PREFACE

The potential uses of the computer to enhance learning have been at the forefront of the planning and design of instruction in education and in industry for the past decade. Much progress has been made in hardware, software, and computer-based or computer-integrated curriculum. For the Family and Consumer Sciences (FACS) teacher and teacher educator who are busy with students, keeping current with the technology and the emerging instructional packages is a challenge. This issue of the Journal of Family and Consumer Sciences Education (JFCSE) is dedicated to providing assistance with this challenge.

In this issue you will find an article that documents FACS teacher's computer use in three states and recommends numerous resources available to assist the FACS teacher interested in more and better computer integrated FACS curriculum. In this article the websites and other Internet addresses are hyper-linked.

An article that features the latest information in foods and nutrition is filled with websites, also hyper-linked in the article. This article is a FCS teacher's dream come true. Read it and treasure it!

Another article offers both the rationale and the procedure for introducing a family history study in a family relations class. This is done by exploring with their grandparents such things as what it was like when they were young, dating, marrying, and/or moving into their first residence. This article suggests that an investigation of trends in clothing and its design when grandparents were young, can further enhance the bond between the student and their grandparent(s). The article also suggests that teachers have students use the computer to record and enhance the information they gather, by such means as scanning and including photos of their grandparents when they were young. Also, websites for pursuing family genealogy and other study in family relations are provided.

Use of technology to enhance instruction in a family relations class should not be monopolized by the computer. Visualization of concepts in family relations can be effectively accomplished by using snippets from videos, TV, and movies. Students will have more agreement on the meanings in family relations when such concepts as anger, negotiation, and commitment are presenting via a visual image than they will from a verbal definition. Many suggestions are made to help you initiate the use of visual technology in the family relations classroom.

The article on consumer education taught through a simulation process recommends computer programs and websites to help the consumer respond to questions about their rights and responsibilities when they occur. Decision making, maximizing resources, buying store brands, and how to be fashionably dressed on a budget are topics included in this article

To inspire you to explore this issue thoroughly, you are reminded of several additional technological advances that are coming down the proverbial "educational pike," even as this is written. Instructional designers and educational researchers are teaming to explore such new ideas as the effects of visualization on cognitive development, the effects of learning structure on summarization during computer-based learning, the impact of navigational models on task completion in Web-based information, and reading comprehension in generative hypertext processing. They are also evaluating narrative simulation for potential to impact bias, studying the effects of various web and electronic technology-based teaching models on students with disabilities, and simultaneously assessing the effects of faculty incentives and faculty motivators on adoption of new technology in their teaching.

As you investigate the new technology you may explore such concepts as navigational structure and computer-mediated communications. One example of the first is our Internet provider and the other is email. What is the potential of the dual-structure instructional systems approach or instructional grouping on navigation and student learning in a web-based environment? Why and when would you use CD tutorials? Who will be designing instruction for the technology-supported K-12 FACS classroom, and what models for Web-based instruction will be most popular, most common, and/or most effective in the FACS classroom? Will you enter the debate between the effectiveness of Web-based collaborative learning environments and traditional classroom instruction?

Can you design a decision-making model for problem selection in project-based learning for your web-based instruction? When you anticipate designing instruction to encourage critical thinking? Will you use the interactive strategy model for mental learning and disposition? Will you study the effects of goal intentions on critical thinking, problem selection, and problem solving?

Who will want to design, evaluate, or use multiple instructional models? How can FACS teachers and teacher educators include motivational strategies for learner involvement in what otherwise is likely to be a relatively isolated learning environment?

How will this change in teaching-leaning architecture and design affect the relationship between teachers and their students? What will it mean for FACS instructional designers. And the bottom line is, "Will web-assisted learning enable our next generation to have a better quality of life?"

Using the computer to replace the typewriter is not a question today. The computer must be included to enhance the speed and accuracy with which students learn. The computer is also used to increase motivation, to stimulate, and to encourage persistence in studying and learning.

The articles in this issue are designed to encourage you to move beyond your current level of computer use in classroom instruction. The authors have shared with you some of their best teaching strategies. You are encouraged to use, revise, modify, and share the ideas with FACS teachers and teacher educators nationwide. We do ask that you give credit to the authors in this issue who have made the effort to stimulate you to enhance you skills and increase your use of contemporary technology in your teaching.

Joan R. McFadden Guest Editor Fall 2001

THEORETICALLY-BASED FAMILY INTERVIEW PROJECT TRANSCENDING FAMILY AND CONSUMER SCIENCES DISCIPLINES

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This article describes a family relations project that can be utilized in family related classes at either the high school or college level. The authors describe an assignment utilizing interviews with grandparents or other family members to help student understand family theory. The authors discuss how the assignment was developed, the theory guiding the project, a method of assessment, and the expected outcomes. They also explain how the project can be expanded to include disciplines closely related to the family, such as dietetics, fashion, nutrition, and housing. Further, they will elaborate on how an adaptation of the assignment could become a senior research project in a university consumer and family sciences department.

Even though grandparents have played a part in many children's lives throughout history, medical technology has made it possible for more older adults to live longer than ever before. As a consequence, there has been an increase in the number of three and four generation families (Mills, 2001; Roberto, Allen, & Bleiszner, 2001). Longer life expectancy has increased the potential for grandparents to interact not only with their early school-aged grandchildren, but also with their high school and college aged offspring's. Mills, Wakeman and Fea (2001) question "whether the likelihood of more years of shared lives among grandchildren and grandparents will result in long-term joint satisfaction or will result in more years of disengaged relationship between the two generations" (p. 428). This may be especially true for maternal grandfathers since prior research has found they feel closer to their pre-pubescent granddaughters than to older granddaughters (Mills, 1999).

Pressures beyond the family environment also may complicate adolescent grandparent-grandchild interactions. According to Erikson (1968), group identity and peer pressure are powerful forces operating in the lives of early adolescence (12-18 years), while developing autonomy from parents and establishing a separate identity are major tasks during later adolescence (18-24 years). During this time, family interactions often take second stage to participation in peer activities. When together, conversations with grandparents often remain unidirectional and superficial with older relatives asking questions related to dating, grades, employment, school activities, or sports.

Purpose of the Article

During their years of teaching and in conversations with students outside of the classroom, the authors have become aware that students, in general, have a positive relationship with at least one grandparent and have some understanding of history. It became apparent, however, that many students are unaware of how history specifically has impacted their families. They may know, for example, their grandparents grew up during the Depression, that grandpa's

picture in a military uniform standing beside an airplane has always been on the piano, that an African-American grandmother worked in a hospital when discrimination was common, or that grandma and grandpa lost two children to polio. Nonetheless, many had not heard specific details personalizing the historical times that humanize their grandparents during earlier periods in their life cycles. Often these stories are lost when grandparents die. Also lost are educational opportunities for students to integrate their lives with the past and to become more personally aware of how families change and are impacted by the economic, political, and social aspects of the larger society.

The purpose of this article is to describe a family relations project that can be utilized in family related classes at either the high school or college level. It involves conducting a guided interview with grandparents, a grandparent, or a great aunt or uncle. The authors will discuss how the assignment was developed, the theory guiding the project, a method of assessment, and the expected outcomes. They also will explain how the project can be expanded to include disciplines closely related to the family, such as dietetics, fashion, nutrition, and housing. Further, they will elaborate on how an adaptation of the assignment could become a senior research project in a university consumer and family sciences department. Methods for finding alternative interviewees will be discussed for those students whose relatives are unavailable.

Our project assists students in gathering information about their family within an educational structure and by use of a guided interview. It is of value because many models of educational processes indicate that a combination of cognitive, affective, and behavioral learning are important (Burr, 1994). Traditionally, cognitive knowledge or learning has held primary place in the academic community. We believe this assignment captures each of the three types of knowledge or learning. For example, cognitive learning is utilized when students are asked to integrate theory into their interviews. In collecting information about their grandparents' earlier lives students gain a greater connectedness to their grandparents and assistance in developing a sense of continuity and emotional attachment (Strong, DeVault, Sayad, & Cohen, 2001). This contributes to the students' affective knowledge, while scheduling interviews and meeting with their grandparents makes use of behavioral knowledge.

We have found this assignment may stimulate increased student interest in family history and genealogy. Websites, such as www.geneology.com, www.genhome.age.com, and www.CyndisList.com may be helpful and are free. The last provides links to over 100,000 sites. In addition, other sites can be found by using "genealogy" or "ancestry" as key words.

Theoretical Background

The project is guided by Bronfenbrenner's ecological model (Newman & Newman, 1999). It attempts to explain how individuals are impacted by interlocking systems of interaction that take place within and beyond their families, as well as the time period in which they live. Bronfenbrenner uses the terms microsystem, mesosystem, exosystem, and macrosystem to explain the interlocking nested systems. Explanations of these terms are included here to assist in using the model.

Microsystem - a pattern of activities, rules, roles, and interpersonal relations that a developing person experiences in a given setting with particular physical and material characteristics; the individual and all persons or groups that make up the individuals day-to-day environment. Examples include how children are disciplined or the existence of gender specific roles for boys and girls.

Mesosystem - interrelations among two or more settings in which the individual actively participates (the mesosystem); for example, the relationship between an individual's home and school or between the individual's home and church. Specific examples include how involved parents are in encouraging education for their children or how involved the parents are in taking their children to church.

Exosystem - one or more settings that do not directly involve the developing person as an active participant but affect the person; for example, father's work and how it impacts his treatment of his family members or the parents' involvement with friends and how it affects their views on parenting.

Macrosystem - the broad belief system or cultural beliefs that affect the lower systems. Examples include the *federal government*, e.g., World War II, the development of the welfare system, health care assistance, and legislation; *societal norms*, e.g., acceptance/nonacceptance of divorce, discrimination, changing gender roles, impact of Civil Rights movement; *religion*, e.g., beliefs and values; *mass media*, e.g., radio, television movies; and the *economy*, e.g., The Depression, factory closings or lay offs. Macrosystems changes which occur over time.

Bronfenbrenner's model therefore, is helpful in studying family from both the micro and macro levels, as well as the time period in which an individual lived. The following is a description of the assignment and how the model can be utilized to assist students in applying their grandparents' lives to the social, economic, and political happenings of the larger society.

Family History Assignment

Each of us carry our family history. Most often, however, it is a quiet history that is often lost when our grandparents die. We may interact with our grandparents or other relatives of their generation, but we know little about them as children or young adults as people living during a particular point in time. A greater understanding of your family history would give you a better understanding of who you are, as well understanding how your family fits into the collected histories of our society. The purpose of this assignment is to assist you in gathering portions of your family history and in comparing your history with that of two other classmates.

PART I. Interview your grandparents - at least one grandparent if possible, but may interview all grandparents if desired. (If you do not have a grandparent who is available to interview, you may interview a substitute grandparent. Please think of an alternative and discuss this with your instructor.) Each student is to submit a five paged typewritten paper that should be separated by the following headings.

A. Grandparents' Families Of Origin

Discuss your grandparents' families of origin (family in which they spent their childhood).

- 1. What were their parents and siblings' first names (are these names still commonly used)?
- In what geographic location did your grandparent live while growing up? (Country, state; urban/rural)
- 3. What was the time period during which your grandparents were growing up?
- 4. Who was the parental disciplinarian and what kinds of discipline were used?
- 5. What occupations did your grandparent's father and/or mother have?

- Have them relate a short story about things they remember their parents saying about work or the type of work they did.
- 6. What events were happening in the larger society at the time? Ask your grandparent to relate a short story about an event or happening in the larger society.
- 7. During this stage of their life and during this time period, what were your grandparent's greatest pleasures and biggest concerns?
- 8. What were several ways in which current family life is different from family life when your grandparent was a child?

B. Grandparents' Dating-Wedding

- 1. At what age did your grandparents begin dating? About how many other people did they date until they "settled" on each other? How did they meet? How did their first date come about? What types of things did they do on their dates?
- 2. What is a story about your grandparents' dating experiences with each other?
- 3. What type of transportation did your grandparents use on dates?
- 4. How long did they date before their engagement? How and where did it occur?
- 5. What was their wedding like? Where? Who presided? Who was in the wedding party? Did they go on a honeymoon? If so, where?
- 6. What does your grandparent remember about the first weeks and months of married life?

C. Grandparents' Work-Family

- 1. What were your grandparents' occupations?
- 2. What did they earn each week (or use hour, day, or month depending on how they were paid).
- 3. What was the cost of their rent?
- 4. What was the cost of their first home?
- 5. How many children did they have? Children's names (are they still commonly used)?
- 6. If they had children and worked outside the home, how was childcare managed?
- 7. If they had sons and daughters, in what way did they raise them similarly and differently? (i. e. chores, discipline, age to begin dating)
- 8. What tasks were their children expected to do around the home?
- 9. What historical events happened while their children were growing up?
- 10. What were the greatest pleasures and biggest worries while they were at this stage of their lives?
- 11. In what ways is life different now compared to when your children were growing up?
- 12. How was life different while your children were growing up compared to when you were growing up?
- PART II. Comparison of families. In this section, you will be comparing your grandparent's history with those of one or two other classmates. In a minimum of two typed pages and using the three sections in Part I, compare and contrast

grandparent families' history. What similarities existed in their dating and weddings? What differences existed in occupations, number of children, family pleasures and worries? Look at such things as historical times and political, social, and economic happenings in terms of their impact on the families. Each group member is to submit a paper. It is expected papers will be similar, but different, since each of you should base comparisons starting with your own grandparent.

Method Of Evaluation

Instructors can adapt the evaluation to their fit their expectations. Some may place sole emphasis on the paper's contents, while others choose to include grammar, spelling, and writing style in their evaluations. See Table 1 for a matrix we used to score the assignment.

Methods For Integrating Bronfenbrenner's Model

Various methods exist for Bronfenbrenner's model to be incorporated into the assignment.

- 1. Present the model either before or after the grandparent interviews. In either situation, students can incorporate information from their interviews into the various components of the model and write a paper with the material gathered from their interviews. This assignment can stand alone or be used in conjunction with the 2nd strategy described.
- 2. Following completion of their individual papers, students are assigned to work in groups of three to compare and contrast their interviews. Class time can be used for these discussions. Instructors can determine whether to require use of the model in the two-three paged paper assignment as students compare and contrast their grandparents' lives.
- 3. A final way to use the model is for the students to conduct their interviews without prior knowledge of the model and write their individual and group papers. Instructors, by way of a class discussion, present Bronfenbrenner's model with students volunteering information from their interviews.

Adaptations For Interdisciplinary Study

There are a variety of ways to adapt this assignment. Additional questions can be developed for students to gain information from their grandparents about other aspects of family life. Some examples follow.

Fashion - grandparent's family or origin

What type of clothing did your grandparents wear as children? What kinds of play clothes, school clothes, special/church clothes did they have? Were they "store bought," hand-made, hand-me-downs, etc.? Discuss the social/cultural conditions that influenced the style of dress, such as changing gender roles, popular culture, influential personality, political event, religious beliefs.

Fashion - grandparent's dating and wedding

Briefly describe the wedding. What attire did the bride and groom wear? What did the attendants wear? Include photos if possible. (They will be returned.) Where was the wedding held? Who presided? What did the presider wear?

Fashion - grandparent's work-family

What type of clothing did your grandparents wear to work? If a specific type of attire was needed, explain. Discuss the social/cultural conditions that influenced the style of dress, such as changing gender roles, popular culture, influential personality, political event, religious beliefs.

Nutrition and dietetics - grandparent's family of origin

What were your grandparent's favorite foods as a child? What type of food storage and food preparation equipment did your grandparent's family have (e.g. ice box, refrigerator, wood-coal stove)? Did your grandparent's family use lard in cooking? Was there any understanding of health and its connection to food? How often did your grandparent's family eat in restaurants? Did your grandparent eat in fast food restaurants? What were the names of some of the fast food restaurants?

Nutrition and dietetics - dating and wedding

In what ways did food play a part in dating? If your grandparents had a wedding reception, how was food utilized?

Nutrition and dietetics - work and family

How were work meals handled? For example, were meals carried from home or food purchased at or near the work site? Was there any understanding of health and its connection to food? Who was primarily responsible for food preparation? How often did your grandparent's family eat in restaurants? What differences exist between eating out now and when your grandparent was a child?

Housing and interior design -

Have your grandparent compare and contrast the houses they lived in while growing up, while raising their family, and their current residence in such areas as cost, (don't need to get specific) size, and number of bedrooms.

Alternative Assignment for Students

Some students' grandparents may be deceased, while others may have grandparents who are ill and unable to be interviewed. Still others may feel uncomfortable asking their grandparents to be interviewed because of existing family issues. We have found geographic proximity not to be a problem. Our students sent a copy of the interview guide to their grandparents and arranged a time to converse by telephone. Proximity, however, may be a concern for some students. One of the following options may be a solution to student concerns. If a great aunt or uncle is still living, ask them to be interviewed. If no older relatives are living or available, an elderly friend, such as a neighbor or church/synagogue friend, may provide information about their families. It also is important to recognize that the ethical guidelines for family scientists (individuals who teach about family including university students, social service professionals, educators, therapists, and administrators are considered family scientists) developed by the National Council on Family Relations (Adams, Dollahite, Gilbert & Keim, 2001) indicate that while teaching a for-credit course, family scientists do not make assignments that require students to divulge potentially painful personal or family experiences or information without providing an alternative assignment for those who do not wish to participate. Because of family problems or diminished health, interviewing a grandparent may be too sensitive for some students and options discussed above might not be available. An alternative assignment could involve students interviewing one or more members of an ethnic minority family different from their own.

Adaptation As A Senior Research Project In A Department of Family & Consumer Sciences

The utilization of the project as a university family and consumer sciences senior project has the potential to provide both educational and personal benefits to students. The website of the American Association of Family and Consumer Sciences states "Consumer and family science professionals focus on an integrative approach to the reciprocal relationships among individuals, families and communities, as well as the environments in which they function" (AAFCS, 2001, p. 1). The interview guide and integration of Bronfenbrenner's ecological model (Newman & Newman, 1999) provide a venue for future family and consumer scientists to gain a greater understanding of the reciprocity of family and environmental contexts. More specifically, they assist students in determining how their individual families fit into the collected history of society and how society and history has impacted their families.

In addition, by including fashion, dietetics/nutrition, housing and interior design, the assignment provides a method for future family and consumer sciences professionals to assimilate information across consumer and family sciences practice areas and content specializations. Thus, the project assists students in gaining a greater awareness of the connectedness among the family and consumer sciences disciplines.

Since influencing the creation of family policy is a core component of the family and consumer sciences professional goals (AAFCS, 2001), the inclusion of a policy component in a senior project is essential. Various methods for its inclusion could be incorporated into the senior project. For example, students might be required to select a specific content area, such as child care provider requirements, nutrition package labeling, or clothing construction employment regulations, and follow policy development at the federal and state levels. Another suggestion would require students to select a specific policy and interview a state legislator who has introduced a bill related to the policy. The student would be required to discuss the bill's positive and negative merits. A final suggestion requires students to study a specific policy and determine how it has impacted the various systems in the Bronfenbrenner model.

Summary

Responses from students in a family relations class and a fashion history class who completed the assignment were very positive in their anonymous feedback. The following statements are representative of the responses.

I like the project because I got to interview my grandparents and listen to them tell me about their pasts. Personally, I've never really taken the time to get to know (about) them before they became grandparents and I found it fascinating.

I enjoyed the assignment because it gave me a chance to learn more about my grandparents. I liked some of the funny stories that my grandma shared with me, and it was interesting to compare some things, such as dating with the way it is now!

I liked getting the time to talk with my grandmother. I feel I know her a little better since she told me the information about her past. I learned about her childhood and what she has had to deal with in her lifetime.

I liked the assignment. It gave me the opportunity to learn more about my family. I put a copy of this in my lock box so my children will have it down the line. This

was important information about their heritage that I would never have know. Great assignment!!!

Student feedback also was favorable regarding the group work of comparing and contrasting others students' families with their own. We also experimented with pairing students in a family relations class with students in a fashion industry class. While in theory, the pairing sounded good, practice garnered different responses. Student feedback was primarily negative because of the difficulty of arranging times to get together and not knowing students in the other class.

We have described a theory-driven family relations project that can be used at the high school and college levels. We described the interview guide students can use to interview their grandparents (or an alternative), and explained how the assignment can be expanded to include other disciplines in the family and consumer sciences field, such as nutrition and fashion. An effort also was made to explain how the assignment could be adapted as a senior project for undergraduate majors in Family and Consumer Sciences. In addition, methods of evaluating and outcomes were addressed. The educational goal is for students to integrate their lives with the past and to become more aware of how the family impacts and is impacted by the economic, political, social aspects of the larger society. We recognize other methods with similar goals may exist, but have found this assignment to work particularly well for us.

Table 1
Family History Assignment Evaluation

Catagories	Possible points
Overall. Writing/grammar	10
Part I. Grandparent's families of origin	20
Part II. Grandparents' dating and wedding	20
Part III. Grandparents' work-family	20
Part IV. Comparison of families (see below)	30

Comparison of grandparent's history with that of one other member of our class.	No/Not mentioned	Mentioned Briefly	Compared Adequately
Comparison of two families:			
Similarities of Dating (length of time, type of dates, etc.)	0	3	5
Wedding (where, who attended, reception, etc)	0	3	5
<u>Differences in</u> Occupations			
Number of children	0	2	4
	0	2	4
Names of children	0	2	4
Family pleasures	0	2	4
Family worries	0	2	4
Compare such things as	U	2	4
Were similar historical events recalled?	0	5-10	15
Were similar political events recalled?	0	5-10	15
Compare how the <u>social happenings</u> of the time impacted your grandparent's family and the family of your classmate's grandparents.	0	5-10	15
Compare how the <u>economic conditions</u> of the time impacted your grandparent's family and the family of your classmate's grandparents.	0	5-10	15

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THE PLACE OF COMPUTERS IN FAMILY AND CONSUMER SCIENCES CLASSROOMS

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The use of computer technology in the classroom presents challenges for Family and Consumer Sciences teachers. Such use is difficult to accomplish because of lack of time, hardware, and software. This article reviews many of the online resources that are available which empower the teacher with a desire to seek out and utilize them.

The first decade of new millennium may well be known as the time the computer came of age in education. Consistent with recent research showing that the use of the computer as an instructional tool enhances learning and makes accomplishing teaching related tasks more efficient (Collins & Dewees, 2001; Kulik ,1994; Schacter, 1999), the use of computers by teachers and students is expected in all subject matter areas today.

The extent to which the computer is used as a tool for instruction or to support a teaching-learning experience varies between classrooms, schools, and states. Instruction in some classrooms may be saturated with the use of the computer while in others it is non-existent. Despite the goal of the federal government to "connect every classroom to the Internet by the year 2000" (U.S. Newswire, 1997) only 22% of the teachers reported Internet access in their classrooms at the close of the 1997-98 school year.

Collins and Dewees (2001) reported that the use of computers in the classroom can be an effective teaching and learning tool, but there is much to learn on the part of the teacher before it can be used to its fullest potential. Spencer (1995) found that the factors associated with increased computer use in the classroom included available resources, administrator support, teachers' belief in computer effectiveness, and available budget money.

Review of Literature

Kulik (1994) did an extensive meta-analysis of the literature dealing with the outcomes of the computers used for instructional purposes. He found that most studies show that students using computers learn more in less time, like classes more, and have more positive attitudes towards computers in classes that utilize computers for instructional purposes.

Schacter (1999) compiled and analyzed five large-scale studies of education technology for the Milken Exchange on education technology. He concluded that in over 700 empirical research studies, including a study of the entire state of West Virginia, a national sample of fourth- and eighth-grade students and an analysis of newer educational technologies that students with access to computer assisted instruction, or integrated learning systems technology, show positive gains in achievement on standardized tests. He found the same to be true for students with access to computer simulations, software that teaches higher order thinking, collaborative networked technologies, or design and programming technologies.

Reasons For Non-Use Of The Computer In The Classroom

Several studies of the use of the computer for instruction in schools across the U.S. have revealed numerous reasons for computer non-use, several of which are pervasive. The most commonly reported barriers to effective use of computers in the classroom are lack of knowledge, lack of time, and lack of hardware (Croxall, 1998; Salomon, 1992; Teasley, 1996; Smerdon, Cronen, Lanahan, Anderson, Iannotti, Angeles, & Greene, 1999; Wright, 1999).

The Office of Technology Assessment (1995) found that school districts spent less than 15% of their technology budgets for training. Education Secretary Riley (1998) stressed the need to increase funding for teacher training.

In 1999, \$135 million in grants was made available for training teachers to use technology in the classroom (The White House, 1999). While these grants were targeted at training new teachers rather than current teachers, the direction the funds was channeled is an indication that teacher training in computer technology has been falling behind.

Bulkeley (1997) reported that one-half of the teachers in the U.S. lack the necessary training to effectively use the computer in the classroom. Only 13% of school systems mandate computer training; less than half provide incentives to encourage teachers to seek computer training; and only 20% of teachers use computers regularly in classroom instruction. External factors frequently influence the integration of the computer into instruction. Facilities, a plan that includes an expectation that the computer will be used in instruction, and an active computer committee in the school system are associated with increased use of the computer for instruction. Rutherford and Grana (1995) identified other factors as preventing computer integration into the classroom, namely fear of the following: time commitment, change, appearing incompetent, techno lingo, techno failure, and not knowing where to start.

How To Increase Computer Use In The Classroom

Not surprisingly, then, other researchers have studied what it takes to increase computer use in the classroom. Computer training was reported as a positive influence on computer usage, attitudes, and skills (Bradford, 1996; Croxall, 1998; Durham; 1997; Scigliano, 1997; Wright, 1999). Bradford found 80% of the participants in computer-related staff development increased their use for instructional purposes. The most effective strategy was extensive peer-directed hands-on staff development that was conducted in short segments, timed to allow assimilation between trainings, and teacher specific. Cwiklik (1997) reported that many teachers only use a computer for grades and word processing due to lack of teacher training in using the computer as an instructional tool. Also, Cwiklik reported that extensive in-service training does increase the use of the computer for instruction, especially when more computer literate teachers mentor teachers for whom using the computer is a new skill.

Literature that links FCS with use of the computer for classroom instruction include studies by Wright (1999), Croxall (1998), and Werhan (1999) reviewed here.

Wright (1999), Utah

Wright (1999) reported that many studies have been conducted on the educational effects of computers in public schools. Much of the literature reports positive effects on student achievement as a result of the use of computers in instruction (Hadley & Sheingold, 1993; Reeves, 1998). Wright (1999) studied the factors affecting Family and Consumer Science Education (FACS) teachers' use of computers, barriers to use of computer technology in FACS education, and contributors to successful use of computer technology by FACS teachers.

Although computers are prevalent in all schools and are being used in nearly all disciplines, many teachers are not using them or are not using them effectively because they lack an understanding of how to do so. Research has suggested that application of the effective computer training findings has been weak or non-existent (Wright, 1999).

A random sample of FACS teachers in Utah was surveyed in 1995-96 to study the relationship between FAC teacher computer training and their utilization of computers in FACS teaching. Analysis from the 275 respondents (representing a 81% response rate) showed that teachers who participated in computer training had significantly lower computer anxiety and higher computer use and liking (Wright, 1999).

Specifically, FACS teachers who had participated in computer training workshops were more likely to use the computer in their classroom in a variety of ways to enhance the effectiveness of their instruction and to engage students in computer experiences. The longer the computer training, the more likely teachers were to use computers in the classroom for instruction and for such purposes as recording grades, generating materials, and inventory tracking (Wright, 1999).

Wright (1999) also found that when FACS teachers had taken a college computer class or participated in FACS-sponsored workshops, they were more likely to use computers in their classrooms for purposes that directly involved students in the use of computers. Other factors that correlated positively with increased computer use by FACS teachers included larger schools, higher computer confidence and liking, lower anxiety, and recency of college degree.

Other facts that emerged from Wright's study were that computers were used more frequently in higher grades, but the number of programs used was greater in lower grades. The average teacher spent over 74 hours in computer training, used the computer 11 hours per week for teaching tasks and two hours per week for instructional purposes. Over 90% of the respondents had access to a computer in their classroom. Only two teachers reported that they had no access to a computer in their school (Wright, 1999).

Croxall (1998), New Mexico

Croxall (1998) conducted a study of Family and Consumer Sciences (FACS) teachers in New Mexico, to determine the extent of classroom computer usage. Ways teachers incorporated and used computers within the classroom and in professional activities outside of class time were examined. Barriers to use of computers in the classroom and computer training were studied. Of the 267 FCS teachers surveyed in NM, responses from 199 teachers (75%) were analyzed for the study.

Croxall (1998) found that while 74% of the teachers had at least one computer in their classroom, that computer was likely outdated (85% of the time) and unable to either connect to the Internet or run a CD ROM program. Even without Internet access in their classrooms, many New Mexico Family and Consumer Sciences teachers are incorporating the Internet into their teaching; 27% reported using the Internet at least monthly with 14% reporting weekly usage. Many teachers responded that they sent students to the library or computer lab with assignments to complete on the Internet. For example, one teacher utilized Internet sites showing fetuses inutero as she taught a child development course.

Computers in the classroom were most frequently used as word processors (41%), to access the Internet (33%), conduct research (28%), and have students prepare FCCLA materials (22%). Computers were most frequently used in either foods and nutrition classes (57%) or childcare and development classes (31%).

Teachers used computers to prepare tests (84%), prepare lesson materials (78%), prepare curriculum (73%), and compute grades (64%). Seventeen percent of the New Mexico FACS teachers reported having received no computer training with an additional 39% reporting less than 10 hours of training. Most teachers (73%) would like a course tailored towards teaching FACS content using computers. Nine teachers (5%) indicated that they did not need or want further training in using computers.

Lack of computer software and hardware were the most frequently cited barriers to using computers in the classroom (75% and 64% respectively). Over half (55%) identified a lack of time as a barrier to computer usage while over 40% lacked computer skills. It is vital that FACS teachers who currently utilize computers in the classroom assist in training FACS teachers who are not using the computer to do so.

Croxall (1998) reported that many teachers expressed frustration with the lack of computer hardware and software for FCS instruction. Computer training workshops that utilize FCS specific software familiarize the teacher with both hardware and software.

Werhan (1999), Indiana

Werhan (1999) studied the influence of a corporate sponsored computer training workshop on FACS teachers in Indiana. The experimental group consisted of teachers who attended the State and corporate sponsored workshop on computerizing FACS classrooms using the modules of the corporate sponsor. This group was not a random sample, but rather teachers who were interested in more information about the Cinergy/PSI program.

A control group of FACS teachers who attended a statewide conference in October, but did not attend the workshop was used for purposes of comparison. The experimental group scores increased for both professional and classroom use of the computer but only the professional use was statistically significant. During the same time frame, the control group had a statistically significant increase in the classroom use of PowerPoint software and the Internet. Therefore, the expectations that the computer usage of teachers in the experimental group would exceed those of the control group were not substantiated.

Werhan (1999) made several recommendations for more effective teacher computer training based on her findings. These included determining teacher interests, arranging workshops that support teacher interests, providing software for participants, registering teachers as a team to attend the workshop as support partners, and encouraging past participants of teacher training to act as mentors to recently trained teachers.

Use Of Computers In FCS Classrooms

The following are some of the many ways in which computers may be used in the secondary FCS classroom.

Internet Sites

There are dozens of puzzle/game/worksheet/quiz generator programs on the web. Some of them charge a fee but many of the best sites are free. A few examples of such sites are Puzzlemaker that instantly creates puzzles with your content and Quia that allows you to create your own activities, quizzes and web pages.

Commercial web sites may also offer useful instructional material. To locate these sites use a web browser (i.e., Google, Yahoo) to search for the location of the site. Be aware that

commercial sites may contain information biased in favor of the company, but do not overlook these sites simply because they are sponsored by a commercial entity.

Many organizations also host web sites with information that can enhance the FCS curriculum. Some FCS teachers prefer sites sponsored by organizations above those sponsored by commercial enterprises since there is less likely to be a commercial bias reflected in the information at the site. Organizations hosting web sites include the <u>American Heart Association</u> and the <u>American Diabetes Association</u> and most educational institutions. The Utah Association of Family and Consumer Sciences hosts a page with links to many FCS-related sites.

The <u>Utah Education Network</u> hosts a web site with an incredible wealth of useful information. (Other states undoubtedly also host such sites; make inquiries of your state office of education.) Among the useful items available at this site are contacts for Utah FCS teachers as well as curriculum (lesson plans), FCCLA links and the National FCS Standards.

San Diego State University hosts <u>The WebQuest Page</u>. A WebQuest is an inquiry-based activity in which some of all of the information with which learners interact comes from resources on the Internet (Dodge, 2001). <u>Discovery School</u> hosts a wealth of information created by Kathy Schrock. Information available includes web site evaluation criteria, subject specific links (see Vocational Education), and other teaching aids. At Schrock's <u>Sites of School Days</u> you can find a new site each week that will help you integrate technology into the teaching/learning process.

Web-based tutorials can help teachers overcome a lack of knowledge about computers and specific computer programs. Self-instruction, for the self-motivated, is an excellent method of learning how to use computers in the classroom. There are plenty of self-help sites available on the Internet. Free Tutorials is an example of a site that provides self-instruction opportunities.

And last, but not least, the government hosts thousands of web sites with free information. Sites like <u>Nutrition.com</u> and the <u>Federal Consumer Information Center</u> provide a variety of useful information for both teachers and students.

C-U-See-Me

This clever little program has been around for a decade or so. Its use requires free software (download from http://www.rocketcharged.com/cu-seeme/download.htm) and a video camera connected to your computer (can be purchased at a local computer store or on the internet for under \$100). This program works on both PC and Macintosh computers. Once set up, C-U-See-Me allows you to communicate with others anywhere in the world. You not only talk to the person, you can see them. You can speak with whomever happens to be online or you can plan in advance to visit with a specific person or group of people.

Potential uses of C-U-See-Me include visiting with other FCS classes around the country or the world. You could arrange for a foods class in another country to do a demonstration on cultural foods, then reciprocate. You could have a class discussion on any topic of contemporary concern between your students and other students anywhere in the world. The implications for cross-cultural education are greatly expanded with the use of this free program.

Proprietary Software Programs

There are literally thousands of software programs that are FCS-related. Unfortunately the sheer number of programs available adds to the dilemma of determining which programs are appropriate for classroom use. Programs range in price from under \$10 to well over \$1000. Few, if any, stores allow return of opened software so you are faced with the quandary of

knowing which programs to purchase (if you have money to buy programs). Some software publishers will donate a copy of their software for educational use and others sell their software to educational institutions at a reduced price.

Email

Although a powerful tool, with incredible potential for increasing learning, e-mail has potential for misuse in the classroom. Students e-mailing each other during class can distract them from fully participating in the classroom learning experience. One partial solution to misuse of e-mail during class is to require students to write a brief summary of what they discussed including a list of those with whom they communicated.

In the 1960's and 70's teachers often arranged for entire classes to have pen pals. Students exchanged letters with counterparts in some other region of the world in an effort to learn about culture, traditions, etc. E-mail can be the 21st century version of the pen pal and it is much easier on the teacher and the pocketbook. To identify teachers whose students may become your e-mail pals, go to Web66: International School Web Site Registry. E-mail the teachers with a detailed explanation of your plan (how it will benefit not only your students, but theirs, how student privacy will be protected, etc.) and await a reply. One word of caution: make single inquiries (rather than blanket inquires) since you do not want to acquire an excess of e-mail pals or someone will end up disappointed.

Books

Computer Projects for Family and Consumer Sciences, (2000), by Ruth E. Bragg, Ph.D. is available from the American Association of Family and Consumer Sciences (Item #0200-19). This book lists computer related projects that can be used in every content area of Family and Consumer Sciences. It includes worksheets and lesson plans.

A commercial book that can be useful to one segment of Family and Consumer Sciences is *Free Stuff for Sewing Fanatics on the Internet*, by Judy Heim & Gloria Hansen. It is available in most bookstores (ISBN #1-57120-073-8). It lists many Internet sites that can be utilized in clothing, apparel, textiles, and fashion courses.

Conclusions

The use of computer technology in the classroom presents challenges for Family and Consumer Sciences teachers. Such use is difficult to accomplish because of lack of time, hardware, and software. Many sources of help are available and more are becoming available on a regular basis. These resources empower the teacher with a desire to seek out and utilize them.

It will take persistence on the part of classroom teachers to keep current with computer technology, both hardware and software. But, by doing so, they will also be preparing themselves and their students for the future. The task is easier when we work together to share resources and technology that works for us individually.

Note: Links to all Internet sites referenced in this paper can be found at the <u>UAFCS web site</u>. If there are sites you would like added to this site email the URL to <u>C. Wright</u>.

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Using the Electronic Superhighway to "Drive" Your Foods and Nutrition Curriculum: Recommended Websites for Foods and Nutrition Educators

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Considering the growth of the Internet and its use by the public, it is imperative that nutrition educators become familiar with Internet resources. This article highlights a variety of foods and nutrition-related websites selected for their accuracy and reliability. Not only will these sites enhance your teaching, but they also will provide the user with current, up-to-date information well before it is published in texts or available in most libraries.

In recent years, the use of computer technology has become a viable—almost essential—means of gathering and disseminating nutrition information. Both stand-alone applications (e.g., nutrient analysis programs, computerized Food Frequency Questionnaires, recipe management and menu planning, risk assessment tools) and on-line applications (e.g., Internet, e-mail, electronic bulletin boards, search engines, computer conferencing) are available to update and enhance every professional's output (Kolassa & Miller, 1996). The over-abundance of information on-line, along with the concomitant need to critically analyze their content for accuracy and determine their appropriate use or application, can be overwhelming (Hertzler, Young, Baum, Lawson, & Penn-Marshall, 1999). Properly used, however, the electronic superhighway can be used to facilitate or enhance current course objectives, particularly those related to development of materials, evaluation, synthesis, and critical-thinking skills (Rodriguez, 1999). This article highlights a variety of foods and nutrition-related websites selected for their accuracy and reliability. Students and teachers alike can turn to these sites with confidence to update their knowledge and enhance their classroom teaching/learning.

Clearinghouse of Reliable Websites

Because of the unregulated nature of the Internet, the validity of information should always be questioned (Hertzler et al., 1999). Turning to a reliable clearinghouse of nutrition information, however, removes the first layer of skepticism and allows the novice to proceed with confidence. One reliable nutrition clearinghouse is http://www.navigator.tufts.edu. This website, sponsored by the Tufts School of Public Health, screens all nutrition-related websites and ranks them on the following criteria: (a) nutrition accuracy, (b) depth of nutrition information, (c) frequency of site updates, and (d) usability. The user first selects the type of information they are looking for (e.g., women's health, professional, educators) and then sorts through a variety of websites that are ranked in order from best to worst. The user is able to read the reviewers comments and, if interested, be linked directly to the website of interest.

One of the most comprehensive clearinghouses is http://www.nutrition.gov. This website, containing links to a variety of professional and consumer resources, allows the user to search for information using standard search-engine technology. As the name implies, this

website focuses on government publications, documents, and resources, but also contains numerous links to scholarly, professional, and consumer-related data as well.

Another food and nutrition clearinghouse is http://www.foodandhealth.com/. This website contains links to a host of commodity groups, professional organizations, major corporations, and educational sites. The "Editor's Picks" and the "Food and Book Links" are good places to start your tour of this website. Many teachers turn to this site monthly to download seasonally-related clip art, recipes, health calendars, and activities.

Nutrition Reference Materials

The federal government has several outstanding websites for nutrition professionals. A wealth of information can be retrieved on the U.S. Department of Agriculture's Center for Nutrition Policy and Promotion website, http://www.usda.gov/cnpp. This site contains many valuable professional resources hot off the presses. This site allows the user to download government documents, conference proceedings, and meeting announcements as well as clip art (e.g., the Food Guide Pyramid) in camera-ready copy. Another government site is http://www.nal.usda.gov/fnic. The Food and Nutrition Information Center (FNIC) provides a host of resources for teachers, professionals, and students. Here you can access the latest information about the Food Guide Pyramid, the newly revised Dietary Guidelines, and the latest information about the school lunch and breakfast program regulations. Most government documents, journals, and conference proceedings, in addition to camera-ready clip art, are available in a downloadable form from this website. Click on the flashing "Teachers Click Here" button on the left side of the screen and you will be directed to an outstanding list of food and nutrition resources for teachers. Students like this website as the user is quickly linked to pertinent documents and journal articles that address a variety of subjects, making research projects much easier and more current than would be possible from hard copies of documents available in most libraries.

Individuals interested in learning more about vegetarianism should be able to find what they are looking for at http://www.vrg.org. This website, sponsored by the nonprofit Vegetarian Resource Group, provides news, recipes, nutrition information, links, and ideas for those interested in becoming vegetarians.

Those interested in checking out consumer fraud should check out http://www.ncahf.org, the National Council Against Health Fraud's web page. This consumer-friendly site contains updates on the latest health frauds and fads and provides links to a variety of consumer watchdog groups.

Electronic Communication Among Professionals

Finding the right answers to unusual consumer questions has been made easier through the development of the Internet. The Internet has made it possible for people with similar academic training and interests to connect while being separated by thousands of miles (Evers, 1996). Several professional organizations maintain electronic communications available only to their members (e.g., SNEEZE for members of the Society for Nutrition Education). A listserv set up by Purdue University, however, is free and open to anyone who wants to know the kinds of questions and concerns being voiced by the general public and wants answers from academically-trained professionals. The original purpose of this e-mail connection was to find a way for Cooperative Extension foods and nutrition specialists in the United States to quickly contact each other about consumer questions or educational programs (Evers). Today this

listserv has expanded to researchers and educators across the country. To participate, simply send an e-mail message to almanac@ecn.purdue.edu, and type the following message in lowercase letters: subscribe finspec_mg. If you find the amount of information overwhelming, or the discussions irrelevant to your needs, the user can unsubscribe by simply sending the message "unsubscribe finspec_mg" to the address listed above.

Diet Analysis and Energy Calculation Programs

Computerized diet analysis programs empower individuals to become active participants in their health care by allowing them to compare daily intakes to daily nutrient requirements (Painter & Sabbert, 2001). A quick trip to http://spectre.ag.uiuc.edu/~food-lab/nat/ directs the user to The Nutrition Analysis Tool (NAT) and the Energy Calculator (EC). The NAT analyzes diets for calories, fiber, fat, protein, and more than a dozen other nutrients and tells whether or not the diet meets the Recommended Dietary Allowance (RDA) for age, weight, and sex for each nutrient. The EC can quickly calculate approximately how much energy a person burns during the day or a more precise energy calculation requiring a 24-hour activity log. The NAT and EC together receive over 1,000,000 hits monthly from over 90 countries (Painter & Sabbert).

Another website with an easy to use energy calculator is http://www.shapeup.org, the website for Shape Up America, the organization founded by former Surgeon General C. Everett Koop to encourage Americans to eat less, move more, and slim down if needed. Two of the most frequently used features of this website are the Body Fat Lab and the simple-to-use Body Mass Index (BMI) calculator found in the BMI Center.

Nutrient Resources

When it comes to teaching about the functions and sources of nutrients, do you feel like you are lost in a strange land with no roads signs and an empty tank of gas? If so, jump on the superhighway! The website, http://www.freshstarts.com, was voted one of the favorites by students in a college nutrition course for elementary education majors as it not only provides excellent lesson plans, but it also includes a variety of graphics associated with each vitamin. Many professionals turn to the Mayo Clinic Diet and Nutrition Resource Center site, http://www.mayohealth.org/home/, to access experts who answer nutrition questions, nutrition quizzes, and reference articles. This site is, in general, an outstanding place for teachers and students to turn for accurate information on all health-related areas, not just nutrition.

It is hard to beat Dole's website, http://www.dole5aday.com, for their lesson plans, interactive games, eye-appealing graphics, and student worksheets. Although the CD-ROM, free to teachers, was developed for upper elementary and middle school aged children, it would be an appropriate, fun review for high school students.

You can always count on the accuracy of the information retrieved from the American Dietetic Association's official website, http://www.eatright.org. Several commodity groups with websites worth exploring include the Soyfood Association of North America's site at http://www.soyfoods.org and the Wheat Commission's site, http://www.wheatfoods.org. Your students can plan health-conscious meals with the help of http://www.mealsforyou.com, a site that contains hundreds of recipes automatically adjusted based on the number of servings desired and that automatically creates a shopping list. This site would be especially good for students in meal management and foods classes.

Sports Nutrition

A recent search on a common Internet search engine using the key words *Sports Nutrition* elicited over 1 million hits. Thus, there is no shortage of sports nutrition information on the Internet. The difficulty lies in separating fact from fiction and obtaining information that is both accurate and useful. Many sports nutrition websites are commercial in nature; the goal is to promote a product or program. Identifying the few that do not have a financial motive can be a challenge. Below is a description of three of the best sports nutrition websites along with an indication of how these sites could be incorporated into the curriculum.

The Gatorade Sports Science Institute, http://www.gssiweb.com, is probably the most comprehensive website available on the topic of sports nutrition. The site would be most appropriate as a resource for the instructor due to the scientific nature of the information provided; however, the practical information might be appropriate for the high school student. The site contains articles on a variety of sports medicine topics authored by experts in exercise science, nutrition, and sports medicine. The scientific articles summarize the most recent findings from research in the areas of exercise science and sports nutrition. The articles discuss the practical applications/guidelines of sports science research to the athlete or active individual. Examples of some of the subtopics found in the practical information section include: hydration, kids and sports, dietary supplements in sports, and eating on the road. In addition, there is also an "ask the expert" which provides answers to some of the most frequently asked questions about sports nutrition as well as allows the user to submit a question.

The *Sports, Cardiovascular, and Wellness Nutritionists* (SCAN) website, www.nutrifit.org, contains articles on hot topics in the area of sports nutrition and eating disorders. SCAN is a practice group of the American Dietetic Association. The articles found at this site are written in simple language and use relatively non-scientific terminology, making them appropriate for both teacher and student. Some examples of topics found on the site include "nutrition 101 for athletes," "nutrition aspects of overtraining," and "the basics of muscle recovery post-workout."

The University of Illinois Extension: Sports and Nutrition: the Winning Combination, www.urbanext.uiuc.edu/hsnut, is a great website for the adolescent (middle and high school) athlete. There are numerous topics that would appeal to the young athlete including keeping energy levels up, keeping fluid levels up, and ways to ensure your diet doesn't let you down. This site contains a downloadable pre-game meal planner that provides the young athlete with practical tips for choosing the appropriate foods before, during, and after exercise. There are even suggested meal plans and a place where the athlete can design his or her own meals using the foods to choose and foods to avoid checklists.

Eating Disorders/Weight Control

There are several available websites that focus on the issue of eating disorders. Because understanding what constitutes healthy eating is just as important as identifying unhealthy eating habits, eating disorder sites that also incorporate information of healthy weight management would be most beneficial from a teaching perspective. Below are four sites that would serve as excellent resources for the instructor as well as be appropriate for the student interested in the areas of weight control and eating disorders.

National Eating Disorder Resource Center (EDAP) site, www.edap.org, offers information on the issue of eating disorders that would be beneficial for the teacher. EDAP is the nation's largest non-profit organization devoted to the awareness and prevention of eating

disorders. Middle school educators can download a free copy of the *Body Wise* information packet that contains all the materials needed to develop a body esteem development program. Grade school educators might be interested in the downloadable *Healthy Body Image Curriculum* (for 4th-6th grades). This curriculum draws together resources that enhance the students' knowledge of science, health, history, literature, social studies, and consumer skills. For the high school educator there is the GO GIRLS!TM program, a 12-week curriculum that focuses on crucial topics such as body image, media awareness, and the power of speaking out.

The *Mirror-Mirror Eating Disorders* website, http://www.mirror-mirror.org, is dedicated to individuals whose lives have been touched by eating disorders. It provides valuable information on the nature and scope of eating disorders and is written in a conversational format, as if the writer were talking to the eating disorder afflicted. There are also sections that deal with recovery, myths and realities of eating disorders, resources for getting help, and an extensive list of links to other related websites. This site would be perfect for the young person seeking to learn more about signs, symptoms, complications, and treatment options for eating disorders.

The Weight Control Information Network (WIN), http://www.niddk.nih.gov, provides various publications including fact sheets, brochures, article reprints, and conference and workshop proceedings on obesity, weight control, and nutrition. WIN, a national information service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH), was established in 1994 to provide health professionals and consumers with science-based information on obesity, weight control, and nutrition. This is a valuable resource for educators looking for accurate information on obesity and weight control.

The Healthy Weight Network website, http://www.healthyweightnetwork.com, provides a variety of resources (books, journals, articles, news releases, and briefs) that would be beneficial for educators. Educators can download fact sheets and news releases covering such topics as identifying weight loss fraud and quackery, top 10 reasons not to diet, eating disorders in female athletes, obesity and teen dieting, and obesity and eating disorder prevention strategies. In addition, there are valuable resources available for purchase from the site, such as the book, https://creativecommons.com/children and Teens Afraid to Eat, by Francis M. Berg. The book describes six major problems frequently experienced by teens--dysfunctional or disordered eating, undernourishment of teenage girls, hazardous weight loss, eating disorders, size prejudice and overweight--and provides clear guidelines to parents, teachers, and health professionals, along with a wealth of charts, tips, and how-to suggestions. Teachers will benefit from the advice on how to spot eating problems in athletes and other students. Prevention programs and pitfalls to avoid are explained.

Food Safety

Perhaps one of the most important topics to include when teaching foods and nutrition is up-to-date information about food safety. The authors recommend the following four websites to enhance your lecture material and provide a source of accurate information.

Gateway to Government Food Safety Information, http://www.foodsafety.gov, contains links to several federal websites containing food safety materials, as well as consumer fact sheets on timely issues. The section on "Kids, Teens, and Teachers" is rich in materials of interest to Family and Consumer Sciences teachers. The Food and Drug Administration's Center for Food Safety and Applied Nutrition, http://vm.cfsan.fda.gov/list.html, contains a wealth of information on the safety of food beyond the kitchen, including information about pesticides, biotechnology, and federal regulations. Students and teachers alike will appreciate the section for "Kids, Teens,"

and Teachers" in this website. Excellent reference materials can be found at the Centers for Disease Control and Prevention's Foodborne Illness site, http://www.cdc.gov/health/foodill.htm. This site contains concise fact sheets on the most common foodborne illnesses and general articles on food safety topics.

Lastly, we recommend two University-sponsored food safety websites. The Iowa State Cooperative Extension Food Safety Project, http://www.extension.iastate.edu/foodsafety, includes numerous student-ready materials, including a four-part lesson on food safety and a presentation on steps to reduce the risk of foodborne illness at home and a primer on HAACP and food law. The North Carolina Cooperative Extension Service site, http://www.ces.ncsu.edu/depts/foodsci/agentinfo, is rated "one of the best" by the Tuft's Nutrition Navigator. This site offers food safety advice by category (e.g., meat, eggs, fruits), hot topics, information about specific organisms of concern, and provides valuable links to government and industry websites that provide food safety information.

Foods Information

Teaching food science at the secondary level is a difficult challenge for many, especially in these times of budget restrictions and teacher overload. Teachers can maximize their time and energy by turning to the following four websites that focus on the instruction of food science.

Check out the Utah State Board of Education Food and Science Cook and Eat Chemistry website at http://www.uen.org/utahlink/lp_res/nutri375.html#lesson. Here you will find excellent resources, including a curriculum guide and in-depth lesson plans, to teach food science at the secondary education level.

The U. S. Department of Agriculture's (USDA) Food Distribution Programs website, http://www.fns.usda.gov/fdd/MENU/ABOUTFDP/aboutfd.htm, contains useful information about USDA commodity foods and the various food distribution programs that provide these foods to individuals and institutions.

All About Food, http://www.nal.usda.gov/fnic/consumersite/allaboutfood.htm, is another USDA-sponsored website, with information provided by the Food and Nutrition Information Center (FNIC) via the National Agriculture Library (NAL). This site contains a cornucopia of food-related materials related to food selection, storage, preparation, and preservation.

Lastly, the Ohio State University College of Food, Agriculture, and Environmental Science maintains a comprehensive coverage of a wide range of topics including cultural diversity of food, food science, and food preparation. This site is located at http://www.ag.ohio-state.edu/~ohioline/lines/food.html#FOODS.

Summary

Considering the growth of the Internet and its use by the public, it is imperative that nutrition educators become familiar with Internet resources. Not only will these sites enhance your teaching, but they also will provide the user with current, up-to-date information well before it is published in texts or available in most libraries. Hopefully these websites will help Foods and Nutrition educators merge onto the information superhighway with minimal crashes and allow you to reach your speed limit in the least amount of time!

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Consumerism in the Classroom: Effective Strategies for Today's Teenage Consumers

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The way we spend our money will, in a large part, determine our success in life. Current trends indicate that teens have a large amount of disposable income but are not knowledgeable about consumerism. Despite the need for financial information, teens will not respond to lessons on consumerism without motivation. This article describes the following five consumerism learning strategies which have been successfully used in secondary classrooms: Bag It, Name That Denim, How To Spend Your Money, Taste Tests/Price Comparisons, Price That Outfit, and The Virtual Mall. The activities described in e provide intrinsic motivation because they are fun, promote participation, help students set personal goals related to finances, and provide positive feedback to the students. With careful, creative planning, consumerism in the classroom can be a rewarding experience for the students, both today and in the future.

Money is a fundamental part of life, liberty, and the pursuit of happiness! However, money has a different meaning to students in today's classrooms than it did for their teachers. The average teenager spends \$84.00 per week, \$57 of which was their own money and \$27 from their parents (Wood, 2001). The total expenditure for teenagers in the United States in 2000 was \$155 billion. As the total money spent rises, so does the total debt by teenagers. By the time teens enter college, credit cards are an established part of their lives. In 2000, 78% of college students had credit cards, with an average balance of \$2,748 (Jump Start, 2001). On a test of personal finance skills administered to high school seniors, students averaged a score of 57%, and only 5% of the seniors scored a C or better (Jump Start, 2001). Clearly there is a need for consumer education.

Students love money, but do not usually enjoy being told how to spend their money. To adequately teach students about consumerism, activities must be relevant to them and the items they consume. Promoting intrinsic motivation to become wise consumers requires that teachers follow three strategies. First, the teacher must eliminate threats and stress in the classroom. Learning activities that are fun and encourage participation can help the students learn and retain an increased potential for continued behavioral change. Second, helping the students set meaningful goals (both long- and short-term) will assist them in transferring classroom learning into practical application. Finally, feedback is a great source of intrinsic motivation. It is essential that activities promote success and acknowledge student achievement. It is also helpful to create activities that provide automatic feedback so that students are encouraged to strive towards success whether or not the teacher is present to provide feedback (Jensen, 1998).

The following consumerism learning strategies have been successfully used in secondary classrooms. Family and Consumer Sciences education students were presented these ideas in a third-year teaching methods course at Utah State University. For many of the activities, discussion questions are suggested which will encourage students to think critically. Critical thought processes include assessing information accurately, judging the viability of alternatives,

making decisions, imagining consequences, conceptualizing alternatives, and empathizing with others (NASAFACS, 1998). Strategies also are designed to encourage the participation and learning of students with different cognitive styles. This variety recognizes that people perceive and organize information in different manners, thus impacting the way in which they approach tasks and solve problems. For example, some individuals respond quickly to a problem and make instant decisions. Other individuals will move more slowly and reflectively. Still others will choose not to respond. Yet, all the individuals may be equally knowledgeable concerning the information (Woolfolk, 1995). These consumerism learning strategies included:

- Bag It
- Name That Denim
- How To Spend Your Money
- Taste Tests/Price Comparisons
- Price That Outfit
- The Virtual Mall

Classroom participation and discussion is a vital part of these activities. These activities could be completed in a variety of ways. They could be used as short introductory activities that lead into detailed units. However, they could also be completed with more detail and last several days. A third option that is particularly effective with a large group is the "round robin." The class would be divided into five groups. Each group would complete a different activity for a specified length of time, then all groups would move to the next activity until all activities have been completed.

Bag It

One of the big marketing strategies used by most retailers today is the advertising they place on the bags in which they place consumer purchases. Whenever buying an item from a store, always ask for their "shopping" bag (bag with handles). These can be used for a number of activities. It is a good idea to have your students donate bags for which they have no use. This enables the teacher to have a large selection of bags. Four activities using these bags are listed below

- 1. Since these bags are self-standing, have the bags "stood up" around the room when the students enter. Have them select a bag that they like best. Then discuss with them why they selected that bag. Is it a name brand they like? Do they like the design? Do they like what the bag represents? This can lead into a discussion on shopping and where teens spend their money.
- 2. Place items in the bags before the students select the bags. A wide assortment of items should be placed in the bags. For example: name brand items in name brand bags, generic brand items in name brand bags, candy in clothing bags, etc. Have students select a bag. Discuss whether they selected the bag because they liked the bag or for the item in it. This can lead into a discussion on deceptive marketing, or the influence of the mere appearance of name brand items.
- 3. Give each student a bag. Have students think of three descriptors for their bags. As students present their ideas, let other class members share their thoughts concerning the bag in discussion. Most students get very vocal when it comes to shopping. Encourage them to share their ideas concerning the products represented by the various bags.
- 4. Have a display of bags at the front of the room: a name brand bag with handles, a plastic name brand bag, a super-store bag (Wal-mart, Big K, etc.), and a plain brown bag. Let the

students discuss their thoughts as you hold up each bag. Discuss why different stores use different types of bags. How do the students respond to this marketing strategy?

Name That Denim

Collect at least four different types of blue denim jeans. Select two name brand pants that are popular in your area, one store brand, and a pair of "Levi's" or "Wranglers." Fold the slacks in half and roll them up from the top down. Leave about 10 inches of the pant leg showing, but hide the name brand on top of the jeans.

Have students number their paper from 1-4. Label the jeans with numbers 1-4. Pass the jeans around and have students see if they can identify the type of jeans from just the look and feel of the fabric. They should then write the name brand of the jeans on their paper.

Be careful during this discussion not to make the students that wear store brands feel intimidated or that they are not as good as the other students. Identify the type of jeans and see how many students got the right name brand.

Discussion Questions:

- Did anyone get all four correct?
- Does that person like to shop?
- How did he/she know all the different brands?
- Is it important that everyone wear name brand jeans?
- Who pays for the students' clothing?
- What is the correlation between who buys and what brand they buy?
- Does wearing brand name make you a better person?
- Does it make you feel more accepted and self-confident?
- Who benefits from the selection of jeans based on the brand name?

Discuss how it is usually important for teens to have at least one or two name brand outfits to boost their self-esteem. However, having a closet full of name brand clothing may not be the best use of one's money.

Have the students number from 1-4 on their paper, again. This time, as the jeans are passed around, have the students rate the jeans in order of their durability.

- If you could only buy one pair of jeans and it had to last for a year, which jeans would you select?
- Is this selection different from one made on the basis of fashion and name brand alone? Have students identify the jeans they think would be the most durable. Most likely, the most expensive name brand jeans will not be the most durable. Discuss how the lists are different. In early times, people wore clothing as a protection. Today most people wear clothing as a means of decoration, or as a declaration of who they are.

Taste Tests

Students always love food! Select a beverage and a snack for the students to test taste. For example: apple juice and saltine crackers (name brand, store name, special variety such as salt, fat, or sugar free). Cover the labels on the food items. Have at least three different brands of the same item for the students to taste. Have the students rank the food in order of their preference. Show the students which brand is which. Many times the students actually prefer store brands to name brands—if they can't see the label.

This activity could be extended to have the students do a price comparison of the products. After computing the costs, would they change their selection of the product they

would buy?

How To Spend Your Money

In preparation for this class, the teacher should have pencils, pens, single sheets of paper, notebooks, erasers, paper clips, a worksheet, snacks, gum, etc. for the students to buy. As students enter the classroom, they should leave all of their supplies, backpacks, etc, in a corner of the room. They will each be given a set amount of money for that class period. With that money, they must purchase all the supplies they will need for the class. Any excess money can be spent as they wish. They should not talk during the purchasing time.

Do not tell the students what they will need for class, just let them make their purchases. However, you can explain that this is a real class and they will be doing work for credit. The idea is to give them a wide variety of options that they would like to buy, but have them limited to what they can buy because they must buy classroom supplies. For example, they will need something on which to write, but they can buy a single sheet of paper for a penny rather than a notebook for a dollar. They will also need something with which to write, but they can spend ten cents on a pencil, or a dollar on a pen. Everyone must buy the worksheet (a basic budget worksheet) for 50 cents. An investment option should be also be available. Students are not required to spend all of their money. If possible, place the unnecessary items where the students can see them best.

After they have made their purchases, have them discuss why they spent what they did. Some of the following questions may be useful:

- Who spent all of their money?
- How many items did you purchase?
- Why did you buy what you did?
- Who bought the least?
- What do you plan to do with your left-over money?
- Did you look to see what your friends were buying, or did you make your own decisions?
- Do you think you did a good job of spending your money?

If a student forgot to purchase a necessary item and they have the money, they may do so at any time. If student does not have the supplies or any money, they must sell something they purchased back to the teacher to get the money they need. The teacher will buy back items for *half price*.

Discuss with students the importance of having a plan for spending money and differentiating between "wants" and "needs." The students will then complete the budgeting worksheet.

At the end of class, students with extra money will double their money because they planned carefully and saved some money, not knowing exactly what the end goal was. Those who bought investments will triple their money. Students may then spend all their money on the snacks, or whatever items they wish to purchase.

As the discussions take place, many students will feel cheated because they were not given better instructions, or they spent all their money at the first of class. Liken this to life and money. We never know what to expect, so we better not spend all the money we have. Investing money is a good option to insure financial responsibility later in life.

Price That Outfit

The teacher should come dressed in an attractive outfit that was purchased at a major

clearance sale, or from a thrift store, garage sale, or is a hand-me-down. (Record the amount of money spent on the purchase, as well as the original price of the items.) The purpose is to show students that it is not necessary to spend a lot of money in order to look nice. For example: clothing and shoes bought at a store going out of business, or at the end of the season can be purchased for a fraction of the original cost. Jewelry, purses, and other accessories can be purchased at thrift stores for a small cost.

Have students analyze the outfit. Describe the fiber content, brand name, etc., to help students identify a reasonable price. Have them list the price of each item and total the cost of the outfit on a piece of paper. Review with them the retail price, and the price you paid for your outfit. Many students are unaware of bargain shopping and the tremendous amount of money it saves. By showing them quality items purchased at a greatly reduced cost, you can help them dress better for less.

A fun option for this class is to tell students ahead of time that you will be discussing bargain shopping. Have them bring their "best deals" to school. The class can vote on the best one and that student could receive a dollar for his/her future bargain shopping.

The Virtual Mall

This activity is designed to help students become aware of the convenience and savings/costs of shopping on line. Students select one piece of clothing they would like to add to their wardrobe (shirt, sweater, jacket, etc.) and then complete a comparison shopping activity using the computer. Have them visit at least three different shopping sites on the web and locate items that are as similar as possible. For each shopping site, they must identify:

- 1.) The item.
- 2.) Fiber content.
- 3.) Cost.
- 4.) Care instructions.
- 5.) Shipping and handling.
- 6.) Special promotions available from that site.

Students should then evaluate which would be the best place to purchase the item.

Discussion questions may include:

- How did you select the sites you visited?
- Would you prefer virtual shopping or traditional shopping?
- How do you think virtual shopping will affect our economy and traditional shopping?
- Did you virtual shop with a friend, or by yourself?
- What influenced you to select the item you selected? (Was it the web-site, the actual clothing item, the price?)
- Do special promotions on websites encourage you to purchase additional items? Do they encourage you to return to that website?
- Have you ever purchased something on-line?
- What are the advantages/disadvantages of virtual shopping?
- How will virtual shopping affect the way we pay for items (cash, debit card, credit card, etc.)?
- Did you save time by virtual shopping?
- How does virtual shopping limit the choices of those who do not have access to the internet at home?
- Who benefits the most from virtual shopping?

Summary

The way we spend our money will, in a large part, determine our success in life. Current trends indicate that teens have a large amount of disposable income but are not knowledgeable about consumerism. Despite the need for financial information, teens will not respond to lessons on consumerism without motivation. The activities described in this article provide intrinsic motivation because they are fun, promote participation, help students set personal goals related to finances, and provide positive feedback to the students. With careful, creative planning, consumerism in the classroom can be a rewarding experience for the students, both today and in the future.

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Let's Go To The Movies: Using Motion Pictures To Teach Healthy Dating And Marital Relationships

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Movies are especially popular to adolescents and young adults, and can therefore serve as a valuable pedagogical tool inside, as well as beyond the classroom. The purpose of this article is to describe how motion pictures with themes related to dating and marriage can be utilized in the college or high school classroom. By developing critical thinking skills, students will be better able to understand the falsehoods of how some movies portray relationships. On the other hand, additional movies, such as those discussed here, can offer useful insight and helpful understanding into many issues, such as functions of dating, gender roles, styles of loving, family of origin, marital myths, or homosexuality, concerning modern love relationships.

Many themes in modern movies are strictly fictional--time travel in a fancy foreign car, missions to space to save the world from Armageddon, and fuzzy little creatures that, with the slightest moisture, multiply and reek disastrous havoc on an otherwise peaceful suburban neighborhood. While movies such as "Planet of the Apes" and "Star Wars" easily can be recognized as fictional, it becomes more difficult, however, to separate reality from fantasy in movies where human characters are involved in such complex issues as dating, love, gender roles, family of origin baggage, expectation of marriage, or homosexuality. All are aspects of our very human, very emotional, and very real lives.

Married couples in the United States continue to have a high divorce rate. While numbers have leveled off in the past decade, it is still estimated that approximately 50% or more of new marriages will end in divorce (Olson & DeFrain, 2000).

The impact of media on adolescents has been studied in depth regarding such issues as self-esteem and sexuality (Chapin 2000; Piper, 1994; Polce-Lynch, Myers, Kliewer, & Kilmartin, 2001). The media, especially television and film, has been scrutinized by marriage researchers for its impact on adolescent perceptions and expectations of marriage (Crosby, 1991; Markman, Stanley & Blumberg, 1994; Stanley, 2001). The movies, unlike television, are especially vulnerable to shaping romantic and unrealistic expectations. They, generally, are not viewed at home where parents may provide input, but viewed in theaters with peers who, most likely, have similar limited life experiences. Lest the baby be thrown out with the proverbial bath water, movies can be utilized as a valuable educational tool, not only because of student familiarity with them, but more importantly as a tool for bringing into the classroom themes relating to the day-to-day contexts in which students live. Motion pictures, therefore, can provide a method for utilizing students' affective knowledge domain to develop critical thinking and problem-solving skills in order to evaluate the reality of dating and marital relationships portrayed in them.

The purpose of this article is to describe how motion pictures (videos or DVDs) with themes related to dating and marriage can be utilized in the college or high school classroom. The authors have developed the following generic critical thinking points which, regardless of

the dating and marriage theme, can assist students in identifying problems, cultivating deductive and inductive reasoning skills, developing selection criteria, and gathering relevant information (Way & Nitzke, 1998):

- Describe ways the main characters change through the movie. Give examples and explain what influenced their changes.
- Explain how their changes were positive and/or negative.
- Discuss any evidence of abuse that was implied or described in the movies.
- Describe healthy and unhealthy examples of love and explain why they might be considered healthy or unhealthy. Explain how outside factors impacted the couple's relationship. Analyze ways in which family of origin factors affected the main characters.

Specific themes were selected from the class syllabus of an undergraduate marriage class taught at a mid-sized Midwestern university. The topics were functions of dating, styles of love, gender roles, marital myths, homosexuality, and impact of the family of origin on marriage. Once the themes were identified, the first author utilized the "theme" search at the www.amazon.com website to assist in finding appropriate videos. The site also provides editorial comments on each video, and, therefore, can serve as an initial tool in locating appropriate movies. (For a potpourri of dating and marriage relationship issues the authors strongly recommend the Coalition of Marriage, Family and Couples' website, www.smartmarriages.com.) In addition to the www.amazon.com website, the authors searched for the selected themes in high school and university texts often used in the teaching of marriage and family (see Table 1). Analysis of the motion pictures (see Table 2) incorporating the themes follows.

Table 1

High School and University Texts Reviewed

- Cox, F. D., & Canada, C. (1994). Family living: Relationships and decisions. Minneapolis: West.
- Crosby, J. F. (1991). *Illusion and disillusion: The self in love and marriage* (4th ed.). Belmont, CA: Wadsworth.
- Knox, D. & Schacht, C. (2000). Choices in relationships. (6th ed.). Belmont, CA: Wadsworth. Lamanna, M. A., and Riedmann, A. (1997). Marriages and families: Making choices in a diverse society. (6th ed.). Belmont, CA: Wadsworth.
- Olsen, D. H., & DeFrain, J. (2000). Marriage and the family: Diversity and strengths. (3rd ed.). Mountain View, CA: Mayfield.
- Ryder, V., & Harter, M. (2000). Contemporary living. Tinley Park, IL: Goodheart-Willcox.
- Sasse, C. R. (2000). Families today (3rd ed.). New York: McGraw-Hill.
- Strong, B., DeVault, C., Sayad, B., & Cohen, T. (2000). The marriage and family experience: *Intimate relationships in a changing society (8th ed.)*. Belmont, CA: Wadsworth.

- Fischoff, R., & Jaffe, S. R. (Producers), & Benton, R. (Director). (1979). *Kramer vs Kramer* [Motion picture]. United States: Columbia House, Rated PG.
- Jordon, N., & Woolley, S. (Producer), & Jordon, N. (Director). (1999). *End of an Affair* [Motion picture]. United States: Sony Pictures, Rated R.
- Karsch, A., & Streisand, B. (Producer), & Streisand, B. (Director). (1991). *Prince of Tides [Motion picture]*. *United States:* Columbia Pictures, Rated R.
- Nichols, M. (Producer & Director). (1996). *The Birdcage* [Motion picture]. United States: MGM Universal Pictures, Rated R.
- Obst, L. (Producer), &Whitaker, F. (Director). (1998). *Hope Floats* [Motion picture]. United States: 20th Century Fox, Inc., Rated PG-13.
- Pierce, F., Sellers, A., Winitsky, A. (Producers), & O'Connor, P. (Director). (1994). *Circle of Friends*, [Motion picture]. United States: Savoy Pictures, 1994, Rated PG-13.
- Reiner, R. (Producer/Director). (1999). *The Story of Us* [Motion picture]. United States: MGM Universal Pictures, Rated R.

Functions Of Dating

The process of dating and becoming romantically involved with another individual plays a very significant role in our lives, and according to textbook authors Knox and Schadt (2000) performs some very important functions. The movie, *Hope Floats*, gives a real depiction of dating, and in doing so allows viewers to see clearly the six functions of dating in the lives of the main characters. The functions are confirmation of self, recreation, companionship/intimacy/sex, anticipatory socialization, status achievement, and mate selection. Birdie, played by Sandra Bullock, is actually a newly divorced woman. While Knox and Schacht (2000) explain the functions of dating with regard to adolescent years, it is evident throughout the movie that these same functions of dating apply at any age.

Birdie's husband decided that marriage was not for him-- at least not marriage to Birdie. It seems he was looking for someone a little more like his secretary. In light of the news, Birdie packs up her daughter and their belongings, and they head back home to live with her mother. Enter Justin, the mother's handy man played by Harry Connick, Jr. As Birdie sulks and feels sorry for herself, her mother encourages Justin to pursue Birdie.

Confirmation of social self, the first function of dating, is a process by which individuals learn about themselves through the feedback of others-- in essence, how individuals think a dating partner sees them. Knox and Schacht (2000) explain, "when a person gives you positive feedback through speech and gesture, you feel good about yourself and tend to view yourself in positive terms" (p. 60). Justin contributes to Birdie's confirmation of social self, and gives her the confidence, not only to get out of bed and take a shower, but also to get a job and begin to move on with her life.

The Recreation function, or "dating, hanging out... fun" (Knox & Schadt, 2000) is

demonstrated when Justin convinces Birdie to "let loose" and go fishing, and a few days later he even gets her to dance with him. The functions of companionship/intimacy/sex occur when Birdie begins to truly feel comfortable with Justin. The intimacy of the relationship is clear in a scene while they are sitting on the porch swing, when they are alone and able to talk seriously about their future ambitions. (Sexual intercourse makes a dramatic appearance here, but it is important to recognize that sex does not refer only to intercourse, but manifests itself in such behaviors as kissing and touching, as well.)

Knox and Schacht (2000) define anticipatory socialization as the function that teaches individuals how to interact with people of the opposite sex. They explain it refers to the process of establishing what is expected in the relationship: negotiating differences, gender role patterns, and assessing a comfort level. Birdie and Justin confront these issues, not so much by discussion, but by trial and error. It takes Birdie some time to realize that Justin's role is not to feel sorry for her and baby her. Justin helps her develop an interdependent relationship rather than an unhealthy one built on pity and dependency (Crosby, 1991).

Through her relationship with Justin, Birdie also experiences the fifth function of dating, status achievement. According to Knox and Schacht (2000), a relationship with a member of the opposite sex "is usually accompanied by more status than being unattached and alone" (p. 61). This concept is clearly illustrated in *Hope Floats*. Birdie is no longer a divorced single parent and one-time beauty queen who hides out in her mother's attic bedroom. People see her differently, and it simply may be that being with Justin puts a smile on her face, and it is easier from a societal perspective to command respect when happy. It also may reflect the stigma society places on divorced women with small children or a perception that a woman is not complete without a man. Discussion of this dating function might also include the fragile nature of self-confidence, such as young women who stay in unhealthy relationships solely for the status they receive from their peer network.

The final function of dating, *mate selection*, or the pairing of two people, is achieved by Birdie and Justin. When Bernice asks her mother if she is going to marry Justin, Birdie answers that she is "not going to marry anyone right away." She also smiles, conveying her happiness with Justin, which leaves the viewer with the assumption they probably eventually will marry. While Justin and Birdie only date each other before the supposition of marriage, most individuals do not marry the first person they date. Knox and Schacht (2000) refer to dating as a filtering process in which individuals use cultural, sociological, and psychological factors to assist in screening their marital choice. In addition to the critical thinking questions listed above, additional queries related to what cultural, sociological, and psychological issues played a role in Justin and Birdie's selection of each other as marital partners could be developed.

Love

Researcher and theorist John Lee conducted 120 interviews, 60 men and 60 women, to determine ways in which lovers relate to each other (Lee, 1973). He classified his results into six categories, which he called love styles. These six love styles are Eros, Storge, Pragma, Agape, Ludus, and Mania (Knox & Schacht, 2000; Lamanna & Riedmann, 1997; Strong, DeVault, Sayad & Cohen, 2000). Lee (1973) emphasized that most individuals view love in more than one way at a time and that their views of love may change over time.

The movie, *Circle of Friends*, is the story of three girls who grow up together, develop very different personalities, and handle love, sex, and relationships in very different ways. It can be used to discuss the positive and negative aspects of each style of loving. *Ludus*, the first love

style, is generally unhealthy and associated with game-playing. Ryder and Harter (2000) refer to this style of love as "passionate love...[which] is driven by nature's desire for biological fulfillment, and it often operates without reason." (p. 272). This carefree view of love is demonstrated by many of the couples portrayed in *Circle of Friends*. Throughout the movie we see wild parties, drunkenness, and "free love." Commitment is obviously not a relationship necessity, as the teenagers experiment with relationships, love, sex, and freedom.

The second love style, *pragma*, involves individuals assessing their partners logically and rationally on such things as assets and liabilities and economic security. Logic would not allow for age discrepancy, long-distance, or interracial relationships. In his attraction to Bennie, Shawn portrays this style. He feels strongly for Bennie, but it seems many of his feelings are based on circumstance. Shawn works in Bennie's father's store and hopes to inherit the store when the old man dies. He has grown up with Bennie and assumes his will be a comfortable marriage, living from the income of the store.

The *eros* style of loving is concerned with sex and passion (Knox & Schacht, 2000; Lamanna & Riedmann, 1997; Strong, DeVault, Sayad & Cohen, 2000). While it is an important component of love in healthy committed relationships, it is empty when it is the only factor drawing couples to each other. Nan and Simon's style of loving seems to exist solely on this type of love. Simon is attracted to Nan's physical beauty. Their relationship is based on empty cottages, hotel rooms, wine, and candles. They do not talk, no emotion other than lust is portrayed, and their "dates" always end when the sun rises.

Bennie and Jack portray a storge love style, which is a love based primarily on friendship, comfort, commitment, and respect (Knox & Schacht, 2000; Lamanna & Riedmann, 1997; Strong, DeVault, Sayad & Cohen, 2000). This love style also is referred to as "philo" (Crosby, 1991) or simply "friendship" (Gottman & Silver, 1999). Recent research by Gottman and Silver suggests this style of love is the most important style for healthy long-term marriages (1999). This style is healthy because by being friends couples share similar interests and values, and get beyond the superficial attraction based on physical appearances. As demonstrated by their friendship, it is easy for viewers to recognize that Bennie and Jack *like* each other, as well as love each other. They also discern each other more realistically than others who do not utilize this love style. The directors of the movie stressed this point by making Bennie slightly overweight and Jack somewhat naive. Because of the imperfections in characters, their growing love, based on friendship, seems very real, honest, mutual, and comfortable.

The agape love style is characterized as a selfless, unconditional love, similar to the love parents have for their children (Knox & Schacht, 2000; Lamanna & Riedmann, 1997; Strong, DeVault, Sayad & Cohen, 2000). Eve and Nick, though they play secondary roles in the movie, seem to have this kind of relationship. The director seems to imply that their relationship needs no explanation. The couple is content with each other, and is unaffected by the scandal and drama occurring to others. Eve appears to be willing to do absolutely anything for Nick, and Nick seems more than willing to return the favor. Crosby (1991) recognizes a potential pitfall of agape love if it is not exhibited by both individuals in a relationship. If only one of the partners demonstrates agape love, the other can very likely be manipulating and exploiting the other's kindness.

The mania love style, as its name suggests, explains a love that is "out of control... extremely jealous and controlling" (Knox & Schacht, 2000). While this style of love is not portrayed in *Circle of Friends*, it is clearly depicted in many other movies. One example is Maurice's obsession with Sarah in the movie *The End of the Affair* in which his jealousy results

in having someone follow her.

Ryder and Harter's (2000) and Cox and Canada's (1994) high school texts explain Lee's (1973) styles of love using different terminology but similar characteristics. Ryder and Harter, for example, divide the six styles into positive and negative types of love. Lee's *eros* style is defined as the negative "passionate love," and the *storge* love style is explained as the positive "friendship love." The authors are uncomfortable with Ryder and Harter's depiction of *eros* as negative. If a relationship is based solely on *eros* it is shallow and negative. However, as Lee suggests, rarely is any individual only one. We suggest a healthy discussion could include *eros* as a healthy component to a long-term marital relationship. This discussion could assist in diminishing the myth often depicted in the media that marital sex is tolerable, at best, but not as exciting as pre-marital or extramarital sex.

Cox and Canada (1994) describe love using only three of Lee's terms, *eros*, *agape*, and *philos*. They explain *eros* love as a physical, sexual type of love. *Agape*, contrastingly, is explained as a spiritual love, while *philos* is described as a brotherly, neighborly love.

Gender Roles

A primary area couples need to address in their relationship before marriage is gender role expectations. While these role expectations have become more egalitarian in the past few decades (Crosby, 1991; Strong, DeVault, Sayad & Cohen, 2000), many couples still cling to traditional dichotomous roles for males and females. Traditional gender roles are based on a male-centered society. In this manner, the strong, powerful male is regarded as the decision maker and breadwinner, while the woman's role is to care for her children and provide emotional support to her family (Olsen & DeFrain, 2000; Ryder & Harter, 2000; Sasse, 2000; Strong, DeVault, Sayad & Cohen, 2000.) According to Lamanna and Riedman (1997), males are considered to exhibit "instrumental character traits," which help them finish hard tasks and accomplish goals. Women, on the other hand, exhibit "expressive character traits," which prepare them for expressiveness of emotion and compassion for others (p. 52). The only emotion traditional society allowed men to demonstrate was anger. From the time they were young, boys received the message, "Big boys don't cry." As a consequence, for many males their nurturing compassionate component never was permitted to develop.

The movie, *Prince of Tides*, demonstrates the limitations of strictly adhered to traditional gender roles. Tom, played by Nick Nolte, has been raised by an overbearing father, who firmly believes men have control over their wives, and by a submissive, passive mother. His parental role models are a mother who stays home and cleans, cooks, and cares for the children during the day, and then is beaten by her ungrateful husband who assumes all credit for family functioning because he has been hard at work all day. As a child, Tom is conditioned not to cry when his father states if he is going to cry, he'll have to wear one of his sister's dresses. This scene reinforces the belief that crying and tenderness are solely feminine characteristics. When Tom reaches adulthood, his parents continue to articulate their traditional beliefs by expressing negativity to Tom's chosen occupation as a high school English teacher. His parents assume that teaching, especially English, is a 'woman's job'. In one scene, his mother describes teaching as a 'seemingly ridiculous career choice'.

By the end of the movie, a therapist, played by Barbara Streisand, who Tom encounters in New York, helps him learn that expressing feelings, regardless of one's gender, is much healthier than suppressing them, and that family is the most important area for them to be shared. Tom returns home to South Carolina, now able to express his feelings towards his family. He

feels free to cultivate his expressive side that allows for the growth and deepening of his familial relationships.

Prince of Tides also is valuable to use in discussions of family secrets and child sexual abuse. It also has received ethical criticism from the therapeutic community because of the sexual relationship between Tom and his therapist.

The 1970s movie, *Kramer vs Kramer*, staring Meryl Streep and Dustin Hoffman is a classic film to use when teaching the evolution of gender roles in the United States. Hoffman is the traditional husband enwrapped in his cultural and self- prescribed role of sole family breadwinner. Because of his desires, his wife, Meryl Streep, is a stay-at-home mom to their young son who is now a first grader. Over a period of time, Streep begins to feel that her life has stagnated and lacks opportunities for personal growth. Ultimately she becomes depressed. Her emotional and developmental wounds go unnoticed by her husband who believes his family is functioning well, and he is excellently filling his family role by climbing the proverbial corporate advertising ladder.

Even though loving her son, Streep decides to leave her family because she believes her emotional health does not allow her to be a good parent. The unprepared Hoffman is left with an expanded father role. He does not even know the grade at school in which is son is enrolled. Through the course of the movie, Hoffman evolves into a nurturing parent and recognizes the dichotomous gender roles he once took for granted were unhealthy for him as a father and were the reason for his wife's leaving. Eventually, through professional help, Streep's emotional health returns and she sues to regain custody of her son. During a courtroom scene, Hoffman's attorney, in an effort to discredit Streep for leaving, questions why she left her family. His questions articulate the role of the traditional husband: "Did he beat you?" "Did he drink alcohol to excess?" "Did he fail to provide an income?" "Did he have an affair?" To each of these questions, Streep answers negatively. At which time, Hoffman's attorney sarcastically replies, "I can certainly understand why you left him!" The scene is a powerful teachable moment to discuss how gender roles expectations are changing and the traditional breadwinner, non-abusing, monogamous spouse role is not sufficient for modern marital relationships.

Homosexuality

Homosexuality is an uncomfortable topic for many educators and students. Unfortunately restrictions may exist on discussing the topic in public high schools, but college instructors should find their environment more accepting. The Birdcage, starring Robin Williams, takes a humorous look at the pressures homosexual households continue to experience in today's society, while at the same time, detailing the complexity of the issue. Val, the boy whom a gay couple Albert and Armand have raised, is now 20 years of age. Having been brought up by these gay men, Val finds it difficult to describe his family structure to his new fiancé's very conservative parents. When the meeting of the two families can no longer be postponed and not wanting to destroy Val's relationship with his future in-laws, Albert and Armand decide to conform to what the fiance's traditional parents are expecting. They change their names to hide their sexual orientation, disassociate themselves from the gay nightclub they own, and redecorate their home to ensure removal of any identifying evidence. In essence, they completely change themselves to be "acceptable." In *The Birdcage* things work out to the good, unlike real society in which same-sex oriented individuals are often forced into secrecy and giving up their dreams to fit in with what is "normal," based on our cultures stigma of homosexuals (Lamanna & Riedmann, 1997).

Family Of Origin/Marital Myths/Expectations

As more research is conducted on marital relationships, the family of origin has been shown to play a major role in how couples communicate, handle day-to-day interactions, create marital expectations and perpetuate myths of love and marriage (Crosby, 1991; Larson, Benson, Wilson, & Medora (1998).

The Rob Reiner movie, *The Story of Us*, starring Bruce Willis and Michelle Pfeiffer, was poorly received by movie critics (Solle, 1999), but praised by marriage educators. It won the 1999 Coalition of Marriage and Family Couples' Education Outstanding Media Award. Throughout the movie the subtle impact of family of origin, unrealistic expectations and marital myths are intertwined between the Willis and Pfeiffer characters. The family in which we were raised has a tremendous effect on our future relationships. Children observe and internalize such things as how their parents communicate to each other, how they relate to their children, and how they handle life stressors. These things are carried, generally unconsciously, into marriages the children create (Crosby, 1991). According to Larson, Benson, Wilson, and Medora (1998), family of origin issues are important to study because they form the basis of what is expected in marriage relationship. For example, the researchers suggest that pessimism as a relationship expectancy may influence how individuals behave and interpret information when interacting with their partners. We see this generational transfer of pessimism when Ben and Katie are unconsciously accompanied by their parents in the "six in the bed" scene. Everyone being in the scene together makes the amazing influences of families of origin even more obvious. Katie's desire for structure and negative attitude complaining about "where all the therapy had gone" were words directly out of her mother's mouth. Ben, on the other hand, prefers spontaneity, optimism, and fun demonstrated by his parents comments.

Another issue plaguing the everyday lives of dating and married couples is the belief in marital myths. According to a review on the Coalition of Marriage, Family, and Couples' Education website, (Solle, 1999), *The Story of Us* deals with "getting past the myths about marriage. The movie rebuffs the marital myths that good marriages come naturally and love is all a marriage needs. During the movie, it is obvious that Katie and Ben love each other but struggle over time to make their marriage work and that sometimes not even effort (both Ben and Katie put in their share of simple effort) but blatant determination and commitment is necessary to make a marriage last.

"Children cement the marital bond" is another myth to which many marriage romantics subscribe (Crosby,1991). He, however, explains that children have a statistically negative impact on marital satisfaction. The impact of children is a major, albeit subtle, theme of the movie-- not that Ben and Katie's children hurt their marriage, but that the marriage relationship changes with children. As the movie progresses, we see the introduction of children leaves less and less time and resources for the couple to be a couple.

Katie stresses the falsehood of the "one right partner" myth in her soliloquy at the end of the movie. She says to Ben, "There's a history here and histories don't happen over night...I don't want to build another city...That's a dance you perfect over time..." The myth of a *right partner* implies that individuals need to keep looking until that person "pops up." Katie is more accurate when she uses the words "history," "build," and "time" to portray the concept of "investing" in the relationship, rather than wasting time searching the earth to "find" the right person.

Ultimately, Ben and Katie learn that taking romantic vacations in an effort to repair their

shaky relationship is not the proper medicine. They learn instead it is discussing the expectations each have of the other and looking at things on a daily basis from the other's perspective is the way to "invest" in and "build" a healthy marriage.

Entering a relationship while continuing to believe in the myths surrounding marriage can have a negative impact on a relationship before the relationship has a chance to develop. Therefore, debunking myths serves an important task of helping students to gain a more realistic understanding of what long term relationships are about.

Conclusion

Motion pictures have been a part of our culture for over a century and will continue to be a part as the new millennium progresses. Movies are especially popular to adolescents and young adults, and can therefore serve as a valuable pedagogical tool inside, as well as beyond the classroom. By developing critical thinking skills, students will be better able to understand the falsehoods of how some movies portray relationships. On the other hand, additional movies, such as those discussed here, can offer useful insight and helpful understanding into many issues, such as functions of dating, gender roles, styles of loving, family of origin, marital myths, or homosexuality, concerning modern love relationships. They can give us insight into our own relationships as well as some varieties of diverse relationships to which we would otherwise be ignorant.

Given the time it takes to find good classroom motion picture relationship themes, creating a teacher website or chat group to post current movies and listing their specific subject matter would be valuable. As with any educational materials, and especially videos, the authors recommend previewing material prior its use in the classroom or before given as an outside assignment.

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