choice that coincided with their inquiry project. One group of students chose to research the poultry industry in British Columbia. Their project began with the lifecycle of the egg. They looked at the differences between cage-reared birds versus free run, free range, and organic. They also explored questions around the use

of antibiotics in the poultry industry. For their three-lab meal that they planned they chose to roast a free-range organic chicken and use that as part of a meal. They then used the chicken carcass to make a stock. The stock was used to make a homemade chicken noodle soup. For their third recipe they chose to make an omelet. All of the recipes that were selected and prepared complemented the information that they researched as part of their project.

Observe.

As this was a new process for both my students and me, I found the initial lesson quite stressful. My students were unclear about where to begin as the options were numerous for them and they were used to the teacher giving them a topic to research rather than having to come up with something on their own. I also struggled with not trying to give them the answer. Once we overcame these initial difficulties I immediately noticed how different it felt as a classroom teacher to be supporting rather than leading. I was there to help them, and guide them to the information they were interested in finding out about, but I was no longer the one with all of the answers. It was really rewarding to see them so engaged and passionate about their own learning.

Reflect.

While this process was rewarding for most students, one group that found the process onerous as the majority of the work fell to them. They are students that I struggle to engage with on the best of days. In the end they took the easy route out and did the most minimal amount of work to satisfy the requirements of the assignment. They only completed two of the three cooking labs that were associated with the assignment as well. I will absolutely do this assignment again, but I will create a modified version for my students with Individual Education Plans (IEP's) as well as my English Language Learners (ELL) who struggle with English. One of the ways that I would modify this assignment is to provide a selection of recipes that students

could choose from. Some of the students struggled with finding recipes that were appropriate for them.

Problem-based Learning

Problem-based learning is an instructional strategy that challenges students to seek solutions to problems that they face in their day-to day lives by themselves rather than through traditional instructional strategies such as lectures or textbooks (Sonmez & Lee, 2003). Following are some of the defining characteristics of PBL:

- learning is driven by challenging open-ended problems with no one "right" answer
- students work as self-directed, active investigators and problem solvers in small collaborative groups
- teachers adopt the role as facilitators of learning, guiding the learning process and promoting an environment of inquiry

Students are asked to apply knowledge to new situations, investigate and discover meaningful solutions.

Proponents of PBL believe that, as a strategy it:

- develops critical thinking and creative skills
- improves problem-solving skills
- increases motivation
- helps students learn to transfer knowledge to new situations

Plan.

As part of the nutrition component of my Foods and Nutrition 11/12 class we cover Canada's Food Guide to Healthy Eating. For many years I delivered this content through a traditional lecture format followed by a fill in the blank worksheet. One of the things that I

noticed was that many students were already familiar with the nutritional requirements of the food guide making the information redundant. I found the lesson as dry to teach as the students did having to listen. Engel (1991) states that the goals of problem based learning are two fold: to learn a required set of competencies and to develop problem-solving skills that are necessary for lifelong learning. I needed to engage my students in a conversation about their daily nutritional requirements, how they could fulfill those requirements and compare how our nutritional guidelines in Canada might compare to those from around the world.

Act.

I altered the assignment in two significant ways that I felt allowed students to gain better insight into a comparison of Canadian nutritional guidelines with other countries and also determine whether they and their family members were meeting their daily nutritional needs. My students were asked to seek out Food Guides from around the globe and compare them to Canada's Food Guide to Healthy Eating with guiding questions such as: How are they similar? How do they differ? Do they see any deficiencies in Canada's Food Guide to Healthy Eating? Do the guidelines laid our by Health Canada meet the needs of the varied diets that Canadian's are following? Students were then asked to create a "Menu for A Day" (see Appendix B) that would meet the nutritional needs of the members of their immediate family, taking into consideration their sex, age, activity level, and any other unique nutritional requirements using Canada's Food Guide as a guide.

Observe.

I was amazed at how engaged my students were in completing this assignment. Many students had no idea what other members of their family ate as I heard many comments such as, "… I don't know what my mom eats! I am not home all day." Many of my students were

challenged by having to problem-solve around creating one meal that would meet the nutritional needs of all their family members. Many of my students gained a new appreciation for the complexities involved in planning a well-balanced meal can be while incorporating family favourites, addressing the needs of "picky" eaters or those with health concerns or considerations, as well as a busy family schedule. I observed that it was insightful for my students to see that many of them were not meeting their daily nutritional requirements of one or more of the food groups. They could problem-solve practical solutions to ensure that they were going to be able to eat a well balanced diet.

Reflect.

One of the challenges that remained with this assignment was the fact some students do not have a stable home life that allowed for them to create a menu for their entire family. In this case they were able to use their own individual eating patterns to analyze whether they were meeting their nutritional requirements. In her study on the state of home economics food and nutrition education in the province of Manitoba between 2000-2010, Slater (2013) found that there was a significant reduction in students' overall food related knowledge, skills, and attitudes. Slater (2013) states that the effectiveness of home economics education now and in the future faces significant challenges including:

- its devaluing by school administrators, non-home economics teachers, and some parents for preparing students for future careers
- outdated curriculum and teaching infrastructure
- a reduced number of new home economics teachers and,
- changing societal norms regarding food and eating.

I felt that problem-based learning activities such as the "Menu for a Day" assignment expose students to current food and nutrition knowledge, issues, and contemporary lifestyles, whilst allowing them to connect classroom content with their lives outside of the classroom. Students were also surprised by the emphasis on fresh fruits and vegetables and healthy fats that other foods guides provided, while Canada's Food Guide to Healthy Eating still recommends Grains Products in the largest amounts. In the future I would consider revising the assignment to have my students create their own food guide recommendations based on the food guides of the world.

Project–based Learning

Project-based learning is an in-depth investigation into a real-world topic that is of interest to students (Katz & Chard, 2000). Students are given the educational freedom to build, create, and or/design something that demonstrates the depth of learning that they have achieved while investigating their driving question. The Buck Institute for Education (2016) states that PjBL:

- makes school more engaging for students
- improves learning
- builds skills for life outside of the classroom
- connects students and schools with communities and the real world

Plan.

For the purposes of my self-study I modified a worksheet on chocolate to turn it into a project that looks at chocolate from the "Bean to the Bar: Exploring the Story of Chocolate" (see Appendix A). In the past I had my classes read an article and answer questions about chocolate production and the global/social implications of the chocolate industry. Students expressed some

interest in the social issues, such as child slavery, that surround the chocolate industry, but I never allowed for the opportunity to have them explore these issues any further.

Act.

The project spanned five lessons. As a class we took part in a chocolate tasting, and students were shown one short documentary put out by the National Confectioners Association portraying the industry in a very positive light and another that showed a darker side of the industry. After the tasting and viewing of the documentary students were asked to complete a series of reflective questions and select an extension activity based on their interest. Examples of extension activities included: chocolate and child labour, exploring the term "fair trade", chocolate as a commodity on the world market, and how chocolate made its way to Canada. Once my students selected a topic that they were interested in exploring further, I provided them with the opportunity to research their topic as well as providing them with resources and suggestions for carrying out their investigations. Students were given the option of how to present their information, either using a more traditional poster/brochure format or in a digital format such as Prezi or PowerPoint. The projects were displayed in the classroom and students circulated through the room viewing their classmates work.

Observe.

My students really embraced the opportunity to explore the chocolate industry, for the positive aspects that it brings as well as the negative. They really enjoyed the chocolate tasting. Reading through their answers to the reflective questions that followed the tasting was insightful. I was not surprised that many did not feel compelled to purchase a fair trade or organic chocolate in the future, even though that can sometimes translate to a more positive experience/situation for the cocoa farmer. I found that they were still very focused on taste and their own personal

preference regardless of the circumstances/consequences of their actions as consumers. This might change as they mature and become worldly.

Students worked in groups to complete one extension activity. The presentations made by my students covered each of the extension activities, provided the entire class with a complete picture of what the industry involves.

Reflect.

I felt that this was a successful example of how project-based learning can be implemented in a classroom setting. My students were motivated, actively involved in their own learning and produced high quality work. One of the reasons that I feel that this project-based activity was a success is because it was well planned, it included differentiated instruction, and it was based on a food item that my students and their families consume on a regular basis. One of my students made the comment that he had a friend who likes to eat a lot of "cheap" chocolate so he needed to talk to him about how bad this habit of his was. I also had another student bring in a newspaper titled, "Cacaography" that mapped out the world's top chocolate loving cities. The fact that my students were now taking notice of such things outside of the classroom told me that the project we completed in class had a positive impact on them and was making them connect what they were learning in class to the outside world.

Conclusion

While the self-study that I conducted with my classes was relatively small, by incorporating authentic assessment, inquiry learning, problem-based learning, and project-based learning techniques into my classroom practice, I gained enough confidence in the philosophy of contextual teaching and learning to continue to revise my lessons and develop new teaching activities to incorporate CTL strategies in the future. I have always believed in the importance of

teacher-student connectedness and the notion of pedagogy as a relationship between students, teacher and the curriculum. When I reflected on my practice, I observed that I was not connecting with my students and they were not connecting what they were learning to their everyday lives. So I turned to CTL as a way to improve my classroom practice and revitalize the way that I was delivering the home economics curriculum. My self study has confirmed for me that contextual teaching and learning strategies are not only instructional strategies for connecting students to experiences outside of the classroom, they also help to develop and enhance the relationship between teacher and student.

Johnson (2002) states that CTL asks teachers to nurture every student, as the relationship that can be established between teacher and student weaves the context for personal growth. "When teachers know their students, they can help them discover the subjects, ideas, and skills that truly interest and delight them (Johnson, 2002, p. 134). I was drawn to the idea of incorporating CTL into my classroom because I have always found the connection with my students to be profound for my development as a teacher and also for my students and their overall well being and how they can be a part of the school community. I love teaching the courses that I do because I am able to connect with my students in a way that I believe other teachers might not always have the opportunity to. The time I spend with my students in the kitchen, whether it is preparing a meal or sharing a pot of coffee are the times that I enjoy the most. I am able to get to know them and what their lives are like outside of school, what their interests are, and aspirations once they leave high school. They are the inspiration for wanting to better my practice.

Revisiting My Research Question

I began my graduating project with this research question: In what ways can I integrate contextual teaching and learning strategies in my teaching and what is the effect?

These are the ways I integrated contextual teaching and learning strategies in my teaching:

- through the remodeling of lesson plans
- allowing for more student directed learning
- moving towards authentic assessment

These were the effects that I observed:

- student engagement in the curricular content increased
- assignment completion rate increased leading to increased academic success
- transfer or application of knowledge and skills from the classroom to students' lives outside of the classroom

CHAPTER 5: Reflecting on My Inquiry Project

Introduction

Keeping the home economics curriculum meaningful and engaging for my students has been one of the biggest challenges in my teaching career to date. The purpose of my teacher directed self-study was to determine whether contextual teaching and learning strategies could be a way to connect my students to the curriculum, and allow for them to make connections between what we were doing in the classroom with their lives outside of school. I will conclude my paper with what I learned about contextual teaching and learning, what I learned about the teacher inquiry process, and finally what I learned about myself.

What I Learned About Contextual Teaching and Learning

As part of my teacher action research self-study I incorporated authentic assessment, inquiry learning, problem-based learning, and project-based learning into my everyday teaching practice. I revised lessons to reflect the principles of these contextual teaching and learning strategies. I observed that the changes that I made in my classroom were welcomed by my students, and achieved the positive goals of CTL as identified by the literature. These CTL strategies allowed for diversity in learning, led to increased student engagement and motivation, as well as the transfer of knowledge and skills learned in the classroom to students' lives outside of the classroom. Using AA as a way to assess student learning enabled me to reflect upon how in the past I was assessing simply for the sake of numbers in the grade book. The notion of 'planning backwards,' starting with what I want my students to be able to demonstrate to me as the assessment piece and then designing the lesson or assignment to reflect that, has as a result made me more thoughtful in my lesson planning. When student were given the choice to delve deeper into topics, they gravitated to those that were meaningful for them and that they could see

connected with their lives outside of the classroom. I was able to support my students, as I was not spending the entire block lecturing or giving notes. I noticed that the students were much more open and willing to share their thoughts, ideas, and questions as a greater sense of community had been created within the classroom.

Service learning (SL) was one of the contextual teaching and learning strategies that I did not have the opportunity to try within the timeframe of this study. SL takes students beyond the classroom and engages them in informal curriculum. It is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities (National Service Learning Clearinghouse, 2014). As pedagogy, SL is similar to other forms of experiential learning in that it is hands-on, and student centered, yet it is significant in that it can also address needs in the community. Traditional forms of teaching and learning develop students with the ability to master knowledge within a certain discipline, while SL transforms students into lifelong learners who are able to approach new situations with flexibility, and transfer knowledge and skills to contexts in their everyday lives. SL can be integrated into curriculum to enhance its meaning for students and prepare them for learning in the 21st century. Having seen my students respond so positively to the CTL strategies that I incorporated into my classroom I will look for opportunities to work a SL component into my classes next year or possibly partner with another department in the school to see if a cross-curricular approach to SL could work within our school setting.

While my experiences with implementing CTL strategies into my everyday classroom practice were very positive I did encounter challenges with implementing these new instructional strategies. The barriers to implementing contextual teaching and learning that I encountered

included: the time involved in creating or remodeling lessons to reflect CTL strategies, and apathy on the part of some students. The time commitment to create and/or remodel the lessons that I wanted to use for this self-study was considerable. Teaching full time with no preparation block in the semester that most of my research was conducted in left little to no time to plan, and with a busy life outside of school I didn't always feel as though I was able to give my best effort to my teaching practice. There are not always enough hours in the day, and with the demands of our job I think this lack of time is something that all teachers face and can sometimes be a deterrent for many teachers who want to try new instructional strategies with their classes.

The other major challenge I found was that while most students were highly engaged and motivated by the opportunity to research their own topics, recipes and labs, there were some students who would rather have the hard work of decision-making done for them. In more than one instance some students only met the minimum requirement for the assignments or did not complete them. The CTL strategies that I chose to utilize within my classroom for the purpose of this self-study required the students to move beyond being passive recipients of knowledge and to actively engage in the content of the class. For some of my students this is a new expectation. They are more accustomed to the transmissive mode of education that has been described as demonstration, lab, worksheet and is common practice in many foods and nutrition courses and probably this is what they expected when they enrolled in my class this year. What I learned is that some students have to be initiated slowly into CTL to overcome their resistance to this change. I will continue to foster my expectation that students take a more active role in their own learning. With the changes coming to the provincial curriculum in British Columbia these instructional strategies will become more commonplace in all classrooms and my students will need to be amenable to these changes.

What I Learned About The Teacher Inquiry Process

The teacher inquiry process has been one of the most challenging and personally rewarding things that I have done in my career to date. Smith (2001) states that our practice is very much who we are. I recognized that I needed to make changes to my classroom practice and the HEEL2 cohort provided me with the tools that I needed to be able to make the small changes that I have, to improve my classroom instruction

Teacher action research is a way to become a more reflective practitioner and work with purpose rather than merely going through the motions on a daily basis. It was easy for me to come into work every day and set up a demonstration or lab for my students, or send them off with a worksheet. Teaching in this manner for a number of years once I was comfortable in my career, was uninspiring for both my students and myself. The action research cycle of plan, act, observe, reflect slowed me down and challenged me to seek out the meaning in what I was asking of my students. Through the teacher inquiry process I learned that I do not need to change everything about the way that I am teaching. There is value in some of the traditional methods of instruction that accompany a foods and nutrition class like demonstrations, but making small changes over time is a way that I can revitalize my classroom practice and excite students about the content covered in my home economics classroom.

What I Learned About Myself

I have realized that what I value the most in my work is the relationships that I have with my students, and being able to provide them with an education in home economics that will serve them their entire life. The teacher inquiry process puts relationships at the forefront and this is why this process has been such a rewarding one for me. Peterat (2001) confirms this belief for me by stating that, “If we think of practice as the way we are with others, then it is all about

relationships" (p. 3). I have the opportunity to connect with students on a daily basis. In a world where they are able to access information about cooking techniques, recipe ideas, and nutrition from many sources other than at school. I believe that they choose to be a part of my class because of the relationships that are formed in my classroom. Food in our culture today represents many things: comfort, love, nourishment, and livelihood. If I can provide my students with a meaningful opportunity to connect with food in any or all of these capacities then I feel as though I am moving towards a professional practice that I can be proud of.

Conclusion

In this paper I have argued that CTL has much potential for revitalizing home economics. As a foods and nutrition teacher I implemented four CTL strategies and, found similar to the research that CTL can:

- address student diversity in learning
- allow for increased student engagement and student motivation, and
- increase the transfer of knowledge from one setting to another.

In the future, I intend to expand the repertoire of activities suitable for the four CTL strategies that I used and I also plan to add the remaining CTL strategies, namely cooperative learning (CL) and service learning (SL). This was a small study in a single course and expanding to other courses that I teach is also a next step.

In addition, I recommend further research in the following areas:

- an elaboration of the notion of connectedness. The claim in CTL is that these instructional strategies connect learning to daily life. Reynolds (2003) describes connectedness as the extent to which the lesson has value and meaning beyond the instructional context, making a connection to the larger social context within which

students live. An interpretive study with students could contribute to a better understanding of connectedness.

- research in health education uses connectedness to explain students' need to feel connected to school and the positive influence this connection has on adolescent health and well-being. Since an emphasis in CTL is to form relationships with students, a study that explores the benefits of connectedness would be appropriate.
- the notion of student resistance to the incorporating CTL strategies into the classroom is also an area for further study.

CHAPTER SIX: LOOKING BACK ON MY EXPERIENCES IN THE HEEL2 PROGRAM

I am finished! Completing the HEEL2 program has been one of the most challenging, yet rewarding things that I have done to date. When I began teaching I never expected that my journey from start to present would be so full of change. I anticipated my experience in the classroom to bring about a greater level of confidence and capability, however I did not foresee that the entire way that I want to *be* in my classroom would change in the dramatic way that it has. This change in the way that I see my professional practice is a result of the journey that I have been on through the Home Economics: Human Ecology and Everyday Life cohort over the past two and a half years. The knowledge that I have gained about myself as a person and educator, as well as the confidence and tools to transform who I am in the classroom, for my benefit and the benefit of my students would not have been possible without taking this journey on.

Where I Was

Before I began the HEEL2 program in September 2013, I had been teaching for thirteen years. In those years I had gone from "survival mode" to feeling very comfortable in the classroom. I was head of the largest elective department in the school, working closely with four other full-time home economics teachers. While things in the classroom are never boring, I began to feel as though I had fallen into a rut. It was very easy to plan a foods demonstration and a lab, maybe throw in a worksheet here and there and repeat until the end of time. I was bored with this teacher directed method of instruction and I was also noticing that my students were not engaging with the home economics curriculum or the way that it was being delivered in the classroom. I felt there was a disconnect between the everyday goings on in the classroom, and what I considered best practice. I knew that my students enjoyed being in my class, and the

relationships that I was able to establish with them were genuine and based on mutual respect, but something was missing. I had lost meaning in what I was trying to achieve, and in turn, was doing my students a disservice by not getting to the parts of the curriculum that would provide them with a more well rounded education in home economics. Something needed to change. What did I want my students to walk away with when they had finished their semester in Foods class? The general feeling of dissatisfaction with my own practice was the catalyst I needed to begin to transform who I was as a home economics teacher (McGregor, 2004). All of this change was happening as I embarked on the HEEL2 Masters program.

On the Road to Transformation

The beginning days of the HEEL2 masters' program were overwhelming to say the least. It had been over 10 years since I had engaged in any academic reading and writing. However, once I dusted off the cobwebs in my mind I was able to re-discover my love for being a student. The shared knowledge, the professional discourse, and the support offered by the HEEL2 cohort has provided me with the foundation necessary to begin to make the changes that I have made and will continue to make in my classroom. Transformational pedagogy has served as the vehicle to allow for these changes to be enacted in my classroom.

Transformative pedagogy, seen as a particular point of view that guides professional practice (DeZwart, 2015) can mean different things to different people, whilst allowing for a synergy of different perspectives that can coexist to reflect a holistic approach to teaching and learning. In EDCP 585A we were presented with 3 different ways to consider transformative pedagogy: pedagogy as a political/moral project; pedagogy as relationship; and pedagogy as classroom practices (Smith, personal communication, August 3, 2015 as cited by DeZwart, 2015). For me, transformative teaching and learning centers around developing authentic

relationships with my students and creating an environment where students are active participants and partners in a home economics curriculum that they find meaningful both in and outside of the classroom.

The kitchen is where I have always felt at home and I want my classroom to have that same feeling for my students. In her article, "Fostering authentic relationships in the transformative classroom", Cranton (2006) suggests ways in which authentic and transformative relationships can be developed between teacher and student. Self-awareness, awareness of others, relationships, context, and critical reflection are critical to the development of authentic and transformative relationships. This transformative learning environment allows for personal growth and development on both the part of the teacher and learners.

Transformation starts from within (Christensen & Aldridge, 2013). In order for me to be able to foster a transformative learning environment in my classroom I need to have a deep understanding of who I am and how much of myself I want to share with my students. How do I see my students and what type of relationship do I want to have with them? When teachers do not see students' individualities, authentic relationships are difficult to forge. I do believe that general classroom structures and guidelines are necessary to ensure my classroom is a safe, supportive environment for all learners. When I am able to see my students as individuals, and take into consideration the challenges that many of them have to overcome to get to my class, we are able to relate to one another on a more transformative level. The context within which relationships exist can have an impact upon their ability to be transformational. Being honest and open with my students about my expectations is a way in which I can maintain authenticity within the classroom. Often as teachers we do not take time to step back and reflect upon where we are going. For me, the moments of critical reflection started me on my transformative

teaching journey. Leading a critical life is a way to maintain genuine relationships with our students. Being able to take a step back and reflect upon what happens in my class on a daily basis can have a profound impact on the "health" of my students and myself. Along with fostering the development of a transformative classroom through authentic relationships with my students, the other critical part of transformative teaching and learning for me on this journey has been the recognition that students must be active, engaged partners in their learning. When students cannot connect the learning that happens within the confines of the classroom to their lives outside of school they become passive, apathetic learners.

There are many reasons that students decide to take home economics in high school. For some it is preparation for a career in the food service industry. For others it is a break from their academic courses; others because their friends are taking it and they just want to be able to eat. Whatever the reasons are for why I find them in my class, I have come to recognize that by seeing my students as partners in the learning process I am able to engage them in home economics curriculum that extends beyond the practical nature of the course.

Other than the people within my department, and my limited involvement in our district and provincial associations, I was essentially teaching in my own private world up until I began the HEEL2 program. In her article, "Transformative learning: we teach who we are," McGregor (2004) speaks of how she taught her course with a predetermined course outline and evaluation scheme that left limited opportunity for student involvement. Upon reading this, I came to realize that this was exactly what I did with my classes, yet I had failed to recognize it as a roadblock to engaging my students with the home economics curriculum. I was stuck in a traditional way of teaching where I was active and my students were passive. The lack of involvement upon the part of my students regarding what we covered throughout the course of the semester was in part

where I was losing them. I want to create a classroom environment that is energized, and recognizes the diversity of my students and their interests, as well providing them with opportunities to take our learning beyond the classroom walls. The idea of working alongside my students to simultaneously engage them in their lives, my life and interests, as well as the world in which we live (Middlecamp, 2005) is in itself transformational as it pertains to my professional practice.

Slavich and Zimbardo (2012) state that in a transformative learning classroom, the teacher works in collaboration with groups of students to facilitate the acquisition of key concepts, while enhancing students' personal development and attitudes towards learning. When students take on more of an active role in the learning process, greater learning is more likely to occur.

Sharing the Road

When I think about how far I have come in my knowledge around transformative pedagogies and the positive and profound impact that this can have on my classroom practice I am in awe. Transformative teaching begins with transformative learning (Cohen, 1997). Taking a step back, emotionally from my classroom practice opened my mind to new possibilities for how I could transform my classroom practice in order to develop authentic relationships with my students and engage them as my partners in learning. This task is not a small one, yet it is worthwhile. As I move forward with trying to enact change in my classroom I expect that I will continue to be presented with disorienting dilemmas. I now have a framework within which I can critically reflect upon these experiences and take action to become a more transformative teacher.

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Appendix A: Definition of Terms

For the purposes of this paper I will use the following definitions; and while there are several instructional strategies that fall under the CTL umbrella, I have chosen to concentrate on authentic assessment, inquiry learning, problem-based learning, and project-based learning.

Authentic Assessment (AA)

According to Mueller (n.d) authentic assessment is a form of assessment in which students are asked to perform real world tasks that demonstrate meaningful application of essential knowledge and skills. AA drives the curriculum. The teacher first determines the task that the students are to perform to demonstrate their mastery of a certain skill, and then a curriculum is developed that will enable the students to demonstrate their acquisition of essential knowledge and skills. McDonald (1992) refers to this as "planning backwards*"* (p. 153).

Contextual Teaching and Learning (CTL)

"Contextual teaching and learning (CTL) is a conception of pedagogy whereby educators use instructional approaches to relate subject matter content to real world situations that presumably, will help students relate this knowledge to their current and future roles as students, citizens, family members and workers" (Lynch, 2006, p. 204). CTL is described as including at least seven strategies or instructional approaches that help students make meaning out of their school subjects.

Inquiry Learning (IL)

Inquiry-based learning is an approach to teaching and learning that places students' questions, ideas and observations at the centre of the learning experience. In his introduction to IL, Stephenson (n.p) expresses how IL involves learners by having them:

- tackle real-world questions, issues and controversies

- develop questioning, research, and communication skills
- solve problems or create solutions
- collaborate within and beyond the classroom
- develop deep understanding of content knowledge
- participate in the public creation and improvement of ideas and knowledge

Problem-Based Learning (PBL)

Problem-based learning is an instructional, learner centered approach where learners are expected to conduct research, integrate theory and practice and apply prior knowledge and skills to develop a viable solution to a defined problem (Savery, 2006). In a problem-based approach learners elaborate on solutions through discussions, answering questions, peer teaching, and critiquing (Lynch, 2006).

Project -Based Learning (PjBL)

In a project-based approach learners are provided with specifications for a desired end product. They are required to build, create, and/or design something to demonstrate what they have learned while investigating a driving question (Henderson, 2014).

Twenty-first Century Skills

The term twenty-first century skills refer to a broad set of knowledge, skills, work habits and character traits that are believed to be critically important to success in today's world. Generally speaking twenty-first century skills can be applied in all subject areas, and in all educational, career, and civic settings throughout a student's life. These skills include critical thinking, problem solving, collaboration, self-regulation, initiative, and the use of technology for learning purposes to name a few (Glossary of Educational Reform, 2015).

Appendix B: From Bean to Bar

Exploring the Story of Chocolate

Video - The Story of Chocolate: https://www.youtube.com/watch?v=IoDqoiYTz04
Source: National Confectioners Association

The treat that now lies quietly in its wrapper carries a story of exotic places, long journeys and small families that raise delicate tropical fruit trees. As you peel back the wrapper, you're uncovering the cocoa tree's seed-and joining people the world over who have turned to this mysterious food for ritual, medicine and sheer pleasure. How do the beans in chocolate farmers' hands become decadent treats in yours? Lets explore the story of chocolate…

The Story Of Chocolate

As you are watching the video clip, complete the chart below with a Fact and a Reaction.

FACT	REACT

Chocolate Tasting Notes

Steps for each of the chocolate samples:

1. Eat a cracker
2. Drink some water
3. Look at the piece in front of you
4. Touch the piece in front of you
5. Smell the piece in front of you
6. Taste the piece in front of you

Fill in this chart as you complete each step

Type/Origin	Price/Unit	Looks like?	Smells like?	Tastes like?	Ingredients
Cadbury Dairy Milk-Milk Chocolate Canada	$2.89/100g				Sugar, milk ingredients, cocoa butter, unsweetened chocolate, soy lecithin
Lindt Excellence – 64% cocoa France	$3.99/100g				Cocoa mass, sugar, cocoa butter, fat-reduced cocoa, natural vanilla bean
Green and Black's Organic- 70% cocoa Poland	$4.69/100g				Cocoa mass, raw cane sugar, cocoa butter, soy lecithin, vanilla extract
Green and Black's Organic – Milk 37% cocoa Poland	$4.69/100g				Raw cane sugar, whole milk powder, cocoa butter, cocoa mass, soy lecithin, vanilla extract
Purdy's Single Origin-45% cocoa Ghana	$5.00/70g				Sugar, unsweetened chocolate, milk ingredients, cocoa butter, soy lecithin, vanilla bean
Purdy's 72% Dark Chocolate Peru	$5.00/70g				Unsweetened chocolate, sugar, cocoa butter, soy lecithin, vanilla

Vocabulary-

Cocoa mass: The product produced from cocoa beans that have been fermented, dried, roasted, and separated from their skins. The beans are ground into cocoa mass (cocoa paste). The mass is melted to become the liquor, the liquor is either separated into cocoa solids and cocoa butter, or cooled and molded into blocks known as unsweetened baking chocolate (bitter chocolate). Also known as chocolate liquor.
Source: https://en.wikipedia.org/wiki/Chocolate_liquor

Cocoa butter: also called **theobroma oil**, is a pale-yellow, edible vegetable fat extracted from the cocoa bean.
Source: http://en.wikipedia.org/wiki/Cocoa_butter

Soya Lecitin: a by-product of soybean oil. It is the key ingredient in chocolate that keeps the cocoa butter and cocoa from separating.
Source: http://ultimatechocolateblog.blogspot.ca/2010/12/chocolate-bars-with-no-soy-lecithin-are.html

Follow Up Questions:

1. Did you have a preference for a particular chocolate? If so, which one and why?

2. Was there anything that surprised you? If so, what was it?

3. What relationship, if any, can you find between the price and the taste/quality of the chocolate?

4. What is another food that you think would lend itself to a tasting activity such as this one?

5. Will this activity may you consider how you buy chocolate in the future? Why or why not?

Vocabulary Words for the Senses

Smell 	Tactile 	Taste 
Acrid	Bristly	Acidic
Aromatic	Burning	Biting
Bouquet	Cold	Bitter
Clean	Damp	Brackish
Crisp	Dry	Briny
Earthy	Feathery	Dry
Fetid	Frosty	Flavourful
Fishy	Furry	Fruity
Fresh	Gnarled	Full-bodied
Flowery	Hairy	Gamy
Fragrant	Hot	Gross
Funky	Knobbed	Juicy
Light	Knotted	Peppery
Minty	Leathery	Rich
Musty	Limp	Sharp
Odourless	Lumpy	Sour
Pine	Oily	Succulent
Pungent	Puffy	Sugary
Putrid	Ribbed	Sweet
Rancid	Rough	Syrupy
Rotten	Rubbery	Tangy
Savory	Sandy	Tart
Sharp	Sharp	Zesty
Spicy	Slimy	Zingy
Spoiled	Smooth	
Stale Sweet	Sticky	
Tart	Velvety	
Woody	Wet	

Extension Activity:

As a cooperative learning group, please select 1 of the following extension activities to explore further.

- Chocolate and “Free Trade”
- Chocolate and Child Labour
- Nutritional information about chocolate/Nutritional Claims/Health Benefits
- Exploring the term “Fair Trade”
- Historical origin of chocolate coming to Canada
- Chocolate as a commodity on the world market
- Explore the term “Greenwashing”

Appendix C: Menu for a Day Assignment

Planning a meal to meet the needs of today's active families can be a challenge! Your task is to plan a well-balanced menu for a day.

Instructions:

Plan a menu for a day that satisfies the nutrient needs of your family according to 'Eating Well with Canada's Food Guide" (see attached handout). In your menu you will be required to include the following elements.

- Age and gender of each family member
- Recommended servings per food group for each family member (based on age, gender, and activity level)
- A list of your family's favourite foods and which food group they belong to
- Menu suggestions for: breakfast, lunch, and two or more snacks.

I have included templates for you to fill in for each part of this assignment if you would like to use them. You are also more than welcome to design your own chart/table for organizing your menu.

Planning your Menu:

Page 1: Title Page – should include the following details
- Family Name e.g. Bensley Family Menu for November 12, 2015
- A picture of your family or images of favourite foods
- Your name and block

Page 2: My Family – should include the following details
- Family members' names, age, activity level, and recommended daily servings of each food group based on "Eating Well with Canada's Food Guide"

Page 3: Favourite Foods – should include the following details
- Your family's favourite foods and which food group they fit into

Page 4-7: Menus – should include the following details
- Breakfast Menu – a balanced breakfast for everyone in your family
- Lunch Menu – a balanced menu for everyone in your family
- Dinner Menu – a balanced menu for everyone in your family
- Snacks – a variety of snacks for everyone in your family

Consider "meal appeal" when planning out your menu!!

My Family

List each family member who regularly lives/eats with you. Include suggested servings according to "Eating Well with Canada's Food Guide."

Name	Age	Gender	Fruits/Vegetables	Grain Products	Milk and Alternatives	Meats and Alternatives

Favourite Foods

List each family member who regularly lives/eats with you. Include 1-2 of their favourite snack foods.

Name	Age	Gender	Fruits/Vegetables	Grain Products	Milk and Alternatives	Meats and Alternatives

Breakfast Menu

Name	Age	Gender	Fruits/Vegetables	Grain Products	Milk and Alternatives	Meats and Alternatives

Lunch Menu

Name	Age	Gender	Fruits/Vegetables	Grain Products	Milk and Alternatives	Meats and Alternatives

Dinner Menu

Name	Age	Gender	Fruits/Vegetables	Grain Products	Milk and Alternatives	Meats and Alternatives

Snack Menu

Name	Age	Gender	Fruits/Vegetables	Grain Products	Milk and Alternatives	Meats and Alternatives

Name	Age	Gender	Fruits/Vegetables	Grain Products	Milk and Alternatives	Meats and Alternatives