CURRICULUM CHANGE IN HOME ECONOMICS EDUCATION AT GWERU TEACHERS COLLEGE, ZIMBABWE, 1975-1995

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This study will enrich the historical base of home economics education in Zimbabwe and document the curricular changes and contextual factors influencing the home economics teacher training program at Gweru Teachers College in Zimbabwe, between 1975 and 1995. Data were collected through documents that were supported by in-depth interviews. Former Gweru home economics lecturers and students were interviewed, and current lecturers participated in a focus group. Structural and administrative changes were found to be more fundamental than conceptual changes. Political and economic crises prompted program changes more than professional concerns for the subject.

Zimbabwe is a former British colony gaining political independence in 1980. The quality and provision of education has been central to the politics of the country since the introduction of the first Western school in 1859. Both the colonial government and the successive Black government each had their own vision of education in Zimbabwe. Most African programs have been characterized by irrelevant professional practice, curriculum that is highly foreign and does not take into account African developmental needs and problems, a lack of critical thinking, and lack of qualified personnel at all levels (HEAA, 1996; Waudo, 1993). The purpose of this study was to investigate the contextual factors which shaped home economics education at Gweru Teachers College in Zimbabwe.

Literature Review

Home economics as a field of study has its origin in the United States of America. According to McGrath and Johnson (1968), the first record of a course in home economics came from Iowa State College in 1869. The primary purpose of the course was to prepare women for work in the home. On the African continent, home economics programs were largely imported by European missionaries (Atkinson, 1972; Kwawu, 1993; Molokwu, 1990; Owalabi et al., 1991; Waudo, 1993). Thus, the beginnings of home economics in the Americas during the middle nineteenth century to early twentieth century coincided with the Scramble for Africa (period when European countries competed to colonize African countries). The trend and pace for home economics and other educational programs were, therefore, set by Christian missionaries.

In Zimbabwe, for example, Christian missionaries opened the first Western-type school in 1859. Initially, their aim was to introduce Christianity (Mungazi, 1990, 1998), but they soon introduced academics. The earliest policy statement issued in 1899 spoke of providing Africans with "systematic training in household work or agriculture" (Atkinson, 1972, p. 90). The 1907 education ordinance prescribed "domestic work" (p. 90) for girls as one aspect of industrial

training so Africans could cope with, and improve village conditions. Domestic work included cookery, laundry, sewing, first aid, and housekeeping.

Curricula known as 'education for village industries' was introduced between 1918 and 1922 (Mungazi, 1990). Blacks were taught hand crafts such as basket making, chair making, poultry keeping, and tilework. This innovation was short lived because Blacks demanded an academic education similar to the education of White children rather than education directed towards the production of crafts.

From 1927 to 1935, administrative personnel emphasized community development programs such as maternity care, child welfare, irrigation, health, and agricultural improvement (Mungazi, 1990; Parker, 1960). However, due to the effects of the depression, coupled with the hostility of the chief Native Commissioner who was against Black advancement, the program soon folded (Parker, 1960).

The 1940s and 1950s saw girls and women being trained for homemaking and employment in textile mills and clothing factories. Because of economic growth after the Second World War, Blacks moved into town necessitating the opening of more schools (Kuster, 1994). In the late 1960s and 1970s Blacks increasingly questioned imbalances between education for Whites and education for Blacks, such as limited access to educational opportunities and the uneven distribution of educational resources including teachers (Nhundu, 1989).

In 1980 Zimbabwe gained independence from Britain and immediately began the task of redressing colonial imbalances and grievances of the Black population. Educational opportunities were democratized and racial education abolished. Several administrative and structural changes were made to education as a whole. The nature of these changes as they relate to home economics education and how they affected its development, are included in this study.

Methodology

Research Design

Historical methods were used to determine the contextual factors which shaped the home economics education program at Gweru Teachers College (GTC). The home economics program at Gweru Teachers College was chosen among home economics programs offered in fifteen teacher training institutions since it had been in existence the longest, and was the largest producer of secondary school teachers.

Data Collection

Data for the study were collected through an analysis of historical documents such as Department of Teacher Education Reports on Colleges, course syllabi, examinations, external assessors and examiners' reports, various forms of correspondence, student enrollment data, college pass lists and records of minutes of the GTC Home Economics Department. These were further supported by in-depth interviews, a focus group, and informal observations. Six former students and two former lecturers of the Home Economics Department at GTC were purposefully selected for interviews by following cues given by other interviewees. Arrangements for interviews were then made by telephone. Students prepared at Gweru were selected from the entire period under study, 1975-1995. Three lecturers who taught in the department for five years or more were selected for participation in a focus group. Interviews were preceded by an initial document search and analysis, and were interlaced with periods of searching, reading, and analyzing documents.

Further triangulation of data was provided using primary data sources such as teacher education reports on colleges, departmental course syllabi, external examiners' reports, various forms of correspondence, college pass lists, and records of departmental meetings. Content validity was achieved by using primary data sources and consulting experts in historical research, teacher education, and home economics.

Data Analysis

The data were divided into four time periods–1975 to 1980, 1980 to 1985, 1985 to 1990, and 1990 to 1995. The boundaries created by the divisions were, however, not definitive since an overlap was possible due to the nature of qualitative data. All interviews were taped and transcribed with analysis ongoing. The following topics were explored in the data and are reported below: program structure, enrollment history, curriculum, and contextual factors.

Findings and Discussion

Program Structure

The structure of the home economics education program evolved from a two-year program before 1975, to a three year program during the period 1975-1982, and then to a four year program from 1983 to 1990. Between 1988 and 1995 the curriculum was again revised and returned to a three year program. Two programs ran concurrently between 1988-1995. The four year program was phased out while the three year program began. Each structure had advantages and disadvantages. One lecturer reported, "...during the pre-independence period, [students] were supposed to teach under a qualified teacher, and so get a lot of supervision and guidance, but after independence they were going to face ... a whole class and ... teach a whole year". One student elaborated, "... because our fellow home economics students spend a whole year [on teaching practice], some become very stubborn. They take themselves to be full qualified teachers...." Educational advantages revolved around the need to provide a structure that allowed the professional growth of students. Administrative convenience centered on issues such as enrollment, deployment of students while on teaching practice, frequency and quality of supervision, accommodation during residential periods, provision of teaching/learning resources, and certification of students. According to Kapfunde (1997), sometimes policy decisions are based more on political considerations than on professional considerations.

Enrollment

In the early 1980s, Zimbabwe needed to alleviate the chronic shortage of teachers caused by rapid expansion and increased enrollments in both primary and secondary education. At that time, focus of home economics programs shifted from training homemakers for village and communal life to training teachers for the education system.

In 1988, there were 42 graduating students but by 1993 the numbers had almost doubled with 80 graduating students. Similarly, the number of lecturing staff varied between six in 1989 and eleven in 1990 and 1991.

Traditional gender stereotypes associated with home economics were broken in 1995, with 15 male students enrolled in the program, two graduates, and one male lecturer. One lecturer recalled earlier times, "Oh, in those days ... we never had male students. It was kind of taboo to get male students." A higher enrollment of male students may have been caused by a greater focus on teaching skills which would have greater economic potential.

Curriculum Error! Bookmark not defined.

Before 1980 all courses received equal emphasis. The structure of the program allowed generous time allocation for all aspects and the program provided a rich environment of needed resources. A former student reported, "At that time [late 1970s] ... the classrooms were well equipped. We had enough stoves, enough sewing machines and the [classes] were not very large. ... We had our own library ... although some of the books were a bit outdated"

In the early 1980s, the concept of major and minor subjects, where students spent more time taking courses in their major area of study, was introduced. Two majors/minors were created namely 'foods, nutrition and home management', or 'clothing furnishings and fabric care' (GTC, 1982). From the mid-1980s to 1995 the program reverted to a generalist approach placing equal emphasis on all areas (TERC, 1986). Students who trained during this period were less confident about their ability to teach, unlike those who trained earlier and felt they were overqualified. The amount of time allocated to a subject per week dropped from nine hours in 1978 to four-and-a-half hours in the 1990s. The limited amount of time devoted to teaching each of the subject components, coupled with generally depleted resources in the 1990s, may have had a negative impact on the quality of teacher produced.

During the late 1970s, skills acquired in home economics were needed in order to improve the health and living conditions of the individual and their community. The Institute of Education (1981, p. 1) recommended that "... more time allocation [be given] to the nutrition content in the course; an area of vital importance in national development." Home economists were needed in order to return to their communities and teach healthy habits (Mungazi, 1990).

In early to mid 1980s because of the shift from training homemakers for village and communal life to training teachers for the education system, the curriculum focus changed. The government realized students needed skills not just for the home and classroom, but for the job market. Student teachers were supposed to learn practical skills which they would impart to secondary school students so they could get jobs in industry or other formal sectors of the economy. Hence, self-reliance and income generation activities were stressed (Nhundu, 1997).

In the 1990s, the focus on job skills continued, with an added dimension of being able to create jobs. Upon completion of secondary school, the majority of graduates found themselves with no available jobs. Therefore, students were expected to acquire skills which could be used to start businesses and employ others.

An examination of departmental syllabi for changes in subject matter revealed changes in course names (see Table 1). There was little change in content, a view that was vividly presented by one focus group participant: "Our courses have always had this emphasis on home management, fashion and fabrics, food and nutrition, and ... applied education or methodology. We still have them as they form the core of our courses here." The respondent continued by describing the existence of a "hidden curriculum" where knowledge was carved into different subject areas without causing visible, documented evidence of changes in subject matter. According to Cuban (1997), when such change happens, it is termed *incremental* change rather than *fundamental* change. Incremental change occurs when new ideas, new topics, and new teaching strategies are introduced but the subject areas remain the same.

Table 1
Subject Content Areas Emphasized: 1975-1995

Period	Subject Content Areas
1975-1980	(I) Housecraft (ii) Needlework and dressmaking (iii) Cookery (iv) Gardening and small livestock (v) Physiology and hygiene (vi) First aid (vii) Project (viii) Methodology (of teaching home economics)
1980-1985	 (I) Foods, nutrition and home management (ii) Clothing, furnishing and fabric care (one of the above taken as major subject, the other one as a minor subject) (iii) Applied education [methodology] (vi) Enriching or broadening component*
1985-1990	(I) Foods and nutrition(ii) Home management(iii) Fashion and fabrics(iv) Family and child studies(v) Applied education [methodology](vi) Project (compulsory)
1990-1995	(I) Foods and nutrition(ii) Home management(iii) Fashion and fabrics(iv) Methods of teaching (applied education)(v) Project (compulsory)

^{*}Enriching and Broadening component: Equivalent of the project that was intended to give students the opportunity for research and in-depth study on topics of their own choice and interest

Both interviews and departmental syllabi provided information about the program's pedagogical shifts. The following expressions, taken from interviews and other documentation, give a glimpse of the quality of teaching and learning experiences prevailing at any given time.weak methodology and an artificial environment under which some students trained. When asked for any weakness of the program they trained in, one of the students replied:

... that program was very enriching but what I thought was weak was the methodology. They were not really looking at the practical problems, trying to solve them with the resources that you would sort of find when you go out to teach. ... it was a bit artificial ... it wasn't the same sort of environment we were experiencing. So you would have to adjust to suit the needs of that immediate environment.

• program's inability to prepare students to adapt to various situations or environments. Teachers who taught in rural schools believed that their schools were disadvantaged mainly because of lack of resources. One of them reported:

I am teaching in a rural area. The equipment is not sufficient and we have many problems with the headmasters [school principals]. . . . they tell you that they don't have the money, . . . And when we are assessed at regional level, they compare us with other schools which have got everything. So it's a little bit unfair

• inadequate resources (including human resources) therefore, inadequate practice. When asked for any differences between how they were taught and how they were teaching, one of the student interviewees responded:

Because resources are sort of very much limited now, and our students cannot be exposed to as much variety of resources like what we had at GTC. The rooms are too crowded now and its very difficult to deal with students at personal level.

Another concurred:

... some of the expectations we have cannot be met because we don't have the resources. ... Our programs have for many years been starved of the proper skills that are required for the next millennium. I think our home economics programs have got constraints, ... constraints of the required resources, constraints of staff.

• inadequate time, therefore, rushed through the program. One lecturer interviewee who taught in the early 1980's commented:

The weakness was rush . . . and the numbers. We started getting very thin on resources . . . and our human resources were not well baked [quality of teachers produced was questionable] because we were rushing to satisfy the demand that was out there.

- large student numbers causing constraints on equipment. A student who trained in the late 1970s recalled, "At that time . . . the classrooms were good because they were well equipped ...the [student] groups were not very large. They were small and you were able to use those facilities without crowding". In contrast, one lecturer who was teaching in the college at the time data was collected observed that "The rooms are too crowded and its very difficult to deal with students at personal level."
- need to change teaching approaches. One lecturer who was asked to comment about the differences in teaching strategies commented:

The teaching before independence was to make the school efficient, or just a teacher where you don't question anything, you don't explore anything. Follow a recipe like that, don't change it, and you saw this like this and that is what you are going to do . . . But now when we teach its like we have different situations in the schools. . . .

Another lecturer observed:

We have also sold to the students the outreach program, where we take the people from the community and teach them skills like jam-making. We expect that when the students go to their schools they will also help with such programs.

One student interviewee also explained that: "I feel the home economist of today should be more critical . . . and focus on the needs of today. It's really important that they even make an analysis of what they teach . . .". Further, the Institute of Education (1981, p. 1) observed:

... a new approach and emphasis is needed, the needs of the members of families in Zimbabwe studied, and how to meet these needs considered. Greater emphasis should be given to principles and less time and energy on mastering every skill.

Demonstration and lecture methods, however, continued to be popular into the 1990s. An external examiner in 1994 observed that the program had, over the years, emphasized *production* at the expense of problem solving (GTC, 1994). Similar observations were echoed by interviewees who spoke of the need to expose teacher trainees to real life situations where they are required to solve day-to-day problems.

Overall, earlier programs appear to have provided richer, well funded, and more meaningful, life-long learning experiences for students. All students who trained between 1975 and 1985 were happy with their training. They believed they were better prepared to teach than those who trained later. The quality of the learning experiences seems to have dropped somewhat due to a number of factors. First, large numbers of students were admitted without a corresponding increase in lecturing staff. Second, there were depleting resources in proportion to the escalating number of students. Third, outdated and malfunctioning equipment was not replaced. Fourth, there was low morale among lecturing staff due to the above administrative problems (GTC, 1991a, 1991b & 1996). Thus, between 1985 and 1995, the program at GTC lacked both the qualitative and quantitative support factors for the effective implementation of the program.

Contextual Factors Influencing Home Economics Education

A summary of contextual factors, their influence on the aims of education, and changes in the GTC Home Economics Program are presented in Table 2. Because of many political hostilities and uncertainties characterizing the 1970s, and possibilities of a change in government in the late 1970s, changes were initiated in teacher education as a whole (GTC, 1975). Teacher education changed from a two-year program to a three-year concurrent program, and then to a four-year program to accommodate current thinking and needs of different governments. In order to make education more accessible, more relevant, and curb the unemployment problem, a new initiative focusing on skills training was introduced. Both the structure and subject matter of home economics education at GTC should have reflected a curriculum that was career-focused, but available documents did not show this trend. Instead, a new program which was vocationally oriented, the National Foundations Course, was introduced at a different teacher training college. Thus, two kinds of home economics teachers were produced in the country, a vocationally oriented teacher and a traditional home economics teacher.

Table 2
Summary of Contextual Factors in Relation to Broad Aims of Education and Changes in the GTC Home Economics Program

Period	Contextual Factors	Broad Aims of Education	Impact on GTC Home Economics	Outcome of Program Changes
Before 1980	Colonial government Racially divided policies in all sectors Economic stagnation Differentiated curriculum based on race and abilities Education tied to community development Restrictions based on age, fees screening, etc African education not compulsory.	Need to contain African advancement	Produce homemakers and community educators Emphasize skills training, theoretical underpinnings not emphasized No specialization- all subject components compulsory	Negative attitude toward technical education due to political connotations Highly skilled personnel, but no theoretical understanding of subject matter.
1980-1985	Attainment of political independence Democratize educational opportunities Increased access to education at all levels Removal of barriers/restrictions in education and employment Increased parental and community involvement	Need for education and literacy	Increase enrollment Focus on producing teachers for the classroom 4-year program Indegenize curriculum Major/minor options though flexibility is encouraged	High output of teachers Strain on resources Name changes of courses Rising concerns about the quality of teachers produced
1985-1995	Rising unemployment Eroding economy Vocationalize school curricula Increased consultations with industrialists and other stakeholders Increased parental involvement	Need for jobs	Add new knowledge and skills Encourage self-reliance and income generation activities Develop entrepreneurship skills Re-introduce 3-year program	Overloaded curriculum However, no impact on course organization Lecturers need staff development Teachers produced no longer as proficient in skills

Note. The period 1985-1990 has been combined with 1990-1995 since the contextual factors remained basically the same.

Focus group participants indicated focusing on skills training alone was not enough because Zimbabwe needed a more "beefed-up" teacher in the 1990s, one who had both technical skills and awareness of environmental issues. They spoke of the need to diversify current programs, have community outreach and extension programs, and have students become aware of their immediate environment, the community, the country, and the world. Such programs, especially those that advocated community connections, were evident in the 1970s but were rejected by the Black people because of racial overtones. The programs seemed to disappear in the 1980s but re-emerged in the 1990s. What caused the resurfacing of "old ideas?" The late 1970s were marked by increased hostility among racial groups, high unemployment, and

unstable family structures due to people leaving their homes to join the war of liberation. In the 1990s, unemployment reached unprecedented highs and most families struggled for economic survival. Socially, family stability and values were challenged in the midst of the AIDS epidemic and continued influence of the West. Focus group participants strongly felt these issues should be addressed in the program.

Conclusions

It is evident that changes in the program were closely tied to the prevailing political conditions during that time period. The government in power influenced the structure of the program, the available resources, and the type of teacher produced. There was no documented evidence that directly linked major or fundamental change to the professionals. Lecturers spoke of "internal changes" and "changes in the environment" as the forces that had induced them to change but such reports were not documented. The general framework of change was provided by government, and the role of professionals, the lecturers, was limited to the implementation level. However, implementation was not always completed as it was intended. One of the focus group participants was concerned that lack of representation at the policy making level was one of the many problems besieging home economics. So, for change to have meaning and the desired impact, it requires the active participation of those involved at the decision making and implementation levels.

While goals were clearly formulated at the government level, the means of realizing them through curriculum appeared not to have been adequately articulated. The resource base of the department, both material and human, actually dwindled. Effective supervisory structures that would ensure that changes were implemented were not put in place. In other words, it was left to the lecturers to decide whether or not to change.

The findings also raised fundamental questions about how, and if, real changes occur in the nature, scope and practice of home economics education programs worldwide. Some ideologies may resist change. Issues about the welfare of people re-emerged as major concerns in the 1990s. Although in most developing countries such concerns focus on economic needs, they also need to address building a 'total' human being, an individual aware of the larger environment in which they live, and who can rectify societal concerns. Suggestions for outreach programs which make use of available technology were encouraged as a way to reach people in the community. For the developing world, this means relying on radio broadcasts, home visits and print media to reach marginalized populations.

Changes in the subject matter created newer demands and expectations of home economics educators. This ever-expanding content presents challenges to teacher education programs. While home economics grows, it becomes more difficult to accommodate new knowledge within college curricula. Change, therefore, is critical. Some knowledge should be removed or revised to make way for new knowledge.

The debate on the goals of education has been a perennial problem throughout history. According to Labaree (1997), educational goals of a society are often conflicting. Potential goals are: democratic equality (focusing on preparing citizens), social efficiency (focusing on training workers), and social mobility (preparing individuals to compete for social positions). While social mobility dominates American education, social efficiency is paramount in Zimbabwean education. Labaree (1997) further noted that politics, more than organizational, pedagogical, social, or cultural concerns, steer reforms in education, a finding which is supported in Zimbabwe.

Educational history in Zimbabwe is not unlike educational history in the United States. While the context is different, political factors also influence American education. While this study has centered on programs in Zimbabwe, one can't help but begin to draw parallels between home economics education in Zimbabwe and family and consumer sciences education programs in the United States during this time period in history. What contextual factors have influenced programs in the United States? Documenting and identifying these factors will help us better understand our past and how these factors impact our future. As governments and educational institutions contemplate their vision of education for the new millennium, it is important that whatever goals are targeted, they should be a result of extensive deliberations of *all* stakeholders who have an interest in education.

References

- Atkinson, N. D. (1972). *Teaching Rhodesians: A history of educational policy in Rhodesia*. London: Longman Group.
- Canadian Home Economics Association. (1996). Home economics/family studies education in Canadian schools: A position paper. *Canadian Home Economics Journal*, *46*(4), 168-170.
- Cuban, L. (1997). Change without reform: The case of Stanford University School of Medicine, 1908-1990. *American Educational Research Journal*, 34, 1, 83-122.
- Firebaugh, F. M. (1980). Home economics in higher education in the United States: Current trends. *Journal of Consumer Studies and Home Economics*, *4*, 159-165.
- Gweru, L. C. (1994). *The trends of 'O' level home economics syllabi in Zimbabwe: 1950 1994*). Unpublished manuscript, University of Zimbabwe, Harare, Zimbabwe.
- Gweru Teachers College (GTC). (1975). Syllabus for two year pre-teacher training domestic science course: T2B.
- GTC. (1982). Secondary Teachers Certificate: Home economics syllabus.
- GTC. (1991a). Home economics syllabus.
- GTC. (1991b). Report of the external examiner in Home Economics.
- GTC. (1992). Home economics syllabus.
- GTC. (1996). Report of the external examiner in Home Economics.
- Home Economics Association for Africa. (1996). *Newsletter for the Southern African Region. No.3.*
- Institute of Education. (1981). Interim Report on Gweru Teachers College.
- Kapfunde, C. L. (1997). An analysis of factors influencing the shaping of educational policy in independent Zimbabwe. Unpublished Ph. D. dissertation, University of Zimbabwe, Harare, Zimbabwe.
- Kuster, S. (1994). Neither cultural imperialism nor precious gift of civilization: African education in colonial Zimbabwe 1890-1962. Munster, Hamburg: Lit
- Kwawu, J. (1993). A proposal for reorienting the home economics profession and programs in Sub-Saharan Africa. In E. C. Murray (Ed.). *Reorienting home economics in Africa*. pp. 1-

- 22. Nairobi, Kenya: Home Economics Association for Africa.
- Labaree, D. F. (1997). Public goods, private goods: The American struggle over educational goals. *American Educational Research Journal*, *34*,1, p. 39-81.
- McGregor, S. L. T., & MacDonald, S. (1997). Canadian university consumer studies courses: a content analysis. *Journal of Consumer Studies and Home Economics*, 21, 271-290.
- Molokwu, N. (1990). Nigerian Vocational Home economics.: History and future. *Journal of Home Economics*. 82(2), 38-42.
- Mungazi, D.A. (1990). Education and government control in Zimbabwe: A study of the commissions of inquiry, 1908-1974. New York: Praeger.
- Mungazi, D. A. & Walker, L. K. (1997). Educational reform and the transformation of Southern Africa. U. S. A.: Praeger.
- Nhundu, T. J. (1997). The effects of policy marginalization on the implementation of a curriculum innovation: A case study of the implementation of education with production in Zimbabwe. *Journal of Curriculum Studies*, 29(1), 47-70.
- Owolabi, E. A, Peterat, L., & Arcus, M. (1991). Home economics programs in Oyo state secondary schools: A survey. *Journal of Consumer Studies and Home Economics*, *15*, 95-105.
- Parker, F. (1960). *African development and education in Southern Rhodesia*. Columbus 10, Ohio: Ohio State University.
- Peterat, L., & Khamasi, J. (1996). Home economics/family studies curricula in Canada: Current status and challenges. *Canadian Home Economics Journal*, 46(2), 68-73.
- Redick, S. S. (1995). The family and consumer sciences curriculum. In A. A. Glathorn (Ed.), *Content of curriculum.* (pp. 130-152). Alexandria, VA: Association for Supervision and Curriculum Development.
- Teacher Education Review Committee (TERC). (1986). Home economics syllabus guidelines.
- Thomas, J., & Arcus, M. (1988). Forces influencing home economics curriculum changes in British Columbia Secondary schools. *Canadian Home Economics Journal*, 38(2), 88-95.
- Waudo, J. (1993). Home economics education in Africa: Reflections and prospects. *Canadian Home Economics Journal*, 43(4), 150-152.

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ACTION RESEARCH: HOLDING UP THE MIRROR TO EXAMINE FCS TEACHER PREPARATION

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Providing more highly qualified teachers is a major goal of education reform. As part of a redesign of the Family and Consumer Sciences teacher preparation program, an evaluation tool to be used with pre-service teachers was piloted. This assessment device, based on the Interstate New Teacher Assessment and Support Consortium Standards for new and beginning teachers, closely parallels this state's Core Teacher Standards. The assessment tool assists mentor teachers to identify teaching skill areas the pre-service teacher should target for development. A scoring rubric provides mentor teachers with a guide for evaluating and guiding pre-service teacher development. This assessment tool also serves to introduce mentor teachers and pre-service teachers to the professional goal of National Board for Professional Teacher Standards certification, and sets the stage for continued professional development as an ongoing responsibility of teachers. The survival of all middle school and high school elective courses is threatened by the demands for high stakes testing mandated by the No Child Left Behind legislation. Only by preparing highly qualified Family and Consumer Sciences teachers, recognized for their ability to reinforce academic skills while delivering FCS content, will the middle and secondary school FCS programs survive and continue to provide important content and skills for life not taught in other subjects.

High quality teachers, at all grades and in all subject areas; are the key to increasing the level of academic achievement in the United States (Fink, 2003; Fordham Foundation, 2002). Although criticism of the American educational system is not new, the majority of Americans now indicate that we need major changes, or a complete overhaul of our education system (Hart & Teeter, 2002). Education reform has been on the lips of many since the early 1980s. Only recently have we known enough about the educational process to begin addressing the right research questions. The No Child Left Behind (NCLB) legislation which dictates that all students have highly qualified teachers (White House, 2002) should be a driving factor in teacher preparation programs. A highly qualified teacher may be described as one who not only knows the content, but also can design "learning experiences that engage young people, and successfully communicate information and skills" (Hart & Teeter, 2002, p. 1). There are many critics who question whether today's education graduates can be described as highly qualified (Quality Teacher, 2002).

Method

As the American classroom becomes more diverse, reflecting the nation's changing demographics and the emphasis on academic achievement intensifies, it is imperative for teacher preparation programs to examine their practice. Action research is "systematic inquiry into practice" (Mills, 2003). By identifying a professional concern and developing questions to be answered, the researcher engages in reform-minded practice: collecting qualitative data experiencing, enquiring, and examining that data. This article details the programmatic assessment and revision of a Family and Consumer Sciences (FCS) teacher preparation program at a northwestern land grant university.

Review of Relevant Literature

The link between the NCLB legislation and action research is clear: Schools and teachers must show that they are making a difference with their teaching for all students. By extension colleges of education must ensure that all graduates can be effective teachers. Based on research done by Sanders and associates in Tennessee we now know teacher effectiveness is highly critical for student learning – especially for the students who are at risk. What teachers know and can do is the most important influence on what students learn (Sanders, 2000). Recruiting, preparing and retaining good teachers is the central strategy for improving our schools. School reform cannot succeed unless it focuses on creating the conditions in which teachers can teach, and teach well.

Since the time of Socrates, evaluating teachers has been an educational activity. In the recent past, the literature over the past 35 years has consistently articulated two important outcomes. Teachers and administrators have always recognized the importance and necessity for evaluation, even though they had serious misgivings about how it was done and the lack of effect it had on teachers. Second, evaluation systems designed to support teacher development and growth through formative assessment produce a higher level of satisfaction and more thoughtful and reflective practice while still being able to satisfy accountability requirements (Tomlinson, 2000).

One factor leading to the evaluation of this program was the impending National Council for Accreditation of Teacher Education (NCATE) site visit to the College of Education, scheduled for spring 2004. Preparation for the NCATE visit raised awareness across the campus for the need to evaluate programs. Thus, the program assessment and redesign was accomplished within two years. This report of the assessment and redesign process includes an assessment tool adopted to encourage continuing professional development of FCS pre-service teacher interns. The assessment tool measures professional outcomes rather than program inputs and course requirements, which have defined education in the past (Palomba & Banta, 2001). The reconfigured program also provides for continuous student assessments made at several levels within the program. The purpose of this article is to document how outcomes assessment can be used with pre-service teachers and for program improvement.

The Carnegie Task Force on Teaching as a Profession issued a pivotal report, A Nation Prepared: Teachers for the 21st Century (1986), calling for the establishment of standards for teaching. Thus, the National Board for Professional Teaching Standards issued What Teachers Should Know and Be Able to Do, (NBPTS, 1989) which provided the basis for establishing the professional designation of National Board Certification, a transportable recognition of quality instruction.

The work of the National Board for Professional Teaching Standards indirectly influenced interest in the development of a set of standards for beginning teachers. In 1992, The Interstate New Teacher Assessment and Support Consortium (INTASC) published a set of model Standards for beginning teacher licensure, designed to be compatible with the Standards of the National Board for Teacher Certification

In 2002, a U.S. Department of Education report indicated schools in the United States would need about 200,000 new teachers per year to fill vacancies left by retirees or teachers leaving the profession (U.S. Department of Education, 2002). By one estimate, about half of the new hires will be new entrants to the profession, with the rest lured back from retirement or other occupations (Darling-Hammond, 2000). Often the new teachers

do not feel prepared for the challenges of today's classrooms. Only about 35% of recent graduates feel "very well prepared" to implement curriculum for performance standards, and less than 20% feel prepared to meet the needs of diverse students, or those with limited English proficiency (Quality Teacher, 2002). Parents, policymakers and taxpayers expect any well-trained educator to know what really works in the classroom. However, most educators, including recent teacher education graduates, are not prepared for the challenge they face (Quality Teacher, 2002). Preparing well-qualified, confident teachers for the challenges of today's classroom is the task facing teacher preparation programs.

Today's workplace requires a better education than in the past. The new psychological contract between employers and employees says, "If you have the skills the company needs in a changing economy you will have a job" (Bottoms & Phillips, 1998, p. 26). This seems just as true for the business of schools as for companies that operate for profit. It is important that Family and Consumer Sciences teachers have the skills to provide appropriate learning and challenge to students in their middle and secondary school courses, enabling students to acquire the knowledge and skills to become contributing citizens of society and the employees a company will need.

To prepare students for the high stakes tests required by the NCLB legislation (2002), and tomorrow's workforce, reinforcing basic academic skills while teaching Family and Consumer Sciences content is imperative. As schools are ranked based on student scores (NCLB 2002), FCS programs that do not reinforce and make application of the academic skills will become luxuries few school districts can afford to keep. It is imperative that the teacher preparation programs prepare pre-service FCS teachers to reinforce the academic standards content by incorporating them into the FCS classes which teach students about work, families and their interrelationships, and provide individuals and families with the knowledge and skills to manage the challenges of living and working in fulfilling and productive ways (National Vocational Education Standards, n.d.).

Highly competent FCS teachers, viewed by their peers and supervisors as excellent teachers, are essential to the survival of the profession. Family and Consumer Sciences instruction in life and employability skills provides content, not taught in other courses, which prepares students to be productive members of society (Council on Basic Education, 2002). Not only must the FCS teachers master the subject content knowledge, they also must have the ability to help prepare students for the mandated academic achievement tests.

Method

Program Assessment

In concert with changes occurring in the College of Education, and revised Family and Consumer Sciences state teacher certification regulations, this FCS teacher preparation program was analyzed. Enhancing graduates' abilities to function as new teachers became the focal point for this action research. Scholarly projects need to "make sense in the context for which they are designed" (Gainen & Locatelli, 1995, p. 48) and are primarily "problem-oriented and field based" rather than traditional laboratory research (Gainen & Locatelli, 1995 p 5). Qualitative data from informal interviews were collected from recent graduates and practitioners, and especially from the mentor teachers who recently worked with student teachers, to determine the perceived strengths and weaknesses of the program. This interview data primarily sought to determine how competent the pre-service teachers were, if they had the depth of content

knowledge needed by a beginning teacher, and if they were able to plan and deliver appropriate content to the students.

Faculty in the Child, Family and Consumer Studies program, a sub group in the School of Family and Consumer Sciences, considered this input in their examination of the FCS teacher preparation program. Discussions from this faculty group led to proposed changes. The changes were operationalized as program additions. These suggested program additions were taken to the School's undergraduate curriculum committee for input and approval. The Adult, Counselor and Teacher Education Division, through which the state Professional-Technical funds are disbursed, also reviewed the proposed changes. After input from these faculty groups, work began on new course proposals for eventual approval by the undergraduate curriculum committee.

Project Goal

The goal for the review and reconfiguration of the FCS teacher preparation program was to enhance the quality of graduates preparing for teaching careers. The concurrent work in the College of Education as preparation for the NCATE site visit facilitated the process for the FCS program, by creating awareness across campus of the need to examine practices in education.

During this time the State Department of Education (SDOE) was also assessing its practices and standards. Through many public meetings and opportunities for citizen input, the SDOE adopted the principles articulated by INTASC as standards for new and beginning teachers in the state (Policy Research, 1999). The redesign of the FCS teacher education program has evolved around the INTASC standards which align with the "Maximizing Opportunities for Students and Teachers" (MOST) standards adopted by the state for teachers (Draft Standards, 2001). Thus, faculty within the discipline, related disciplines, and professional-technical education, were involved in the review process which was done in conjunction with major changes within the College of Education and to align with the new state teacher certification standards. Ultimately the University Curriculum Committee accepted the proposed changes to the program.

Results

Program Changes

The newly designed FCS teacher preparation program evolved from a single 3 credit Curriculum Development in FCS Education course and 10 weeks of student teaching to a more comprehensive program with multiple courses designed to prepare FCS education students with more content depth and increased ability to meet the INTASC standards A newly added introductory class, "Introduction to the FCS Professions" serves to introduce students to Family and Consumer Sciences in general. This 1 credit survey course, designed to assist lower division students to understand the range of careers available with a FCS undergraduate degree, brings alumnae into the class to share their career focus resulting from their FCS degree. Students not only learn about careers as teachers, they also gain a perspective on the range of options available with an FCS degree. The course also introduces the students to other campus services. For example, to encourage students to seek a range of summer internship experiences, a representative from Cooperative Education speaks to the class. Below are the FCS education courses required for the baccalaureate degree option FCS in Education:

FCS 251 (1 credit) Introduction to the FCS Professions

FCS 350 (3 credits) Curriculum Development in FCS Education

FCS 351 (2 credits) Administration of the Student Vocational (FCCLA) Organization

FCS 461 (3 credits) Methods and Strategies in FCS Education

In addition to completing 45 semester credits in the major field, students take a minimum of 3 sequential courses within the College of Education. Students admitted to the College of Education must now have and maintain an overall 2.75 GPA on a 4.0 scale. The prerequisite education courses provide students with 20 to 30 contact hours of site-based experience in a classroom. These preliminary education courses and the field experiences serve to help students confirm their interest in teaching and gain experience in classrooms.

The sequence of courses has a screening evaluation rubric to identify *red flags* or concerns about individual students who may not exhibit the knowledge, skills, and dispositions expected of a pre-service teacher. Students whose performance has raised concerns may be directed to other degree programs if necessary. This College of Education evaluation process continues in the FCS education classes to help direct students to appropriate career options and to ensure that only highly qualified individuals are recommended for certification in FCS Education. The pre-service teachers content knowledge of the field is assessed with the recently required PRAXIS II Examination scheduled for administration during the fall of the final undergraduate year, now called the "Professional Year".

The state Division of Professional-Technical Education (PTE) has mandated that Family, Career and Community Leaders of America (FCCLA) be integrated into reimbursable secondary school programs. The Division views student experiences in this organization as "value-added" to FCS middle and secondary school FCS programs (Stevens 2001). The Administration of Family, Career and Community Leaders of America (FCS 351) provides basic knowledge of the organization, its various programs and student recognition contests. This course incorporates academic service learning. Students with high school FCCLA experience serve as "coaches" at surrounding high schools and assist in preparing secondary school students for district and state competitions. Students, who have no previous experience with the FCCLA organization as secondary school students, assist in setting up and evaluating contests at the district and state competitions after completing a portion of the class designed specifically to prepare for this task.

The *Curriculum Development* (FCS 350) class was retained from the previous program structure, but content is updated and includes the strands of education reform, constructivism and diversity. The focus of the class is the state FCS curriculum framework and programs. Students experience developing unit and lesson plans tied to assessment. This class is graded for mastery, so students have the option of re-doing assignments for mastery learning. Academic service learning is also included in this course. Examples of service learning projects completed by class members includes developing a unit on parenting for a school district initiating a *Senior Survival* class and developing a unit of instruction for another school district that had purchased the "Baby Think It Over" simulators. Students who experienced coaching the FCCLA projects also developed formal lesson plans for use by FCS teachers in remote districts to assist students from these districts with their FCCLA projects. This *Curriculum Development in FCS Education* class precedes the new *FCS Education Methods and Strategies* class.

To align with the College of Education decision to have a capstone *Professional Year Experience*, several additional courses were added to the program. During the fall semester of the final year, students participate in a three-week, Introduction *to the FCS Internship*, at the internship placement school. As part of this course, the FCS teacher intern observes and assists the mentor teacher with the beginning-of the-school-year activities. The intern follows specific observation guidelines to facilitate the acquisition

of information beneficial to developing unit and lesson plans for that program, and to address the learning needs of diverse students within the student population.

After this three weeks at the teaching internship site, students return to campus to enroll in the *Methods and Strategies in FCS Education* course which is taught on campus during the remaining weeks of the semester. The first-hand experience and knowledge about the public school environment, and the middle and secondary school students, gained during the three-week onsite experience provides the pre-service teachers with a frame of reference. This first-hand experience enables these individuals to relate their Methods and Strategies class content to their placement site and students. The Methods and Strategies course focuses on development of project based learning, and of unit and lesson plans incorporating the research-based strategies for increasing student achievement (Marzano, Pickering, & Pollock, 2001) and for designing personalized learning (Ferguson, et al., 2001) to differentiate instruction in mixed ability classrooms (Tomlinson, 2001). Students also spend several class periods learning behavior management, department management and motivational techniques with video illustrations and modeling of motivational and managerial techniques (Jones, 2001). With classroom management issues being cited by Tran as second most common reason for leaving the teaching profession, (2003) and with the shortage of FCS teachers, common sense dictates that pre-service teachers be provided instruction to develop these essential skills.

Discussion

<u>Teacher Internship Experience</u>

Before implementing the new teacher preparation program, FCS teachers across the state were personally contacted at professional meetings and site visits, to assess their views regarding an extended placement for pre-service teachers. The practitioners and the students who were in the ten-week student teaching program, agreed that a longer placement would be helpful. The mentor teachers especially voiced the need for a longer placement for the pre-service teacher.

To accommodate this extended experience, the *Professional Year* students return to their internship site for 15 weeks, beginning early January, following the holiday vacation for the site school. Concurrent with the extended internship experience, two additional 2-credit courses are taught via web delivery during the fifteen-week internship. Two credits are allotted to the *Portfolio Development Project* class. Students are advised to create a developmental portfolio in which all unit and lesson plans, assessments, and other teaching artifacts are filed during the Internship. They then develop a Showcase Portfolio to document their progress toward achievement of the INTASC standards using 2 artifacts for each standard, selected from their developmental portfolio contents. For each artifact the students reflect on the use of that artifact in their teaching. During the final examination week, the faculty evaluate the student's oral presentation of their portfolio, using a scoring rubric. A second scoring rubric is used to evaluate the portfolio itself.

Two additional credits are allotted for an applied research project class which documents the student's ability to provide differentiated instruction in mixed ability classrooms. For this project the intern identifies students in the internship site student population with special learning needs. After assessing the students informally, the pre-

service teacher determines how adaptations and accommodations can be implemented for these students. The outcome of that project is then reported and graded.

Internship Assessment

When the student teaching experience changed from 10 to 15 weeks, an improved means of assessing and guiding students to achieve the state Core Teacher Standards was needed. An evaluation device (see appendix) based on the INTASC Standards is used. A scoring rubric adapted from the work done by the Office of Educational Field Experiences Evaluation Team at Ball State University (Ball State University, 2000) was piloted during spring 2002. This scoring rubric describes the knowledge, skills and dispositions for each of the 10 Standards.

The document formatting allows display of the rubric descriptors for each standard on one page. The facing page contains the evaluation criteria, with a space for the mentor teacher's comments and rating. The assessment tool is designed to be used 4 times during the 16-week internship, with each cycle of comments and rating on the same page, to facilitate analysis of the pre-service teacher's development over time. This assessment provides timely feedback, not only to the pre-service teacher and the mentor teacher, but also to the FCS teacher preparation unit for further refinement of unit operations and programs as evaluated by NCATE standard 2 (NCATE, 2001).

By involving the mentor teachers and inviting the school administrator to assess the student's development, the professional community is involved. Thus modifications in program delivery to pre-service and in-service teachers can be made, based on recommendations from practitioners. This tool and the sequence of courses in the FCS teacher preparation program are designed to provide for multiple assessments at multiple points prior to program completion (NCATE, 2001).

These students were completing requirements under the old 10-week student teaching format. The use of the term 'student teacher' is deliberate in this section to distinguish the old 10-week program from the new 15-week internship. Although the College of Education proposed a formal mentor teacher development plan, declining revenues at the state level leading to program budget cuts eliminated that professional development opportunity. In the absence of that formal mentor teacher orientation, the author visited each FCS mentor teacher. This visit took place during the first week of the student teacher placement. The purpose of the visit was to establish rapport with the mentor teacher and to introduce the new evaluation process.

At this orientation meeting, mentor teachers were provided a copy of the instrument, and given an overview of the MOST/INTASC Standards. The redesign of the FCS teacher program was explained, including the need to pilot the assessment tool in preparation for the 15-week internship. A dialogue with each mentor teacher regarding the philosophy of formative evaluation using the MOST/INTASC Standards, the assessment system, and performance-based formative assessments took place. A sample illustrating the use of the device was provided the mentor teachers, (see Figure 1) and definitions for the levels of performance with the rubric were elaborated.

Sample showing use of the evaluation instrument.

Rationale and Sup	pport			_
Element	Week # 2	Week # 6	<i>Week # 8</i>	Week #
Positive Climate	Most students are	Needs to work on	Students are self-	
for Intrinsic	engaged—needs to	"positive"	engaged and seem	
Motivation	get the rest going (to	motivation	much more	
	be self-engaged		motivated	
	Level <u>B</u>	Level <u>B</u> +	Level <u>P</u>	Level
Pacing	Sometimes too fast	Better @ pacing	Excellent pacing for	
	with so many	multiple activities	both opening and	
	activities		closing of each	
			period. Student	
			takes time to reflect	
			before leaving.	
	Level <u>B</u>	Level <u>B</u>	Level <u>P</u>	Level

Italicized comments and a level assessment are made by the evaluator. Adapted from Student Teacher Evaluation Guidebook, Phi Delta Kappa (2000)

Levels of performance used in scoring with the rubric were discussed with the mentor teachers. Based on examples presented in *Enhancing Professional Practice, A Framework for Teaching* (Danielson, 1996), four levels of performance are used. A pre-service teacher evaluated at the *distinguished* level demonstrates an exemplary ability to create a community of learners that has students highly motivated, engaged, and assuming considerable responsibility for their own learning. A pre-service teacher evaluated at this level has the potential to be an outstanding first-year teacher.

A rating at the *proficient* level indicates the pre-service teacher demonstrates clear understanding of the concepts underlying the standard and implements the component well. With additional mentoring and experience a pre-service teacher rated as *proficient* demonstrates the likelihood of becoming an excellent teacher.

The *basic* rating indicates the pre-service teacher may appear to have an understanding of the concepts underlying a component and be attempting to implement the component but may be intermittent and/or not entirely successful in their implementation. Pre-service teachers receiving a *basic* rating would need significant guidance and ongoing skill development to become successful in the classroom.

The teacher intern that does not appear to understand the concepts underlying the component would be rated *unsatisfactory*. Work on the fundamental practices associated with the element would be required to enable growth in the area. Receiving a designation of *unsatisfactory* as a terminal evaluation would mean the individual would not receive a recommendation for certification from the University without additional coursework and another supervised internship. Tracking student development through the College of Education courses and FCS education courses with the rubric's *red flags* system provides opportunity and evidence to counsel students out of the program rather than graduating individuals who are rated as unsatisfactory.

Piloting the Assessment Instrument

During the pilot year, an initial visit was made to mentor teachers. The instrument was introduced and suggestions were provided to the mentor teachers for using the assessment instrument to provide feedback to the teacher intern. Because of the abbreviated 10-week placement when the assessment tool was piloted, it was suggested to evaluate performance on standards, "pacing of instruction", and the "creation of a positive classroom climate" from standard five for the first evaluation. This first formative evaluation took place during the second or third week of the placement when there were limited opportunities for the teacher intern to demonstrate additional competencies. By the second evaluation, the mentor could evaluate on more, or all, of the standards. Sharing the formative evaluation ratings with the teacher intern provides the mentor teacher opportunity to give formative feedback and creates an avenue for discussion. The mentor and intern then can collaboratively develop the intern's plan for professional development in preparation for the next evaluation.

Mentor Teachers

At present, mentor teachers often have not had a student teacher in the past. Formerly, students were permitted to select their student teaching site and often chose to live at home to control living expenses while student teaching. This practice resulted in an uneven, and in some cases, negative experience for some teacher interns. With the new program, more guidelines are in place to ensure the pre-service teacher experiences teaching in a strong FCS middle school/secondary school program with an effective teacher as mentor. Since none of the 2002 mentor teachers had a teacher intern placed with them during the past 7-10 years, the personal visit to each mentor was made to introduce this assessment instrument and orient these teachers to their role as a mentor teacher.

Initially one mentor teacher indicated the assessment tool would be very time consuming for her to use. She suggested using a one-page lesson evaluation. However, by the end of the placement period this mentor teacher indicated the formative evaluation process was a much more comprehensive tool than a lesson evaluation. The other six teachers indicated satisfaction with this method of evaluation and expressed appreciation for the guidance it provided them to evaluate the teacher intern. When queried about the length of time required to use the instrument, the teachers agreed it was lengthy, but indicated they could not offer a shorter alternative, that would be as helpful to them and the pre-service teacher. These individuals expressed appreciation for the guidance the instrument provided them to assist their teacher intern's professional development. They also expressed appreciation for information about the INTASC standards and several teachers said this knowledge would help them improve their own teaching practices. Only two FCS teachers in this state currently have National Board Certification, even though the legislature provides a financial incentive for teachers to become National Board certified.

Findings

Pilot Group Outcomes

Ranking for the seven teacher interns in the pilot group initially were at the *basic* level on the assessment tool, but moved to *proficient* over time. One individual was evaluated *distinguished* on two standards at the end of the placement. This individual had gained public speaking experience in recruiting efforts for the University. She was able to put the classroom management principles from her methods course in place during her initial class meeting with the students. This teacher intern taught the

class beginning the first day of the new semester. The mentor teacher gave her responsibility for this class the entire time she was at the placement, she flourished in that scenario. The teacher intern also had a sibling attending the school where she did her student teaching; many of the school students were friends with her family. A majority of teacher interns will not have these favorable circumstances. In fact, a similar situation may be a handicap for some individuals.

Beginning in 2003, all pre-service teachers take the PRAXIS II Subject Assessment examination to determine content knowledge. The FCS program manager and four FCS teacher educators from this state reviewed the examination for face validity. The PRAXIS II was viewed as acceptable, but many problems were noted, particularly in relation to diversity, and in reference to outdated theories in the field of FCS. The mentor teachers from the pilot year expressed satisfaction with the basic content knowledge the teacher interns demonstrated. Several also indicated they would like to have another teacher intern "...if the next is as good as this one was." To have mentor teachers ask for another teacher intern can be viewed as a sign of good undergraduate preparation. More often mentor teachers indicate that having a teacher intern in the classroom is problematic.

When pre-service teachers are able to update the mentor teacher, the teacher preparation program is serving dual purposes; providing practitioners with new content and teaching strategies, and preparing pre-service teachers to become the highly qualified teacher all students deserve. With the pressure for all students to pass high stakes tests, administrators sometimes choose to double schedule students into a second section of math and reading classes rather than provide elective courses.

One of the fears stemming from the standards and assessment movement is that the drive to assess student achievement in core academic subjects will force schools to narrow their curriculum and emphasize instruction only in the fields being assessed. While such intentions are a well meaning effort to raise test scores, the elective course offerings, such as FCS, lose space in the curriculum to instructions in reading, science and math. Applied learning, which can be provided in FCS classes, can makes a difference for students who are disenchanted with school because they see no use for what they are taught. When the FCS program provides contextual learning, low achieving students have an opportunity to experience practical applications for literacy, math and reading skills. This practical application often helps students become more self motivated to learn.

Conclusions

Using the MOST/ INTASC standards for formative evaluation during the teacher internship experience prepares the pre-service teacher for standards-based assessments as a professional. The MOST/ INTASC standards provide guidance to the teacher intern about important teacher qualities, and define the basis for assessment of their pre-service teaching experiences. The mentor teachers appreciated having a device based on the MOST/ INTASC Standards with which to evaluate and guide their teacher intern's progress.

Introducing the MOST/INTASC standards in the curriculum development class, offered during spring semester of the junior year, permits the pre-service teacher opportunity to develop unit and lesson plans better formulated to meet standards criteria. Familiarity with standards makes developing standards-based unit and lesson plans for the portfolio the norm, and not an extra chore to prepare artifacts for the portfolio. Having the standards based unit and lesson plans gives the pre-service teacher opportunity to select the best examples from planning documents to include in the portfolio. The Showcase Portfolio, resulting from the materials which are collected through the Internship, demonstrates teaching abilities measured by a recognized standard. Including the ratings from the assessment tool, along with example lessons and unit plans in portfolios, illustrates for prospective employers the kinds of tasks these new graduates have

experienced. It also provides a benchmark for prospective employers to evaluate the teacher candidates seeking employment.

Using the MOST/INTASC Standards for evaluation during the teacher internship also prepares the pre-service teacher for continued professional development. By introducing the preservice teachers to the National Board Certification, students begin to consider professional development as an ongoing responsibility on their part. Thus, the new graduates can strategize how to being to prepare for National Board of Professional Teaching Standards certification as new professionals.

Implications

Education reform has been at the top of the American agenda for years. Parents, the general public, and educational leaders recognize that the quality of teaching determines the quality of education. Overwhelmingly, Americans believe that knowing "how" to teach is more important than knowing "what" to teach (Hart & Teeter, 2002). Assessing pre-service teachers with the standards identified as benchmarks for the developing professionals is one step to take in improving teacher quality. Using standards as job improvement targets prepares the teacher for continued professional development with the goal of becoming a National Board Certified teacher.

Developing a cadre of mentor teachers who are knowledgeable about teacher standards and mentoring beginning teachers is an important goal. Many colleges of education are placing their education majors in their partnership schools for pre-service experiences. When universities are able to develop partnership schools, the university can provide professional development to the mentor teachers, and better prepare the mentors to use assessment and mentoring processes. It is critical for the survival of the Family and Consumer Sciences profession that graduates be seen as highly competent teachers who provide challenging content while preparing their students to become a productive individual, a competent citizen and a community leader. Holding up the mirror to assess the FCS teacher preparation program with an eye to additional cycles of action research for program improvement continues to strengthen the profession.

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References

- Ball State University.(2000). *Evaluation of student teachers guidebook*. Bloomington, IN: Phi Delta Kappa International.
- Bottoms, G., and Phillips I. (1998). How to design challenging vocational courses. *Techniques*, 73, 27-29.
- Carnegie Task Force on Teaching as a Profession (1986). *Forum on education and the economy's task force on teaching as a profession*. Retrieved October 20, 2002 from http://www.nbpts.org/about/hist.cfm#taskforce.
- Council on Basic Education. Retrieved October 20, 2002, from http://www.c-b-e.org/teachered/intro.htm
- Danielson, C. (1996). *Enhancing Professional Practice, A Framework for Teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Darling-Hammond, L. (2000). Solving the dilemmas of teacher supply, demand, and standards: How can we ensure a competent, caring and qualified teacher for every child. New York: National Commission on Teaching and America's Future. Retrieved October 19, 2002, from http://www.tc.edu/nctaf/publications/solving.html.
- Draft Standards (2001). Standards for initial certification of professional school personnel: teachers. Boise, ID: Idaho State Department of Education.
- Ferguson, D., Ralph, G., Myer, G., Lester, J., Droege, C., Guojonsdottir, H., et al. (2001). *Designing personalized learning for every student*. Alexandria, VA: Association for Supervision and Curriculum Development,.
- Fink, L. D. (2003). Creating significant learning experiences. San Francisco, CA: Jossey-Bass.
- Fordham Foundation, (2002). *Teacher Quality*. Education Gadfly Weekly Bulletin. Retrieved October 19, 2002 <u>from http://www.edexcellence.net.topics/teachers.html</u>.
- Gainen, J., & Locatelli. (1995). Assessment for the new curriculum: A guide for professional accounting programs, Accounting Education Change Commission and American Accounting Association, Accounting Education Series, 11.
- Hart, P., & Teeter, R. (2002). A national priority: Americans speak on school quality. Princeton, NJ: Educational Testing Service,
- INTASC (1992). Interstate New Teacher Assessment and Support Consortium. Retrieved October 15, 2002, from http://www.ccsso.org/intascst.html.
- Jones, F. (2001). *Tools for teaching*. Santa Cruz, CA: Author.
- National Commission on Teaching and America's Future, (1996). What matters most: Teaching for America's future. New York: Author.
- NBPTS. (1989). What teachers should know and be able to do. National Board for Professional Teaching Standards. Retrieved October 20, 2002 from http://www.nbpts.org/standards/stds.cfm.
- NCATE. (2001). *Professional standards for the accreditation of schools, colleges and departments of education*. Washington, DC: Author.

- No Child Left Behind. (2002). Public Law 107-110. Stat. 115. Retrieved October 23, 2002 from http://www.nochildleftbehind.gov/.
- Polambo, C., & Banta T. (2001). Assessing student competencies in accredited disciplines. Sterling, VA: Stylus Publishing.
- Phi Delta Kappa International (2000). *Evaluation of student teachers guidebook*. Bloomington, IN: Author.
- Policy Research (1999). *Idaho's investment in its children: A progress peport on the status of education in Idaho*. Retrieved October 20, 2002 from http://www.sde.state.id.us/MOST/PolicyResearch.htm.
- Quality Teacher (2002). *Policies in Focus*. Retrieved October 20, 2002 from http://www.whitehouse.gov/infocus/teacherquality.
- Sanders, W. (2000). Value-added assessment from student achievement data. *Journal of Personnel Evaluation in Education 14, 329-339*. Retrieved August 7, 2004 from http://www.sas.com/govedu/education/evaas/opp hurdles.pdf.
- Stevens, A. (2001). Division of Professional Technical Education Annual Teacher Conference FCS Teacher Recognition Luncheon Address, August 11, 2001.
- Tomlinson, C. (2001). *How to differentiate instruction in mixed ability classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tran, T. (2003). *Teacher shortage? What teacher shortage?* State College, PA: University of Pennsylvania. Retrieved March 3, 2003 from http://www.upenn.edu/researchatpenn/article.php?576&soc.
- White House. (2002). *It's a new era in education*. U.S. Department of Education Official Government Website. Retrieved October 20, 2002 from http://www.nochildleftbehind.gov/index.html.
- U.S. Department of Education. (2002) *National center for education statistics: Projection of education statistics to 2011*. Washington DC: Office of Educational Research and Improvement. Retrieved October 20, 2002 from http://nces.ed.gov/pubs2001/2001083.pdf.

APPENDIX

Rubric for evaluating teacher interns using the MOST/INTASC Standards.

Principle 1: The teacher intern understands the central concepts, tools of inquiry, and structures of the discipline he or she teaches, and can create learning experiences that make these aspects of subject matter meaningful to students.

Element	Level of Performance			
	Unsatisfactory	Basic	Proficient	Distinguished
Knowledge of Content	Makes content errors, does not correct errors of students or self, or lacks initiative to research content.	Displays basic content knowledge but cannot articulate connections with other parts of disciplines.	Displays solid content knowledge and makes connections between the content and other disciplines.	Takes initiative to locate and teach information beyond traditional text. Seeks to keep abreast of new ideas and understanding in the field.
Use of Interdisciplinary Approaches when Teaching Content (may connect to literature, writing, the arts, etc.)	Is unaware of interdisciplinary approaches to teaching and learning.	Displays limited awareness of interdisciplinary approaches to teaching and learning and incorporates some of these strategies.	Is very aware of interdisciplinary approaches to teaching and learning and regularly incorporates these strategies.	Incorporates interdisciplinary strategies on a regular basis and utilizes the knowledge/skills of colleagues and students to enhance learning.
Selects Content to Encourage Diverse Perspectives.	Demonstrates little attention to multiple perspectives. Content is presented without discussion of its relationship to real experience or other disciplines or cultural norms. Individual differences are ignored.	Demonstrates an awareness of multiple perspectives and opens discussions about subject matter to the class. Strives to include content that dispels stereotypes.	Routinely discusses multiple perspectives in subject matter and includes attention to students' personal, family, and community experiences. Individual differences are respected.	Strategically introduces resources and experiences that challenge the learner's beliefs and assumption about common understandings, thus creating an environment where critical thinking is a habit.

^{*} Descriptions at the distinguished level may not be appropriate for some settings. Adapted from Evaluation of Student Teacher's Guidebook: Phi Delta Kappa (2002).

Principle 1. The teacher intern understands the central concepts, tools of inquiry, and structures of the discipline he or she teaches and can create learning experiences that make these aspects of subject matter meaningful to students.

Element	Rational & Support			
	Week #	Week #	Week #	Week #
Knowledge of Content	Level	Level	Level	Level
Use of Interdisciplinary Approaches when Teaching Content (may connect to science, math, communication				
skills, etc.)	Level	Level	Level	Level
Selects Content to Encourage Diverse Perspectives.	Level	Level	Level	Level

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 2: The teacher intern understands how children learn and develop, and can provide learning opportunities that support their intellectual, social, and personal development.

Element		Level of	Performance	
	Unsatisfactory	Basic	Proficient	Distinguished*
Developmental Characteristics of Students	Displays minimal or no knowledge of developmental characteristics of age group, and/or uses inappropriate activities and assignments.	Designs some activities and assignments in a developmentally appropriate way.	Assesses individual and group performance in order to design instruction that meets learners' needs (cognitive, social, emotional, and physical).	Learners are engaged in activities to stimulate their thinking, test ideas/materials, and assume responsibility for shaping their learning tasks (brainstorming, choice activities, opinions/feelings, discussions, etc.).
Activates Prior Knowledge and Experiences	Displays little understanding of prerequisite knowledge important for student learning and fails to activate students' prior knowledge.	Does demonstrate some awareness of the importance of prerequisite knowledge; however, is inconsistent in activating students' prior knowledge.	Consistently helps students make connections between current content and their own background and experiences.	Lessons include deliberate opportunities for students to discover the connections between current content and life experiences. Students see the purpose and the "big picture."

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 2: The teacher intern understands how children learn and develop, and can provide learning opportunities that support their intellectual, social, and personal development.

Element	Level of Performance			
	Week #	Week #	Week #	Week #
Developmental Characteristics of Students	Level	Level	Level	Level
Activates Prior Knowledge and Experiences	Level	Level	Level	Level

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 3: The teacher intern understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

Element	Level of Performance			
	Unsatisfactory	Basic	Proficient	Distinguished
Teaching to Individual Learning Abilities	Is unaware of individual learning abilities as all students receive same delivery of instruction and assignment regardless of differences.	Is aware of the need for adaptations in assignments, time allowed, response modes, etc. and occasionally accommodates these needs for different learners.	Demonstrates awareness that lesson plans take into account the needs of various learners. Appropriate adaptations are a routine part of planning and delivery.	Articulates clearly individual student goals and expectations. Individualized instruction allows for most students to succeed and be challenged.
Selection of Resources to Meet Range of Individual Needs: Special Education to Gifted	Uses or seeks no additional resources or supplemental materials for students with individual needs.	Has limited knowledge of additional resources and attempts to meet the individual needs of some students (i.e., low-achieving or gifted) by assessing resources.	Routinely utilizes supplemental materials and outside resources with students at both ends of the learning curve.	Actively seeks out resources from the community or professional organizations and utilizes these sources and materials for the benefit of varied learners.
Expectations for Learning and Achievement	Conveys only modest expectations for student achievement through instructional goals and activities, interactions, and the classroom environment.	Conveys consistent expectations for student achievement through instructional goals and activities, interactions, and the classroom environment. Instruction is appropriate for the grade level or course.	Appropriately challenges students by presenting material at a qualitatively high level.	Expects students to challenge themselves by providing opportunities for choice in activities and assignments.

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 3: The teacher intern understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

Element	Level of Performance				
	Week #	Week #	Week #	Week #	
Teaching to Individual Learning					
Abilities	Level	Level	Level	Level	
Selection of Resources to Meet Range of Individual Needs: Special Education to					
Gifted	Level	Level	Level	Level	
Expectations for Learning and Achievement	Level	Level	Level	Level	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 4: The teacher intern understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills. (Note instructional strategies include, but are not limited to, cooperative learning, small and large groups, lecture, project work, thematic instruction, partner learning, use of media resources, and technology.

Element		Level o	f Performance	
	Unsatisfactory	Basic	Proficient	Distinguished
Selecting Resources for General Instructions	Utilizes materials from a teacher's guide only. Book content is read and discussed with no outside materials, or resources included.	Displays limited awareness and/or use of resources available or does not take initiative to obtain materials. Occasionally uses supplemental materials.	Routinely seeks out multiple resources for teaching, selecting those most appropriate for comprehensiveness and accuracy. Makes a deliberate attempt to allow for multiple ways of learning.	Seeks out and uses resources from professional organizations or through community speakers, study trips, commercial materials, etc. These resources are not just "add-ons" but are fully integrated into a comprehensive curriculum.
Best Practices: Multiple Teaching Strategies, Active Learning, Modeling	Relies mostly on direct instruction/lecture method and giving assignments. Students are passive learners. No modeling.	Written plans and delivery of instruction show evidence of more than one strategy within a lesson and a variety of approaches over time. Students are actively engaged for at least one half of the lesson. Some evidence of modeling.	Written instructional strategies are effectively incorporated in each lesson based on subject matter and needs of students. Students are actively involved in problem solving and critical thinking with peers in small and large groups when appropriate.	Facilitates inquiry through carefully planned lessons and involving students at the planning stages. Most students are actively engaged in questioning concepts, developing learning strategies, and problem solving. Motivation is evident.
Intern's Role in Instructional Processes	Primarily serves as "giver of information" in an authoritarian mode of instruction.	Occasionally facilitates small groups but steps in to problem solve for the students.	Role varies depending on student activities. Expects students to self-direct and problem solve as needed. Facilitates learning.	Demonstrates multiple roles as needed. Students are actively engaged and self-directed, seeking resources, and collaborating with others.

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 4: The teacher intern understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills. (Note instructional strategies include, but are not limited to, cooperative learning, small and large groups, lecture, project work, thematic instruction, partner learning, use of media resources, and technology.

Element	Level of Performance				
	Week #	Week #	Week #	Week #	
Selecting					
Resources for					
General					
Instruction	Level	Level	Level	Level	
Best Practices: Multiple Teaching Strategies, Active Learning,					
Modeling Modeling	Level	Level	Level	Level	
Intern's Role in Instructional				Level	
Processes	Level	Level	Level		

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 5A: The teacher intern uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction in the classroom.

Element	Level of Performance				
	Unsatisfactory	Basic	Proficient	Distinguished	
Management of Transitions	Much time is lost during transitions. May be unaware of lost time, does not plan for transitions.	Transitions are sporadically efficient, resulting in some loss of instructional time.	Transitions occur smoothly with little loss of instructional time. Specific procedures are taught and used effectively.	Transitions are seamless with students assuming some responsibility for efficient operation.	
Management of Time and Materials	Time and materials are inefficiently handled, resulting in loss of instructional time.	Time and materials are handled moderately well.	Time and materials are handled smoothly with little loss of instructional time or interest.	Time and materials are handled smoothly and efficiently with no loss of attention or interest. Students assume some responsibility for efficient operation of time and materials.	
Directions and Procedures	Directions and procedures are confusing to the students.	Directions and procedures are clarified after initial student confusion or are excessively detailed.	Directions and procedures are clear to students and contain an appropriate level of detail. Frequently checks for understanding.	Directions and procedures are clear to students. Anticipates possible student misunderstanding plans, monitors for it.	
Pacing	The pacing is too slow or rushed	Pacing is inconsistent.	Pacing is usually appropriate. Teacher adapts pace by monitoring students.	Pacing of the lesson is smooth, timely, and appropriate, allowing for reflection and closure.	
Performance of Non-Instructional Duties: attendance, lunch count, distribution of papers, duties, etc.	Performance of non- instructional duties is inefficient. May be inattentive to these duties.	Duties are handled fairly efficiently.	Duties are managed and completed in a clear, professional manner without loss of instructional time.	Systems for performing duties are well established with students assuming appropriate responsibility for efficient classroom operation.	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 5A: The teacher intern uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction in the classroom.

Element	Level of Performance				
	Week #		Week #	Week #	
Management of Transitions	Level	Level	Level	Level	
Management of Time and Materials	Level	Level	Level	Level	
Directions and Procedures	Level	Level	Level	Level	
Pacing	Level	Level	Level	Level	
Performance of Non-Instructional Duties: attendance, lunch count, distribution of papers, duties, etc.	Level	Level	Level	Level	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 5B: The teacher intern understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction in the classroom.

Element	Level of Performance				
	Unsatisfactory	Basic	Proficient	Distinguished*	
Positive Climate for Intrinsic Motivation	Teacher does not attend to positive social relationships. More reprimands than compliments are heard. Rewards may be offered too frequently to motivate students.	Students are complimented for appropriate behavior and study habits. Teacher encourages students to appreciate others. Minimal extrinsic rewards offered.	Classroom environment is positive. Students are actively engaged. Extrinsic rewards are not necessary to motivate students. Teacher clearly shows a caring attitude toward all students.	Teacher helps the group develop shared values and expectations for interactions and academic discussions creating a positive classroom climate of openness, mutual respect, support, and inquiry.	
Establishing Expectations for Behavior	No standards of conduct appear to have been established, or students are confused as to what the standards are.	Standards of conduct appear to have been established for situations and most students seem to understand them.	Standards of conduct are clear to all students. Teacher reviews and prompts behaviors when appropriate.	Standards of conduct for various situations are clear to students and appear to have been developed or revised with student participation.	
Monitoring Student Behavior	Is unaware of what students are doing, and/or student behavior is not monitored.	Generally aware of student behavior, but may miss the activities of some students. May neglect to use positive reinforcement.	Is consistently alert to student behavior, uses positive reinforcement and behavior prompts.	Monitoring is subtle and preventative, Students monitor their own and their per's behavior in appropriate ways.	
Response to Student Misbehavior	Does not respond to misbehavior, or the response is inconsistent. Overly repressive, or does not respect the student's dignity.	Attempts to respond to misbehavior but with uneven results.	Response to misbehavior is appropriate, successful, and respects the student's dignity.	Response to misbehavior is highly effective and sensitive to students' individual needs. Assists students in making appropriate behavior choices.	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 5B: The teacher intern understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction in the classroom.

Element	Level of Performance				
	Week #		Week #	Week #	
Positive Climate for Intrinsic Motivation	Level	Level	Level	Level	
Establishing Expectations for Behavior	Level	Level	Level	Level	
Monitoring student behavior	Level	Level	Level	Level	
Response to Student Misbehavior	Level	Level	Level	Level	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 6: The teacher intern has knowledge of effective verbal, nonverbal and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

Element	Level of Performance				
	Unsatisfactory	Basic	Proficient	Distinguished	
Oral and Written Language	Speech is inaudible or written language is illegible. Language may contain grammar, syntax, or spelling errors. Vocabulary may be inappropriate, vague, or used incorrectly.	Speech and written language are clear and correct. Vocabulary is correct, but limited or not appropriate to students' ages or backgrounds	Speech and written language are clear and correct. Vocabulary is appropriate to students' ages and interests.	Oral and written language are correct and expressive with well-chosen vocabulary that enriches the lesson.	
Quality of Questions	Questions are usually of poor quality; low level of thinking or one word responses are accepted.	Questions are a combination of low and high quality. Only some invite a thoughtful response. Wait time is inconsistent.	Appropriate variety of questions. Challenges students to justify responses, probing for learning understanding, and helping students articulate ideas. Consistently provides adequate wait time.	Knows how to ask questions and stimulate discussion in different ways of particular purposes. Promotes risk-taking, divergent thinking, and stimulations of curiosity. Students learn to question.	
Discussion Techniques with Student Participation	Interaction is predominately recitation style, with teacher mediating questions and answers. Only a few participate in the discussion.	Makes some attempts to engage students in a true discussion but with only limited success.	True discussion, with teacher stepping aside when appropriate. Teacher insures that all voices are heard in the discussion.	Students assume considerable responsibility for the success of the discussion, initiating topics, and making unsolicited contributions. Students insure that all voices are heard in the discussion.	
Use of Media & Technology: (felt/magnetic boards, charts, film. overhead projectors, computers (Internet PowerPoint, Distance Learning, etc.) as available.	Limited use of media and/or technology to enhance learning.	Some media and/or technology used, but is inconsistent or of limited quality.	Lessons consistently use media and/or technology to add instructional impact and increase learning.	Takes initiative to integrate new technology formats into curriculum. Quality and depth are consistently strong.	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 6: The teacher intern uses knowledge of effective verbal, nonverbal and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

Element	Level of Performance			
	Week #	Week #	Week #	Week #
Oral and Written Language	Level	Level	Level	Level
Quality of Questions	Level	Level	Level	Level
Discussion Techniques with student participation	Level	Level	Level	Level
Use of Media and Technology: (felt/magnetic boards, charts, film. overhead projectors, computers (Internet PowerPoint, Distance Learning, etc.) as available.	Level	Level	Level	Level

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 7: The teacher intern plans instruction based upon knowledge of the subject matter, students, the community and the curriculum guide.

Element	Level of Performance			
	Unsatisfactory	Basic	Proficient	Distinguished
Purposeful Learning Activities Based on Academic Achievement Standards, National FACS Standards, State and District Curriculum	Learning activities are not compatible with school and district curriculum and/or do not follow an organized progression.	Activities may follow an organized progression but are not completely compatible with the required curriculum.	Learning activities are highly relevant to students' needs and match instructional goals. Unit plans are keyed to state/district curriculum.	Learning activities follow a well-organized progression and follow the school/district curriculum requirements.
Short- and Long- Term Planning (including Unit Plans)	Thoughtful planning is not evident in lessons. Lesson plans are not prepared in a timely fashion.	Short-term planning is evident and lessons are consistently ready on time. There is minimal evidence of long-term planning or connections to past/future teachings.	Long-term planning with connections to past-future teachings is clearly evident and prepared in advance of teaching. Plans are linked to students' needs and performances.	Responds to unanticipated sources of input, evaluates plans in relation to short-and long-term goals. Has a clear understanding of the "big picture" for planning.
Lesson Plans: Monitoring and Adjustment	Adheres rigidly to an instructional plan even when a change will clearly improve the lesson.	Begins to check for understanding within a lesson. Attempts to adjust a lesson but with mixed results.	Routinely checks for understanding within the lesson. Makes minor adjustments to lessons or units and the adjustments occur smoothly.	Makes major adjustment to plans to meet student needs, interest, and motivation.

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 7: The teacher intern plans instruction based upon knowledge of the subject matter, students, the community and the curriculum guide.

Element	Rationale & Support				
	Week #	Week #	Week #	Week #	
Purposeful Learning Activities Based on Academic Achievement Standards, National FACS Standards, State and District Curriculum	Level	Level	Level	Level	
Short- and Long-Term Planning (including Unit Plans)	Level	Level	Level	Level	
Lesson Plans: Monitoring and Adjustment	Level	Level	Level	Level	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 8: The teacher intern understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

Key to Levels on the Rubric: U = Unsatisfactory B = Basic P = Proficient D = Distinguished *

Element		Level of Performance				
	Unsatisfactory	Basic	Proficient	Distinguished		
Variety of Formal/Inform al Assessment Strategies	Uses minimal number of assessments or only commercially prepared tests. Methods of assessment not consistent wit instructional goals.	Some instructional goals are assessed but not all. Gathering of assessment data is more frequent and begins to use performance-based measures.	Data on student progress is gathered in multiple ways such as observations, portfolios, teacher- made tests, performance tasks, student self-assessment and standardized tests.	Involves learner in self-assessment activities to foster awareness of their strengths/needs and to set personal goals for learning.		
Assessment Data Used in Lesson Planning/Adju stment	Assessment results affect lesson planning only minimally.	Uses assessment results to plan for the class as a whole.	Assessment results are used to adjust plans for individuals and small groups.	A deliberate attempt is made to assess instructional goals for the sole purpose of determining the next steps in instruction for individuals, small groups, and the whole class.		
Evaluation Criteria and Feedback	Criteria for evaluation are not predetermined on paper. Feedback is not provided in a timely manner or is of poor quality.	Feedback to students is timely but may only be minimal (just a score). Learners are not made aware of performance criteria in advance.	Learners are given evaluation criteria in advance (rubrics, point systems, etc). Feedback includes qualitative comments to highlight strengths or needs.	Learners are involved in setting criteria for evaluation. Feedback is individualized and includes personal goa setting. Descriptive rubrics are created and shared with students.		
Recording and Monitoring Assessment Data	Numerous errors in scoring of student work. Assessment records are in disarray or not up-to-date resulting in errors and confusion.	Scoring of papers and written records are adequate but require frequent monitoring to avoid errors.	System for scoring and recording data is fully effective and up-to-date.	System is highly effective and students are involved in collection and summarizing of data.		

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 8: The teacher intern understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

Element	Level of Performance				
	Week #	Week #	Week #	Week #	
Variety of Formal/Informal Assessment Strategies	Level	Level	Level	Level	
Assessment Data Used in Lesson Planning/ Adjustment	Level	Level	Level	Level	
Evaluates criteria and feedback.	Level	Level	Level	Level	
Recording and Monitoring Assessment Data	Level	Level	Level	Level	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 9. The teacher intern is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Element	Level of Performance				
	Unsatisfactory	Basic	Proficient	Distinguished	
Reflection on Teaching (written journal and conversations)	Does not know whether a lesson was effective or achieved its goals. Profoundly misjudges the success of a lesson. Perceptions are often inaccurate. Does not accept constructive criticism well.	Generally accurate impression of a lesson's success. Offers vague, general suggestions for improvement or is dependent on supervisors for ideas. Open to suggestions.	Can accurately determine whether a lesson has met the stated goals and cites references about how it may be improved. Is committed to reflection, self-assessment and learning as an ongoing process. Welcomes constructive criticism.	Is able to critically analyze a lesson weighing the relative strength of the weak areas. Offers alternative actions complete with probable successes with different approaches. Actively seeks constructive criticism.	
Relationships with Colleagues	Little interactions with colleagues or relationships are negative, self-serving or unprofessional.	Maintains professional cordial relationships with school staff and attends required meetings.	Seeks opportunities to work with colleagues to learn and grow professionally. Is willing to give and receive help.	Routinely shares materials, resources, ideas with colleagues. Manage volunteer to organize tasks or take the lead with activities within a department or team or at the school level.	
Professional Growth (including internship requirements and portfolio)	Makes no effort to share knowledge with others or to assume professional responsibilities (attire, mannerisms, communications). Does not complete teacher internship requirements.	Participates in professional activities that are provided. Conducts him/herself in a professional intern teacher manner most of the time. Some intern teaching requirements are not completed appropriately.	Consistently demonstrates professionalism in appearance/manners. Actively seeks out professional literature, colleagues, conferences, mentors, etc. to grow professionally. Intern teaching requirements are completed with quality and depth.	Demonstrates levels of leadership on a team or with the faculty. May include: sharing new knowledge/skills, conducting/sharing action research in the classroom, making presentations to faculty, fully coordinating events such as study trips, teaching after school enrichment classes.	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 9. The teacher intern is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Element	Rationale & Support				
	Week #	Week #	Week #	Week #	
Reflection on Teaching (written journal and					
conversations)	Level	Level	Level	Level	
Relationships with Colleagues	Level	Level	Level	Level	
Professional Growth (including internship requirements and					
portfolio)	Level	Level	Level	Level	

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 10. The intern teacher fosters relationships with school colleagues, parents and agencies in the larger community to support students' learning and well being.

Element	Level of Performance			
	Unsatisfactory	Basic	Proficient	Distinguished
Participation in School/District Events and Projects	Avoids becoming involved in school/district projects and events.	Participates in school/district events when specifically asked.	Volunteers to participate in more than one activity and makes substantial contributions. Participates as much as possible as a full staff member.	Frequently seeks opportunities to volunteer for activities outside of own classroom or creates activities such as enrichment /remedial classes for students outside of regular school day. Values his/her role in making the entire school a productive learning environment.
Sensitivity to Student Needs and Awareness of Community Resources.	Does not readily observe or identify clues to student distress, special needs, etc. Does not honor confidential information about students.	Identifies special needs of some students (vision, hearing, counseling, medical interventions, etc.) but does communicate concerns with classroom teacher. Respects the privacy of students and the confidentiality of information.	Is concerned about all aspects of a child's well-being (cognitive, emotional, social and physical), and is alert to signs of difficulty. Takes steps to stop discrimination or harassment among students.	Is persistent in seeking to end discriminatory activity or harassment among students. Also, teams with the classroom teacher to obtain support services.
Respectful and Productive Communication with Families	Provides minimal information to parents or is insensitive to parent concerns about students. Does not make an effort to get involved with parents.	Adheres to the existing formats for communications with parents. Needs to be reminded to communicate with individual students' parents.	Teams with the teacher to communicate with parents about their child's progress (both positive and negative) on a regular basis and openly welcomes parents to the classroom. Responses to parent concerns are handled with great sensitivity.	Demonstrates initiative in creating new avenues for connections/communications with families. This may include: family learning projects, a new or different type of class newsletter, utilizing parents in class projects.

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

Principle 10. The intern teacher fosters relationships with school colleagues, parents and agencies in the larger community to support students' learning and well being.

Element	Rational & Support			
	Week #	Week #	Week#	Week #
Participation in School/District Events and				
Projects	Level	Level	Level	Level
Sensitivity to Student Needs and Awareness of Community Resources.	Level	Level	Level	Level
Respectful and Productive Communication with Families	Level	Level	Level	Level

^{*} Descriptions at the distinguished level may not be appropriate for some settings.

CREATING MEANINGFUL PROFESSIONAL DEVELOPMENT FOR NEW FACS TEACHERS THROUGH COLLABORATIVE ACTION RESEARCH

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Kentucky Family and Consumer Sciences Teacher Educators collaboratively planned and implemented a model of professional development – New Teacher Workshop for new (one to three years) and returning (coming back to the classroom) teachers from 2000-2003. To enhance the planning of this model, principles of Action Research were applied throughout the process. Results from a recent nationwide study identifying six factors that establish the context for successful professional development were used to guide the planning. The New Teacher Workshop provides a model of professional development for others who are interested in mentoring new teachers.

In light of educational reform movements, professional development needs are no longer being met by the traditional, one-shot, everybody meet in the cafeteria in-service (Corcoran, 1995; Darling-Hammond, 1995; Lieberman, 1996; Little, 1993). Teacher needs are better addressed through well-planned, content specific, ongoing professional development. The purpose of this article is to highlight a model of professional development, *New Teacher Workshop*, collaboratively implemented by Kentucky Family and Consumer Sciences Teacher Educators between 2000 and 2003. To enhance the collaborative planning of this model, principles of Action Research were applied throughout the process. A secondary purpose of this article is to share insights gained from the ongoing Action Research in relation to the development of the *New Teacher Workshop*.

Development of the New Teacher Workshop

Professional development is defined as an ongoing, planned process for growth. It must be purposeful and result in some recognizable change in teachers' knowledge, attitude, and/or skill, which will ultimately improve student learning. As professional development evolves, it must embrace principles of adult learning, which foster group collaboration and the desire to immediately apply new skills and knowledge (Knowles, 1980). Additionally, effective professional development should foster meaningful teacher reflection.

Armed with this working definition, teacher educators began the Action Research process, which according to Mills (2003) includes four steps: 1) identify an area of focus, 2) collect data, 3) analyze and interpret data, 4) develop an action plan. The area of focus in this case was to enhance the localized professional development experience for new (one to three years) and returning Family and Consumer Sciences (FACS) teachers. The teacher educators used information collected from informal needs assessments with new teachers and results from a recent nationwide study by Birman, Desimone, Porter, & Garet (2000) to guide the preparation and planning of the *New Teacher Workshop*.

Birman et al. (2000) identified six factors that establish the context for successful professional development. They are form, duration, participation, content focus, active learning, and coherence. These factors can be posed in question form to guide the planning process.

- 1. Form. Is the activity structured as a "reform" activity (e.g. a study group, mentoring relationship, individual action research project), or is it a traditional format of a workshop or conference? A traditional format is defined as a one time lecture in-service criticized for not giving teachers time, appropriate activities or content necessary for increasing their knowledge enough for meaningful change. Recent literature on professional development emphasizes changing the form to encompass more educational reform approaches (Darling-Hammond, 1995, 1996; Loucks-Horsley, Hewson, Love, & Stiles, 1998). Birman et al. (2000) reported that reform based activities better meet the needs of today's teachers because they are longer, have more content focus, provide for active learning opportunities, and coherence.
- 2. *Duration*. How many hours did participants spend in the activity, and over what span of time did the activity take place? Birman et al. (2000) found that activities of longer duration (more than one time/day) provide more subject-area content focus, more opportunities for active learning, and more congruity with teachers' other experiences.
- 3. Participation. Did groups of teachers from the same school, subject area, or department participate collectively, or did teachers from different schools, different subject areas participate individually? Birman et al. (2000) concluded that activities that include collective participation tend to promote more active learning and are more likely to be coherent with other teaching experiences. Collective participation promotes the discussion of concepts and problems specific to those teachers and promotes integration of what they learn with other aspects of instructional content. Teachers with a common background are likely to share curriculum materials, course offerings and assessment requirements.
- 4. Content focus. To what degree did the activity focus on improving and deepening teachers' content knowledge? Birman et al. (2000) observed that the degree to which professional development focuses on content knowledge is directly related to teachers' reported increases in knowledge and skills. These results are consistent with other research that documents the importance of content (Cohen & Hill, 1998; Kennedy, 1998). Focusing on content targets the professional development on a specific subject area, such as classroom management.
- 5. Active learning. What opportunities did teachers have to become actively engaged in a meaningful analysis of teaching and learning? Birman et al. (2000) noted that if professional development included opportunities for active learning, teachers reported increased knowledge and skills and changed classroom practice. Examples of active learning activities include opportunities to observe and be observed while teaching, to plan classroom activities reflecting the professional development, to review student work, and to present, lead, and write about experiences.
- 6. *Coherence*. Did the professional development activity encourage continued professional communication among teachers and incorporate experiences that are consistent with teachers' goals and aligned with state standards and assessments?

Birman et al. (2000) stated that the coherence of the professional development is directly related to increased teacher learning and improved classroom practice. The more the professional development activity is connected to teacher learning and development the more coherent it is. Activities are also coherent when they support national, state, and district standards and assessments.

In the collaborative development process of the *New Teacher Workshop*, the Kentucky Teacher Educators applied the above six questions to develop an action plan for delivering professional development. The overall goal of the workshop was to continue the development of new teachers in areas where teacher education programs leave off. Secondary goals were to contribute to teacher professionalism and retention in Kentucky, to promote the status of the FACS profession, and promote a commitment to life-long learning by FACS teachers. The following narrative will discuss how each of the six questions was addressed throughout the planning and implementation of the *New Teacher Workshop*.

Planning and Implementing the New Teacher Workshop

Form – Was the New Teacher Workshop structured as a "reform" activity (e.g. a study group, mentoring relationship, individual action research project), or was it a traditional format of a workshop or conference? Yes, the workshop was structured as a "reform" activity in numerous ways. First, the workshop was ongoing throughout the academic year, and in most cases, the meetings were held for more than one day. Second, the workshop encouraged the sharing of concerns for group dialogue and the completion of individual growth activities, many of which were completed for graduate credit under the direction of a teacher educator. Each participant anonymously completed evaluation forms after each session.

Many of the teachers chose to participate for two years and some of them took on the role of mentor for first year attendees. On an evaluation, one participant noted, "Sharing ideas was excellent! I greatly enjoyed getting to meet other new teachers! The meetings built a bond that would never have otherwise been formed" (personal communication, 2000).

Duration – How many hours did participants spend in the activity and over what span of time did the activity take place? The workshop was designed to meet five times throughout the year, beginning and ending in July as a pre-conference to the Kentucky Association of Career Technical Education (KACTE) Conference. The participants were identified through teacher education programs, the Kentucky Department of Education (KDE), and the various professional organizations affiliated with FACS Education. E-mail and paper invitations were sent to these individuals encouraging them to attend the New Teacher Workshop and the KACTE Conference. The workshop then continued throughout the academic year, meeting for three more sessions on Friday and Saturday. The selected host sites represented different departmental configurations such as single or multi teacher departments. During the second year of the New Teacher Workshop the pre-conference included a joint meeting of those teachers who had just completed the workshop and the group of new teachers for the upcoming workshop.

Participation – Did groups of teachers from the same school, subject area, or department participate collectively, or did teachers from different schools, different subject areas participate individually? Although the participants were from different schools throughout Kentucky, they were all Family and Consumer Sciences (FACS) teachers with a common bond – they were new to the classroom or returning after several years of absence from the teaching profession. The commonality of the participants promoted collective participation. Participants were eager to

discuss concepts and problems related to new teachers, such as classroom management. One of the most successful activities of each workshop was the sharing session in which the topic was identified in advance and participants were encouraged to bring examples to share. The sharing session included a variety of topics including surviving the first days of school, class management, lesson plans, and Family, Career and Community Leaders of America (FCCLA) activities.

Content focus – To what degree did the activity focus on improving and deepening teachers' content knowledge? Because the participants were all FACS teachers, multiple opportunities existed for strengthening content knowledge relevant to FACS Education. Topics specific to FACS Education included areas such as management of the FACS department, curriculum ideas, advising and integrating FCCLA into the classroom, implementation of FACS Career Majors, Kentucky Skill Standards Assessment System, professionalism, and integration of academic skills with FACS content. Participant evaluation comments confirmed that a content focus is beneficial. One new teacher said, "It really helps to get information specifically designed for FACS teachers" (personal communication, 2000).

Active learning — What opportunities did teachers have to become actively engaged in a meaningful analysis of teaching and learning? As mentioned earlier, the workshop encouraged the sharing of concerns and ideas for group dialogue. The sharing sessions allowed for more reflection on the part of the teacher than the teacher educators realized would occur. These directed activities allowed participants to give and to receive input and ideas from each other, which often resulted in new strategies for solving classroom problems. One new teacher stated, "I definitely learned new ideas and realize ways to improve" (personal communication, 2001).

Participants were encouraged to complete individual growth activities beyond the workshop for graduate credit under the direction of a teacher educator. Graduate credit (3 hours) required attendance at all of the workshops: a reflective paper on strengths, areas for growth and teaching/professional goals; reflective abstracts of nine outside readings in the areas of current trends, professionalism, and technology; and a project to be presented at the pre-conference. Project choices include a ten-lesson unit utilizing technology; assisting four students in developing PowerPoint presentations for FCCLA, class, or a community organization; or the formulation of a *new* FCCLA chapter. These projects were presented to the group at the final workshop, which served as a wrap-up activity for the current participants and as an introduction for the upcoming workshop participants.

Coherence – Did the professional development activity encourage continued professional communication among teachers and incorporate experiences that are consistent with teachers' goals and aligned with state standards and assessments? The ongoing nature of the workshop promoted continued dialogue between new teachers, teacher educators, and state staff. Periodic emails between workshop sessions further enhanced communication among the new teachers.

The focus of each meeting addressed the unique needs of new FACS teachers in Kentucky. Promoting a better understanding of the specific components of state standards, such as Career Majors, and the Skill Standards Assessment System was a major goal. The strategy in presenting information was to develop a deeper comprehension without overwhelming the new teachers. Therefore content of the workshop was introduced gradually. Implementation into the FACS classroom was highlighted.

The teacher educators met regularly throughout the year to reflect on the workshop and to discuss future directions. Participants' evaluations were reviewed often to better meet the needs of the new teachers. These meetings included staff from the Kentucky Department of Education

to ensure that the most recent and necessary content was being addressed. Implementation of content was divided equally between the teacher educators.

Evaluation of the New Teacher Workshop

The following conclusions were drawn from the teacher educator reflection session and evaluations completed by the participants. The *New Teacher Workshop* was so successful that many of the new teachers participated a second year. A participant said, "I loved it all – again! It's new each time and soaks in a little more hearing it every year....I appreciate having this professional development opportunity" (personal communication, 2002)! All the evaluations were positive. The only request that echoed through the evaluations was for more time to share. Sharing sessions were a highlight – they generated new ideas and a sense of comradery among the new teachers.

The *New Teacher Workshop* increased the level of motivation among the attendees. They realized they were not the only teachers experiencing similar problems and issues. As successes were shared, others were eager to go back to the classroom with new ideas. The *New Teacher Workshop* has allowed for professional involvement of new teachers that may not have gotten involved otherwise. After attending the *New Teacher Workshop* many of the new teachers have taken on leadership positions in regional Kentucky Association Teachers of Family and Consumer Sciences.

Although the participants gained numerous benefits, a few hurdles surfaced during the implementation of the workshop. Attendance at the meetings became increasingly difficult for some participants because of traveling distances and recent state budget cuts. Several participants needed to travel four to six hours to attend a meeting. Administrators were reluctant to release new teachers for travel due to the shortage of funds for substitute teachers. Additionally, some school districts required their own professional development programs that competed with the workshop.

Facing these issues, the teacher educators have established the following goals for future workshops. First, in order to accommodate more new teachers, the group will secure official approval from the KDE to be a professional development service provider, which will eliminate the competition with some school districts in providing professional development. A second goal is to restructure the format as a summer institute. The New Teacher Institute will be created with a special focus to meet the needs of the first year teacher. Second and third year teachers who have attended previously will be grouped together with the focus on using Action Research to enhance student learning. Graduate credit will be available for the second and third year teachers. Finally, to alleviate travel issues experienced by some of the participants, alternative delivery methods such as distance learning are being explored.

References

- Birman, B. F., Desimone, L., Porter, A. C., & Garet, M. S. (2000). Designing professional development that works. *Educational Leadership*, 57(8), 28-32.
- Cohen, D. K., & Hill, H. C. (1998). *Instructional policy and classroom performance: The mathematics reform in California (RR-39)*. Philadelphia: Consortium for Policy Research in Education. Corcoran, T. B. (1995). *Transforming professional development for teachers: A guide for state policymakers*. Washington, DC: National Governors Association.

- Darling-Hammond, L. (1995). Changing conceptions of teaching and teacher development. *Teacher Education Quarterly*, 22(4), 9-26.
- Darling-Hammond, L. (1996). What matters most: A competent teacher for every child. *Phi Delta Kappan*, 78(3), 193-201.
- Kennedy, M. M. (1998). Form and substance in in-service teacher education (Research monograph no.1). Arlington, VA: National Science Foundation.
- Knowles, M. (1980). *The modern practice of adult education*. Englewood Cliffs, NJ: Cambridge Adult Education.
- Lieberman, A. (Ed.) (1996). Practices that support teacher development: Transforming conceptions of professional learning. In M. W. McLaughlin & I. Oberman (Eds.) *Teacher learning: New policies, new practices* (pp. 185-201). New York: Teachers College Press.
- Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational and Policy Analysis*, *15*(2), 129-151.
- Loucks-Horsley, S., Hewson, P. W., Love, N., & Stiles, K. E. (1998). *Designing professional development for teachers of science and mathematics*. Thousand Oaks, CA: Corwin Press.
- Mills, G. E. (2003). *Action Research: A guide for the teacher research* (2nd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

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UP CLOSE AND PERSONAL: WEEKLY REFLECTIVE JOURNALING REVEALS PERCEPTIONS OF FCS STUDENT TEACHERS

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The purpose of this qualitative study was to examine the perceptions of family and consumer sciences student teachers as they experienced 15 weeks of student teaching. The objectives were to identify the significant events experienced by the student teachers, feelings perceived by the student teachers, and sources of feedback and support the student teachers received. Prior literature identified important components of the student teaching experience and common feelings perceived by student teachers. The common feelings included being overwhelmed, frustration, anger, pressure, fear, tension, self-confidence, anxiety, motivation, and enthusiasm. The results of this study indicated that events and experiences perceived by the student teachers as difficult, generated feelings of overwhelm, disappointment, discouragement, and concern. As their teaching assignment continued and they received support and positive feedback regarding their performance, the difficult events and experiences were perceived as successful events and experiences that generated feelings of satisfaction, happiness, self-confidence, and excitement.

The amount of time student teachers spend in a classroom can be a significant factor in preparing them for the "real world" of teaching. Teachers who are fully prepared and certified in their discipline are more highly rated and more successful with students than those without adequate preparation. For this reason, teacher education programs need to be concerned about how successful their programs are in preparing education students for the realities of teaching. If the student teachers' expectations of their teaching experiences match the realities of their teaching experiences, the students will most likely find that teaching is a positive and rewarding career, and will want to remain in the teaching profession. Maintaining the number of teachers in Family and Consumer Sciences (FCS) is particularly important due to the current shortage of teachers in this field. Examining the experiences of FCS student teachers provides useful information regarding the skills, knowledge, and other attributes perceived to be imperative to a successful student teaching experience. It also identifies areas of teacher education programs that may need to be changed in order to better meet the needs of FCS teachers as they begin their teaching career.

Related Literature

In a study of family and consumer sciences (FCS) education graduates in Virginia, nearly one third of certified teachers were not teaching (Mimbs, Stewart & Heath-Camp, 1998). Mimbs (2000) surveyed 188 certified FCS teachers in Missouri who were listed in the state certification files as not currently teaching. When questioned as to why they were not currently teaching the most common responses were family obligations and working in other occupations. Other reasons for leaving the profession included the frustration and stress associated with teaching, the lack of administrative support, and elimination of positions. When questioned regarding what

they felt was necessary in order to keep FCS teachers in the teaching profession, the need for more experience in the classroom prior to teaching was given.

Additional competencies that FCS teachers felt they needed to ensure a successful student teaching experience included classroom management skills (Nichols & Mundt, 1996). Providing beginning teachers with strong mentor teachers was also recommended to keep FCS teachers in the profession. Van Zoest (1995) identified classroom management strategies, instructional strategies, teaching style, student behaviors, and course content to be imperative to a successful student teaching experience.

The role of university supervisors and cooperating or mentor teachers also has a significant impact on the perceptions and feelings of student teachers. Enz, Freeman, and Wallin (1996) determined that student teachers perceive their university supervisor as a mentor, interpreter, and professional resource. Zimpher, DeVoss, and Nott (1980) identified the university supervisor as the single force responsible for helping the student successfully complete the student teaching experience. Shantz and Ward found that student teachers felt it was important for university supervisors and cooperating or mentor teachers to provide feedback.

Mentor teachers also play a significant role in providing support to beginning teachers in the areas of classroom and behavior management. This is crucial since 14% of secondary and 9% of primary teachers stated behavior management and discipline as priority issues for beginning teachers (Eves, 2001). Eves indicated a significant correlation between first teaching assignments and the willingness of the teacher to stay on the job. Support from principals and staff was the major reasons beginning teachers indicated for staying on as a teacher.

Limited studies have been conducted regarding the common themes of concern for FCS student teachers as they complete their student teaching assignment. Do they feel that classroom management and student discipline are critical skills? Do they receive adequate support from principals and administrative staff? Do they receive feedback from their cooperating or mentor teacher and university supervisor? What areas would they like to have additional knowledge or skills in? These are a few of the questions that can be answered by studying FCS student teacher perceptions as they complete their student teaching assignment.

Method

The purpose of this qualitative study was to examine the perceptions of family and consumer sciences student teachers in a western state university teaching program as they completed fifteen weeks of student teaching. By identifying common themes of concern, university teacher preparation programs and other FCS student teachers will have a better understanding of what knowledge, skills, and attributes student teachers should possess to ensure a satisfying and rewarding student teaching experience. The research was designed to identify 1) events and experiences of the students as student teachers, 2) feelings student teachers perceived and the precipitating factors influencing the feelings, 3) sources of feedback and support that the student teachers received, 4) strengths and weaknesses student teachers perceived regarding their level of preparation for teaching.

Data for this study was examined through the detailed descriptions of the student teachers being studied. The researcher developed ten open-ended questions, designed to initiate reflective analysis and interpretation of the participant's accounts of their experiences. The ten questions focused on the student teachers' thoughts and feelings towards their students, staff, school, and administrators; sources of support and feedback; their strengths and weaknesses; and any questions they had regarding their overall experience. The questions included:

- 1. Identify feelings you experienced this week (including your current feelings) and what caused them.
- 2. Is there something you don't know that you feel you should know? Please explain.
- 3. List the people who gave you feedback regarding your teaching this week. Please include the number of times and the mode of feedback (written or verbal).
- 4. How many times did you meet to talk with your cooperating or mentor teacher this week?
- 5. What other sources of support did you have this week?
- 6. What are your thoughts and feelings about your students this week?
- 7. Please share any specific thoughts or opinions you have this week about your school, the administration, other faculty, or teaching in general?
- 8. What is one thing about this week that caused you to feel good?
- 9. Overall, what do you believe is not going well? Please explain.
- 10. What questions do you have?

Fifteen FCS education students were registered for student teaching in the Fall 2001 and Spring 2002 semesters and were invited to participate in the study; however thirteen students agreed to participate. Four of the student teachers were emergency permit student teachers and nine were traditional student teachers. The emergency permit teachers were full-time employees, had earned Bachelors degrees, and had passed the state's basic skills test, but had not yet completed their teaching credential program.

Each student was asked to reflect on their week by responding to the set of open-ended questions at the end of each week of their 15-week student teaching assignment. They responded to the questions by using electronic mail or by tape recording their responses and forwarding the tape to the researcher utilizing stamped and addressed mailing envelopes provided by the researcher. Their responses were then transcribed into Word documents, read, and analyzed for common themes.

Results

Demographics

The student teachers ranged in age from 23-43 years of age. Nine of the participants were single, 3 were married, and 1 was divorced. Six of the 13 student teachers had children. Out of the 6 student teachers that had children, 2 had only one child, 3 had two children, and 1 had four children. All of the student teachers had prior work experience other than teaching, with 8 of the student teachers having prior paid teaching experience. Three of the student teachers had one to five years as substitute teachers, two had three semesters teaching at the high school level, and one student teacher had already taught for one year with an emergency permit. Four of the participants were enrolled in other university credential courses while completing their student teaching and 9 out of the thirteen had completed all their credential coursework before beginning their student teaching assignment.

Themes

During their student teaching assignments, the student teachers identified particular events that they perceived to be difficult. Often, these events identified areas where they were lacking particular skills or knowledge. Difficult events fell into one of two distinct categories, instructional or communication. Instructional events included difficulty with classroom

management, student motivation, lesson planning, and resources. Communication events included communicating with administration and communicating with the cooperating or mentor teacher.

<u>Classroom management</u>. All of the student teachers experienced some difficulty with managing their classrooms, even the student teachers that had prior paid teaching experience. The emergency permit student teachers requested more assistance with classroom management than the traditional student teachers. One student teacher made several statements regarding her need for additional classroom management skills. She stated, "I would like to feel more in control when it comes to classroom management" and "I need to build up my skills of classroom management and discipline." Another student teacher had similar thoughts when she stated, "Why don't we have classes that reflect what really goes on in the classes today and how to deal with kids when nothing you try works?"

Difficulty with how to handle excessive talking by the students and disruptive or unruly behavior were common difficulties noted by both the emergency permit and traditional student teachers. Some noted problems with particular classes. One traditional student teacher commented, "I am frustrated with my freshman class. I have tried everything and they just seem to get worse." Another student teacher expressed similar thoughts and felt frustrated with her class of seniors, "The students are just getting very chatty and senior-itis is pretty strong."

It was apparent that most of the student teachers had difficulty in successfully managing their classrooms and therefore identified the need to further develop this skill in order to be more effective teachers.

<u>Poor student motivation.</u> Many of the student teachers had difficulty motivating their students to complete assignments and participate in classroom activities. One traditional student teacher relayed her frustration with her students by stating, "I'm feeling a little frustrated because they are so lazy and they don't want to take notes or do activities." An emergency permit student teachers had similar feelings when she commented, "They [the students] are very apathetic and lazy. It drives me nuts." She felt that she should be doing a better job at motivating her students as she stated, "I feel I should know how to get the students to turn in their work. No amount of cooking or eating motivates them to turn in their assignments." Both the emergency permit student teachers and the traditional student teachers appeared to have the same level of difficulty motivating their students.

Lesson Planning. Lesson planning was another skill commonly identified as a difficult experience for a majority of the student teachers. Student teachers who had prior teaching experience appeared to have just as much difficulty with lesson planning as the teachers that had no prior experience in teaching. Many expressed a strong need for further assistance with this skill noting particular difficulty with finding adequate time to complete the lesson plan. One traditional student teacher commented, "The only part so far that I am not sure is going so well is lesson plans." On another occasion she wrote, "I believe that I'm falling behind in my lesson plans. I cannot seem to catch up."

Gess-Newsome and Lederman (1990) found that student teachers perceived a lack of time for proper planning, writing objectives, and reflecting on what was planned. It was apparent that the FCS student teachers in this study had similar perceptions.

Resources. Some of the student teachers expressed frustration regarding a lack of resources to assist them in lesson planning and developing the content of their curriculum. One emergency permit student teacher expressed this by writing, "There is not a previous outline and no book for my class. I wish I had some kind of guide to go by."

Communication with Administrators. All of the emergency permit student teachers expressed concern on how to effectively communicate with their school administrators. This may have been attributed to the fact that because these student teachers were full time employees, they had to assume full responsibility for their classrooms and in doing so, had many issues that required the assistance of their administrators. They often questioned whom to go to with their questions and concerns, as one emergency permit student teacher commented, "How do you get what you want or need from the administration? How do you explain that my 'wants' are for the best interest of the students? "Another emergency permit teacher had similar thoughts. She went on to say, "I don't know how to handle the problems that I face with my administrators. I don't know who to talk to about my workload, or [if I am] justified with my complaints? Is this what is expected of all new teachers? I don't know."

The traditional student teachers did not express similar perceptions as the emergency permit student teachers even though they most likely had similar questions and concerns. It is logical to assume that the traditional student teachers had less difficulty with this because they could get assistance from their cooperating teachers. It therefore, may not have been necessary for them to go to their administrators since they had another source of support to utilize.

<u>Successful Events or Experiences.</u> During their student teaching assignments, the student teachers also identified particular events that they perceived to be successful. These events generated positive feelings towards their students, school staff, and administrators. The successful events consisted of three categories; instructional, school events, and interaction with faculty and staff.

<u>Instructional</u>. The most prominent successful events perceived by the student teachers were those that involved witnessing successful student performance, particularly in lab classes. One traditional student teacher conveyed, "My 8th grade class was crunched on time to complete a comprehensive luncheon buffet, and they did it. The food tasted great and we got out of there in a reasonable amount of time." Another traditional student teacher had similar perceptions commenting, "My 7th grade classes seem to perform better and better in their labs."

In addition to witnessing improvement in student performance, verbal feedback from students and from adults was also identified as significant successful experiences by the student teachers. Many of the student teachers expressed satisfaction with the casual conversations that took place with their students allowing them to get to know their students better. A traditional student teacher relayed that when her students spoke to her outside of the classroom, she felt that she finally belonged. Others expressed happiness when students personally thanked them or told them that they found the class enjoyable as one traditional student teacher conveyed, "My students from last year told me I was their favorite and my class this year made the comment that they felt privileged that they are the only class lucky enough to have me as a teacher." An emergency permit student teacher had similar feedback from her students, "One of the boys in my foods class said that because of my class he got some of the answers on the SAT exam that he wouldn't have if he wasn't in my class." She went on to say, "My girls in my child development class tells me I am a good teacher and they want to take my other classes next year. That makes me feel good."

In addition to the feedback the student teachers received from their students, feedback they received from adults was also noted as successful events or experiences. The adults included their mentor or cooperating teacher and school administrators.

Several of the student teachers noted feelings of pride and satisfaction when their mentor or cooperative teacher told them that they were doing a good job. One traditional student teacher

was "thrilled" when her cooperative teacher said she liked the lesson and activities she developed and requested a copy of them. Another student teacher also felt she was successful when her cooperating teacher expressed interest in her ideas and told her she was doing a fine job.

Others relayed feelings of success when school administrators paid them a compliment regarding their teaching, particularly when it was the principal or vice principal. An emergency permit student teacher wrote, "Rumor has it through the grape vine that our principal thinks I'm doing a great job." Other student teachers had similar feelings when their assistant vice principals expressed to them that they felt they were doing a great job.

<u>School Events</u> In addition to successful events involving instructional skills, the student teachers also perceived specific school events as successful. These school events included open house and back to school night, parent teacher conferences, student awards ceremony, and a student bake sale. Events that involved the parents of the students offered the opportunity for

One traditional student teacher wrote, "... some of the parents' comments during open house were just making me smile from ear to ear." Two additional traditional student teachers had similar experiences. Parents of their students told them that the students loved their classes and that they thought the teachers treated the students fairly.

School events in which the student teachers could interact with their students were also noted as successful events. One emergency permit student teacher commented that the bake sale she had with her students not only generated money for the foods classes, but went so well that the students, administration and the teachers wanted to know when the next one would take place. Another student teacher expressed that when she attended the awards ceremony it made her feel that she "belonged."

<u>Interaction with faculty and staff.</u> School events that involved faculty and school staff such as the student teacher luncheons were also recognized as positive significant events. One student teacher felt that when she attended a faculty luncheon she was able to see the level of support among the faculty members. This made her feel secure knowing that if she ever had a problem; the faculty would be there to support and help her too.

When a traditional student teacher was asked, what did you think went well this week, she said, "Talking with another teacher from the history class. He is an excellent teacher and fun to talk with about the lessons." It was apparent that these events and experiences the student teachers perceived as successful increased their level of self-confidence as beginning teachers.

Feelings

Previous studies have indicated that student teachers experience a wide array of feelings, including both negative and positive, as they complete their student teaching assignments. Common feelings previously identified include overwhelm, frustration, anger, pressure, fear, tension, self-confidence, anxiety, motivation, and enthusiasm (Burstein, 1988; Eves, 2001; Gess-Newsome and Lederman, 1990).

Negative feelings. In the beginning of their student teaching assignments, negative feelings commonly identified by the family and consumer sciences student teachers were frustration, overwhelm, and concern. The most common precipitating factor that initiated feelings of frustration was students' lack of motivation, their own lack of classroom management skills, and a lack of administrative support. One student teacher had an unusually difficult time managing her students and stated, "...I don't feel that I went to school and paid money and time to teach some disrespectful, lazy, arrogant teenagers about foods!" Another student teacher had

similar feelings of frustration with her students as she noted, "[I am feeling] a little frustrated because they are so lazy and they don't want to take notes or do activities."

Mimbs (2000) cited several reasons why FCS teachers leave the teaching profession. One of these reasons included the level of frustration and stress associated with teaching and lack of administrative support. It was apparent that the student teachers in this study felt lack of administrative support regarding the number of students placed in the FCS student teachers classrooms.

Feelings of overwhelm were also commonly experienced by a majority of the student teachers, particularly during the first few weeks of the student teaching assignment. Contributing factors to the student teachers' sense of overwhelm was the workload associated with their teaching assignment. This was expressed by one student teacher who stated, "It's an enormous amount of work...to teach three entirely new subjects, be in the [new teacher program] and be a mom. I am tapped beyond belief."

Another prevalent feeling expressed by the student teachers was concern. Feelings of concern were reported as a result of poor student performance, lack of student attendance at classes, and difficulties in classroom instruction. Both the emergency permit and traditional student teachers appeared to have similar levels of concern in these defined areas.

<u>Positive Feelings.</u> Due to the elevated level of frustration and stress that student teachers experience at the beginning of their teaching career, it was surprising to see the volume of responses from the student teachers that included positive feelings. These positive feelings included satisfaction, happiness, self-confidence, and excitement.

The student teachers expressed feelings of satisfaction when they accomplished a difficult task or felt comfortable with the outcome of their efforts. Feelings of happiness were attributed to observing their students' performance level improve and witnessing their students' interest and enjoyment while learning in the classroom. Many of the difficult events that first led to feelings of frustration and concern, such as classroom management and poor student performance, appeared to be the same precipitating factors that now generated feelings of satisfaction and happiness. The data indicated that feelings of satisfaction and happiness were more frequently experienced by the traditional student teachers than the emergency permit teachers.

Most of the student teachers noted feelings of satisfaction as a result of experiencing success with a skill that had previously been a struggle to attain. For example, one student teacher struggled with classroom management but then felt she was managing her classroom more effectively stated, "[I am feeling] accomplishment, finally getting through to my classes that I will not tolerate talking." Another traditional student teacher conveyed a similar response regarding her classroom management skills by stating, "I felt good that my kids were cooperative and interested in the activities that I had for them."

Student teachers who previously indicated a lack of lesson planning skills noted satisfaction at the end of their teaching assignment when they felt they had finally understood how to complete a lesson plan. One traditional student teacher during the 9th week of her 15-week teaching assignment stated, "I am feeling accomplishment, finally figuring out how to really do a lesson plan." Another traditional student teacher was also satisfied with her lesson planning skills during the 8th week of her teaching assignment. She wrote, "I did develop different lessons for every single day and they went pretty well so I feel good…"

Many of the student teachers expressed happiness with their students' performance. One traditional student teacher noted, "[I am] happy about the way my students are cooking and cleaning up." One emergency permit student teacher also indicated similar feelings. She stated,

"One good thing that made me feel good this week was my students turning in their sewing projects and how well they all turned out!"

Other factors resulting in feelings of happiness were teachers' receiving positive feedback from other adults, particularly their cooperating or mentor teacher. They also noted happiness when receiving positive verbal feedback from their students, for example when students paid them a compliment or told them that they enjoyed the class.

At least half of the student teachers, traditional and emergency permit, indicated feelings of confidence. Some expressed a sense of self-confidence at the beginning of their teaching assignment and others noted an increase in their confidence level several months into their teaching assignment. The traditional student teachers that had previous teaching experience noted feelings of self-confidence at the beginning of their teaching assignment.

One traditional student teacher was specific in her comment regarding her increased confidence at week 5 and 6 of her teaching assignment compared to the first week. Similarly, at

the end of her teaching assignment, another traditional student teacher felt confident enough at the end of her teaching assignment that she felt she could teach on her own. She stated, "I really just want to be on my own now and feel I can do the job without hesitation."

These results coincide with the findings of Burstein (1988). Student teachers who had a structured classroom, support of their cooperating teacher, and were confident that they could handle increased responsibility were able to cope and adjust more readily to their teaching responsibilities.

Interestingly, three out of the four emergency permit teachers had teaching experience prior to their student teaching assignment, yet only one of the emergency permit teachers stated she felt confident and this was noted at week 9 of her teaching assignment.

Turley and Nakai (1998) interviewed both traditional route student teachers and student teachers employed as emergency permit teachers to obtain their perceptions of the benefits and drawbacks between the two routes of student teaching. Traditional student teachers felt unprepared for full classroom responsibilities, and desired the opportunity to observe another teacher, practice their teaching, and receive feedback from an experienced teacher. Once completed, this would most likely increase the student teachers' level of self-confidence.

Perhaps the emergency permit teachers in this study lacked feelings of self-confidence due to taking on the increased responsibility of teaching without the opportunity to practice their teaching skills. They may have also felt that they did not have adequate support or feedback from another experienced teacher.

Feelings of excitement were prominently noted by a majority of the student teachers. Some expressed excitement and feelings of anticipation the first week of their student teaching assignment. Other precipitating factors were observing their student's achievements, receiving positive feedback regarding their teaching, and looking ahead to teaching independently and having their own classroom.

One traditional student teacher was excited to see her students participating in discussion and taking an interest in the subject being presented. She was also excited to see the students trying new foods during one of the food lab classes. The student teachers were also excited when they witnessed the students having fun in their classes and as they looked forward to being

on their own. This was conveyed by one traditional student teacher that stated, "I am excitedly looking forward to being on my own," and "I am so ready to be done just after one semester."

From her statements, it was evident that she felt she had enough experience and confidence to begin teaching independently.

It was not surprising that excitement, anticipation and a sense of nervousness was a common feeling expressed by most of the student teachers, particularly at the beginning stages of their teaching assignments. As their assignments continued, it was evident that these feelings were noted less frequently. Many of the students felt less excitement and nervousness as they became more comfortable with their school, class, students, and faculty.

Feelings experienced by the student teachers were also influenced by the feedback and support they received or did not receive from both professional and personal sources. Professional sources included their cooperative and mentor teachers, school administrative staff, school faculty, students, school meetings, or seminars that they attended. Their university supervisor and classmates were also sources of professional support and feedback. Personal sources included their family, friends and spiritual sources.

Sources of Feedback and Support

Two of the ten open ended questions the student teachers were asked to respond to concerned sources of feedback and support they felt they received at the end of each week of their student teaching assignment. They were asked to list the individuals who gave them feedback regarding their teaching, the frequency of the feedback and whether or not it was given verbally or in a written format. They were also asked how often they met to talk with their cooperating or mentor teacher and what other sources of support did they receive that week.

Mentor and Cooperative Teachers. The most frequent source of feedback received by all of the student teachers was verbal feedback from their mentor teacher (emergency permit student teachers) or from their cooperative teacher (traditional student teachers). All of the eight traditional student teachers received verbal feedback from their cooperative teacher five times a week or in some weeks, more than five times per week. During the first two weeks of the student teachers assignment, it was common for the traditional student teachers to speak with their cooperative teachers several times per day. Very often, the student teachers had lunch with their cooperative teacher and would receive feedback from them at this time.

When the data was analyzed for the emergency permit teachers, it appeared that the emergency permit student teachers received much less verbal feedback from their mentor teachers. Looking at the data more closely, it was discovered that when the emergency permit teachers responded to the question regarding who provided them with feedback, they often responded "no one." This was not a true reflection of the feedback they may have actually obtained since they did indicate in a separate guided question that they met to talk with their mentor teacher at least four to five times a week throughout the semester. Two of the emergency permit student teachers also indicated that they met with their mentor teacher several times a day during their first two weeks of student teaching. Only one emergency permit student teacher indicated meeting with her mentor teacher only two to four times per week.

It was concluded that since the emergency permit student teachers met with their mentor teachers daily, they had to have some kind of exchange regarding how the experience was going for the student teacher. It would also be logical to assume that when the mentor teacher spoke with the student teacher, she would offer some form of verbal feedback or support at this time.

Responses regarding written feedback were much less frequent. For both the traditional and emergency permit student teachers, written feedback was typically in the form of an evaluation. Only five of the nine traditional student teachers noted that they received written feedback from their cooperating teacher. All of them indicated that at the end of one week, they had received feedback at least once that week. Feedback was provided to complete their evaluations, and to offer suggestions and comments after the student teachers taught a class.

Written feedback from mentor teachers was only received once or twice throughout the semester by three of the four emergency permit teachers. One emergency permit teacher did indicate that during one week, she did receive written feedback three times from her mentor teacher. The written feedback provided to the remaining three emergency permit student teachers was in the form of a mid-term or final evaluation.

Although prior literature has found feedback from the cooperative or mentor teacher invaluable to the student teacher (Montgomery, 2000) it was quite surprising to find that very few student teachers, traditional and emergency permit, did not receive more frequent written feedback from their cooperating or mentor teachers.

Administrative Staff. A source of feedback with a lower response rate was other school faculty and staff, including administration. It was interesting that the results indicated three out of the four emergency permit teachers received verbal feedback from administration more than once a week for at least one week of their teaching assignment. Five out of the nine traditional student teachers received verbal feedback from administrative staff, with the remaining four traditional student teachers not receiving any verbal feedback from administration throughout their teaching assignment. Administration did not provide any written feedback to any of the student teachers throughout the teaching assignment.

School Faculty. Other faculty that provided feedback included teachers within the schools' FCS departments and teachers outside of the FCS departments. Other teachers were noted as a source of feedback more often from the emergency permit student teachers rather than the traditional student teachers. The emergency permit student teachers indicated that they received feedback from two to six teachers within a week's time; however, the number of weeks they responded in this way was limited to only one to two weeks out of the entire semester.

Students. Although student feedback was likely received daily by the student teachers, they did not indicate this in their responses. Only two student teachers, one emergency permit and the other traditional, listed their students as a source of feedback. This occurred during the first three weeks of their student teaching assignment. This result may be quite misleading in that it would be logical that students provide feedback to the student teacher on a daily basis. These results could be due to student teachers not considering their daily interactions with their students as feedback although they wrote about their daily verbal interactions with students each week of their teaching assignment.

School Meetings. Five out of the thirteen student teachers reported school meetings as a source of support. These meetings included faculty meetings, new teacher support meetings, and department meetings. One student teacher stated that the meetings gave her the opportunity to meet other teachers, the administrative staff, and department members. Attending the faculty meetings brought about a sense of "belonging" to some of the student teachers and increased their comfort level with the faculty and school staff they were working with.

University Sources of Feedback and Support

The university supervisors and fellow classmates enrolled in the student teacher education program were reported as sources of feedback and support for both the emergency permit and the traditional student teachers. A majority of the student teachers received verbal feedback at least once a week from these sources.

<u>University Supervisor.</u> Twelve out of the thirteen student teachers received verbal feedback at least once a week from their university supervisor. The supervisor issued verbal feedback after observing them teach in their assigned classrooms. Written feedback was also given when the student teachers received their mid term evaluation. EST01 stated, "This week I received my mid term evaluation from my mentor teacher and was visited by my university supervisor." Many of the student teachers valued the support and feedback, provided by their university supervisor. One traditional student teacher wrote, "I did get some great advice from my supervisor, which helped my lesson writing." Another student teacher noted difficulty communicating with her cooperating teacher and consulted with her university supervisor to see how she should handled the situation. She wrote, "[After my supervisor] visited, I discussed [with my supervisor] what was going on and how I should handle talking with her."

The findings in this study agreed with Knudson (1998) who indicated that university supervisors could establish therapeutic relationships with their student teachers. If aware of the students' difficulties during the early stages of their student teaching assignment, the university supervisor can intervene and resolve problems related to inexperience.

<u>Classmate Support and Feedback.</u> An additional source of support at the university was the other students' enrolled in the student teaching program. The student teachers referred to these individuals as classmates or other student teachers. Those that were enrolled in university courses while completing their pre-service assignment tended to list their classmates as both sources of support and feedback while the student teachers that did not have university courses thought of the other student teachers solely as a source of support. Either way, the student teachers valued the support and feedback they received from the other student teachers.

Personal Sources of Feedback and Support

Some of the more surprising results of this study were found in the data for this particular source of feedback and support. Personal sources of feedback and support included family, friends and spiritual sources. Interestingly, only once did two out of the thirteen student teachers indicate they received feedback from personal sources. One traditional student teacher received feedback from her husband and one emergency permit student teacher indicated that her friends and family gave her feedback.

Although some responses were received for personal sources of support, the frequency of these responses was minimal. Only five out of the thirteen student teachers indicated personal sources of support. Four of the five were traditional student teachers and one was an emergency permit student teacher.

Three of the student teachers were married, yet only one indicated her spouse as a source of support. This same traditional student teacher also listed her in-laws, friends, and father as additional sources of support. Friends, family, and a roommate were also indicated on one occasion by two of the traditional student teachers. Church was listed once by a traditional student teacher and God, friends, and family were indicated once by an emergency permit student teacher.

It is unclear why personal sources of support were not reported very frequently by the student teachers, particularly since their levels of frustration, overwhelm, and concern was so prevalent throughout their teaching assignment. The data currently available does not lend any additional insight to this finding; however, we can speculate that the student teaching experience was so intense that the student teachers focused their thoughts and interactions on the teaching environment rather than those outside the teaching environment.

Discussion

This study indicated that the student teachers struggled with particular events and experiences more frequently at the beginning of their teaching assignment and these struggles generated negative feelings and emotions. As their teaching semester continued and the student teachers gained additional experience interacting with their students, their level of self-confidence increased. As they continued to feel they could adequately handle classroom events and experiences, they felt more successful in their role as a teacher and began to perceive their teaching assignment as more enjoyable and rewarding.

Additional skills the student teachers felt they required were skills in classroom management, writing lesson plans, and communicating with administrators. They experienced feelings of frustration, disappointment, discouragement, and concern due to lack of these skills. Feelings of frustration were most prevalent in the classroom, particularly when students lacked motivation to complete assignments, talked excessively, and did not attend class.

One of the most prevalent feelings expressed by the student teachers was overwhelm. The excessive workload, excessive number of students enrolled in their classes, and the other responsibilities of teaching were the precipitating factors of their overriding sense of overwhelm. Many of the student teachers were married with families, and had to juggle their responsibilities as a mother, spouse and student teacher, which may have led to additional feelings of overwhelm. Although feelings of overwhelm were prevalent, it was noted that as the semester continued and the student teachers adjusted to their role, less feelings of overwhelm were noted.

Most all of the student teachers worked cooperatively with their cooperating or mentor teachers and received frequent verbal feedback regarding their performance. Positive feedback received from their mentor or cooperating teacher, university supervisor, school administrators, and school faculty increased the student teachers level of self-confidence. The emergency permit student teachers felt less self-confident than the traditional student teachers possibly because of the burden of responsibility they felt with their full time teaching load.

Recommendations for Practice

Instructors in teacher education programs who teach methods classes may want to spend additional time discussing hands on classroom management techniques that work for teachers of middle and high school students. Additional class time needs to be devoted to teaching education students the steps involved in developing creative lesson plans and classroom activities that can motivate middle and high school students to learn.

The student teachers also experienced difficulties in communicating with school administrators. Instructors should incorporate "real life" scenarios into course curriculum so students can role play and have the opportunity to practice effective communication skills with administrators and other mentoring adults.

An apparent difference between the traditional student teachers and the emergency permit student teachers regarding their level of satisfaction with their teaching assignments was noted.

Future FCS teachers may find this information helpful when deciding what route of student teaching may best meet their needs and expectations.

Lastly, the student teaching assignment was found to be an overwhelming and stressful experience for most of the student teachers, particularly at the beginning of their teaching assignment. It may be helpful for education instructors to include stress management techniques in their curriculum to assist student teachers in handling the stress associated with the student teaching experience.

References

- Burstein, N. D. (1988, April). From observing to teaching: An examination of the relationships between student teachers' activities, perceptions and performance. Paper presented at the Annual meeting of the American Educational Research Association, New Orleans, LA.
- Enz, B. J., Freeman, D. J., & Wallin, M. B. (1996). Roles and responsibilities of the student teacher supervisor: Matches and mismatches in perception. In D. J. McIntire and D.M. Byrd (Eds.), *Preparing tomorrow's teachers: The field experience* (pp. 131-150). Thousand Oaks, CA: Corwin Press.
- Eves, C. (2001). Assisting beginning teachers in managing inappropriate classroom behavior through mentoring. *Primary Educator*, 7(1), 3-16.
- Gess-Newsome, J., & Lederman, N. G. (1990, April). *Metamorphosis, adaptation or evolution: A longitudinal investigation of pre-service science teachers' instructional decisions, concerns and perceptions.* Paper presented at the Annual Meeting of the National
 Association for Research in Science Teaching, Atlanta, GA.
- Griffin, G. A. (1989). A descriptive study of student teaching. *Elementary School Journal*, 89(2), 343-364.
- Knudson, R. E. (1998). Secondary student teaching and the supervised experience. *High School Journal*, 82(1), 49-60.
- Mimbs, C. A. (2000). Retention of certified family and consumer sciences teachers: Implications for teacher supply and demand. *Journal of Family and Consumer Sciences Education*, 18(1), 23-27.
- Mimbs, C. A., Stewart, D. L., & Heath-Camp, B. (1998). Career choice decisions of family and consumer sciences education recent graduates: Recruitement Implications. *Journal of Family and Consumer Sciences Education*, 16(2), 45-59.
- Montgomery, B. (2000). The student and cooperating teacher relationship. *Journal of Family and Consumer Sciences Education*, 18(2), 39-45.
- Nichols, L. S., & Mundt, J. P. (1996). Surviving the first year of teaching: Perceptions of critical competencies from four educational perspectives. *Journal of Family and Consumer Sciences Education*, 14(2), 23-39.
- Shantz, D., & Ward, T. (2000). Feedback, conversation and power in the field experience of preservice teachers. *Journal of Instructional Psychology*, 27(4), 288-297.
- Turley, D., & Nakai, K. (1998). Coping with class size reduction in California. *Educational Leadership*, 55(5), 40-43.

- Van Zoest, L. R. (1995, April). Focus of pre-service secondary mathematics teachers observations of classroom mathematics instruction. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Zimpher, N. L., DeVoss, G. G., & Nott, E. D. (1980). A closer look at university student teacher supervision. *Journal of Teacher Education*, 31(4), 11-15.

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THE INFLUENCE OF POPULATION DEMOGRAPHICS: WHAT DOES IT MEAN FOR TEACHERS AND TEACHER EDUCATION?

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The authors of this article reference changing population demographics within the United States as grounds for needed changes in the education system, specifically Family and Consumer Sciences Teacher Education Programs. Statistics related to ethnicity, race, family composition, etc. are cited as a means of highlighting the diversity among the student population that teacher candidates will be charged with educating upon completion of their teacher education programs. Suggestions for modifications in teacher education program requirements are outlined, as are steps current educators and other professionals within the field of education can take to better prepare themselves and their students for the dramatic demographic changes that are projected to occur during the first half of the 21st century.

As the United States faces dramatic demographic changes in the 21st century, many may wonder, what kind of diversity exists in classrooms? Every kind of diversity exists in classrooms within the United States, which should be of special interest to all professionals within the field of education because it indicates that there is a need for change within the realm of education. As the voice of strong families, Family and Consumer Sciences (FACS) teachers should be particularly concerned and work to accommodate the many races, ethnicities, family compositions, socioeconomic statuses, etc. that are seen throughout the nation because these changes impact children and families on a daily basis. Teachers today are being charged with the responsibility of educating people with backgrounds such as these. FACS teachers, especially, regularly confront these issues because students of varying levels enroll in their courses. The purpose of this article is to enable FACS teachers to question and explore what it would be like to teach in a setting as diverse as one that is created based on varying demographics.

Relevant statistics will aid in effectively conveying the diverse population demographics evident among school-aged children in America. To begin, an estimated 27 million children live in low-income families (National Center for Children in Poverty, 2003), while about one in five live in poverty (Hodgkinson, 2001). People may question how socioeconomic status has any bearing on education. Those familiar with the effects poverty has on education and children would answer that money dictates many things in society, especially within the wealthiest nation on Earth. Often, it dictates how much funding a district receives because the amount of money spent on education is heavily influenced by local property taxes (Slavin, 1997). The differences between the poorest and wealthiest school districts are stupefying: 56 percent more per student is spent within the wealthiest school districts, when compared with the poorest (Children's Defense Fund, 2002). Hodgkinson notes that children who are classified as Black, Hispanic, from single parent homes, etc. are not thought to be automatically disadvantaged, as was previously the case. However, children who live in poverty have a universal disadvantage (2001) in part because of a

perceived lack of parental involvement. Often, the parents of these children may work frequently or have inconvenient work hours for school involvement. These considerations would affect the amount of time parents have to devote to their children or schools. Also, parents may not be an asset to their children with regard to certain subjects or issues because they may lack the knowledge necessary to effectively assist their children (Meyer, 1997).

Another consideration with regard to poverty is whether the children are receiving proper nutrition. If children are malnourished or undernourished, the effects on their educational performance and attendance could be profound. In fact, malnourished children may have deficits in intellectual development, which impair their ability to learn and cannot be overcome through schooling (Bellamy, 1998). Some specific examples include deficiencies due to lack of proper vitamin intake. For example, a severe lack of Niacin can result in a condition called Pellagra, which can cause, among other things, mental problems. On a similar note, an Iron deficiency can impact a child's cognitive development (Kids Care Clubs, 1999). Even if children are healthy enough to attend school, another aspect to consider is transportation. Impoverished children may not attend as many days of school as children with adequate transportation. Children living in poverty may not have access to a car, which would prevent them from attending school on days, for instance, when they missed the bus. Additionally, some school districts may not provide transportation or may rely on parents and/or public transit to transport students.

Some other applicable statistics relate to the family in which children are raised, i.e. family composition. Less than half of children live with both their biological parents and almost sixty percent will live in a single-parent household at some point before they turn eighteen (Sapon-Shevin, 2001). Although neither of these statistics suggests anything about how these situations may affect education, and they may have no adverse effect, it is important for teachers to be aware of the family compositions of their students. This information can be used to better communicate with the children and their parent(s) and to incorporate children's experiences into the discussions. With that in mind, it is also important to recognize other comparable statistics: somewhere between six and fourteen million children live in a house which is headed by a grandparent and one-third of these households do not have a parent present (AARP, 2003); one to two percent of children in the United States have been adopted, more often now from other countries; 500,000 children live with foster families (Sapon-Shevin, 2001).

What may seem more relevant to classroom teachers are facts and projections about diversity with regard to races, cultures and national origins. These figures are the ones constantly emphasized in the media and perhaps those that will require the most modifications and accommodations. Currently, at least one-third of the school aged population is of a racial or ethnic minority (Hodgkinson, 2001); this may seem like a modest figure when one considers that by the year 2020, students of color will comprise almost fifty percent of the school aged population (Allison, 2003). With regard to the population as a whole, the U.S. Bureau of the Census projects that by the year 2050 non-Hispanic Whites will be a minority (Clausell, 1998).

While these statistics indirectly affect education on many fronts, others have a more direct impact. For example, a conservative estimate in 1999 stated that 2.6 million children spoke another language at home and had difficulty speaking English (U.S. Department of Education, 2002), which is of great concern to educators, as they are responsible for identifying these children and providing applicable services to help them succeed to the best of their ability. It is likely that when teaching some of these children there are cultural and language and

communication barriers to the children's education, which make educating them, involving them in class, incorporating their experiences and communicating with their parents difficult. As these statistics help us to see more clearly, many unique issues are faced in today's classrooms. With this picture in mind, what can be done to better prepare future FACS educators for the classroom and the students that await them?

Addressing these demographic changes in teacher education is critical because the majority of teachers are white females. Teacher candidates, who are 84 percent Non-Hispanic Whites and 59 percent female, will face a diverse student population (Toppo, 2003). The first step is usually modifying teacher education class requirements so that they begin to recognize the need for diversity-friendly curriculum. For example, a course in multicultural education may be required in the teacher preparation curriculum, as a means of relaying the importance of considering the needs of all students. This course may convey information about the history and culture of a diverse population of students (Coballes-Vega, 1992). The course may be rooted in pedagogy or content or better yet, address both. Another change to existing teacher education programs may be increasing the time required within foreign language classes. In these classes, teacher candidates could acquire information on the differences between first and second language acquisition, so they can serve those students who have limited English proficiency (LEP). In a methods class, they may also be required to learn the best teaching practices for working with LEP students (Coballes-Vega, 1992).

The changes mentioned thus far may seem superficial after delving into the following suggestions for teacher education programs. One recommendation for effective teacher education programs includes teaching about the dynamics of racism and prejudice (Sapon-Shevin, 2001). This course or unit would be intense, as prospective teachers would examine their experiences, thought processes, attitudes and knowledge and be willing to make changes to all of them. A class of this nature would help future teachers to learn to question information sources, the accuracy of events and actions, possible flaws in history and education, etc. The content of this course should be supplemented with discussion, as a means of creating an environment where everyone's views, attitudes and opinions are considered and appreciated, which would hopefully be an objective present in the future classrooms of these teacher candidates.

Roach suggests situation-specific problem-solving sessions as an invaluable resource that should be mandatory in teacher education programs (1995). In these sessions, teacher candidates work together to develop strategies and identify resources that could help them manage certain situations they may encounter in a diverse classroom. One such resource is Dr. Ruby Payne's book, A Framework for Understanding Poverty. A review of this book is available at www.enc.org, which itself is an invaluable resource, as it addresses issues related to equity in the classroom, diversity and multiculturalism and includes links to applicable journal articles related to the aforementioned topics. Another suggestion involves the way in which instruction is delivered to teacher candidates. Sapon-Shevin (2001) notes that it is essential for future educators to be able to learn in an environment, which is conducive to creating social relationships, which are essential for support, and an environment that is intellectually challenging.

Students frequently receive the most valuable information and experiences outside a teacher education classroom. Site visits are one example of outside experiences that would be beneficial, as they provide a frame of reference (Roach, 1995) for future educators, some of whom have never actually been in a classroom before this point. These visits serve to heighten

awareness and allow for extension of concepts beyond the confines of the classroom walls; therefore, the visits should be deliberately planned to allow for exposure to diverse learning situations. Following these visits, thorough discussion, deprogramming and reflection should occur. Another experience, one that currently is required in teacher education programs, is the student teaching experience. It is crucial to provide prospective teachers with this opportunity, but further, it is also important to expose them to students from different backgrounds during this experience (Coballes-Vega, 1992). Often, placements are made based on close proximity to the university, whereas a more deliberate placement should be made. A placement that considers the teacher candidate's background and previous experiences and charges the person with challenging their existing schemas and biases through teaching a diverse student population would be ideal.

As these recommendations are considered and implemented accordingly, they only address a specific population: future educators or teacher candidates. An effort must also be made to reach teachers who are already in the classroom. Although many continue their education in one form or another, there are often no direct outlets for this information. For this reason, it is critical to outline suggestions for teachers currently active in the profession so they will take initiative to adapt teaching practices to address relevant changes. While university teacher education programs sometimes take the lead in professional development, each school district has a responsibility to address these issues and ensure the continued training of their teachers.

With regard to diversity, the first step any teacher should take in creating a more student friendly classroom is generally considered the most difficult: acknowledgement of personal biases (Clausell, 1998). This step could entail many different things. One approach might be to research anti-bias curriculum, which seeks to nurture the development of every child's fullest potential by actively addressing issues of diversity and equity in the classroom, and its implementation (Hohensee & Derman-Sparks, 1992). This approach would help to highlight areas in which individuals were not aware they held any bias, and it would provide suggestions to combat such biases. Another approach might be to have colleagues observe classroom instruction and review their comments to determine what others perceive to be present or lacking. The bottom line is that to be able to change teaching strategies, thought processes or even curriculum, it is important first to acknowledge the need for it and then take action to improve the classroom experience.

While acknowledging biases, teachers will need to develop a clear sense of their own personal cultural identity (Allison, 2003). This will help them to foster collaboration, cooperation and appreciation for others in the classroom, while simultaneously educating themselves about contributions and significant points unique to their cultures. Another suggestion would be that teachers become bilingual; some sources even suggest they go beyond English and another language and actually become multilingual (Clausell, 1998). It would be beneficial to have knowledge and conversational skills in more than one language. However, some critics argue that this may be an unrealistic solution, for, if the teachers comprehend and use one foreign language and encounter the need for a different foreign language, then their time and efforts may seem wasted. Without seeking to acquire functional language skills in foreign languages, teachers can still arm themselves with information and resources that will aid them in communicating with students and parents with limited English proficiency. For example, there are websites available, such as http://www.freetranslation.com, which will translate text from one language to another at no cost.

The previous recommendations have all involved personal change. Now, let us shift the focus to adapting the environment, instruction and curriculum. Adapting the environment may include active promotion of diversity within the classroom and the school. It is important to remember that when promoting diversity, it is also important to recognize the commonalities among people. Too often the focus is on that which divides instead of that which brings together (Clausell, 1998). It is important for teachers to facilitate communication among and between students as they work to identify both similarities and differences.

With focus on pedagogy, the teachers are again forced to review themselves; this time they must acknowledge their preferred learning style, both the manner in which they like to learn and the manner in which they like to teach, and actively try to vary their instruction. It could be argued that this should be done in all classrooms. However, it is extremely significant when one considers that ethnicity and culture significantly influence how students learn (Allison, 2003). When each learning style is recognized and approaches are used to enhance the students' understanding and comprehension, the teachers not only improve their chances of reaching every learner, but they also exhibit a respect for diversity (Sapon-Shevin, 2001).

The last educational arena to be tackled is curriculum. Once teachers have changed their perceptions, actions, classroom environment and instruction, the next step is to change the material being presented to the students. Roach (1995) suggests using curricular adaptations and modifications when dealing with diverse learners. At least with inclusion of such aids, the teachers are relaying their enthusiasm and willingness to accommodate. Since research has shown that most materials used in schools reflect a European lifestyle, it is necessary to make provisions regardless of the student population, as to represent the appreciation of diversity whether it is present in a particular classroom or not. Teachers should aim to incorporate culturally relevant curriculum materials and instructional aids (Allison, 2003).

Finally, revision of the curriculum needs to be completed. Anyone working in the field of education knows that this is a huge undertaking, but for things to change, the existing curriculum has to be examined for its weaknesses with regard to diversity and given a complete overhaul to essentially create an anti-bias curriculum. This stage of curriculum adaptation involves administration, school boards, review committees, and comparable parties, so it is not expected that this be something teachers take on without support and planning. Perhaps after implementing some of the aforementioned changes, teachers can be credited with creating a new purpose and producing new outcomes within the realm of education; it has been debated whether or not real change like this has happened as yet in education (Parish & Aquila, 1996).

After detailing the many steps necessary for successful accommodation of most students, it is only logical to deduct that there are barriers to true multicultural education. Upon understanding the participation necessary from teachers and future teachers, it may come as no surprise that one of the most common obstacles to multicultural education is lack of interest, among teachers, administration and students (Darling, Greenwood & Hansen-Gandy, 1998). This is not a blanket statement, or accusation, but simply the findings of surveys conducted at the college level. Attitudes of individuals might also be impacted by the lack of financial resources, time, background, training and community resources that were identified as perceived barriers to the implementation of a multicultural education (Darling et. al., 1998).

Another seemingly invisible barrier to multicultural education is probably the most difficult to change: the organizational culture of the school. This term relates to the way in which the school is run and the expectations embedded within this culture. It is said that in American schools there are those students who are supposed to do well and then there are the

others, and the schooling culture knows which ones are which (Parish & Aquila, 1996). If schools continue to function on this premise, it is quite possible that no real change can occur, which would negatively affect the nation, not just the educational arena. Is this a sacrifice everyone is willing to make?

To end on a positive, possibilities for education in the future are endless. This article has outlined some of the many outlets available for teachers and future educators as they continue their educational careers. Change can be an intense and arduous process, and it begins slowly. But with all the information and resources available to those in the field of education, it will only be a matter of time before real changes are evident. All students, regardless of national origin, race, family background, etc. have the right to positive educational experiences and FACS teachers can lead the way to reporting that every kind of diversity is recognized and appreciated in U.S. classrooms.

References

- Allison, B.N. (2003). Multicultural classrooms: Implications for Family and Consumer Sciences teachers. *Journal of Family and Consumer Sciences*, 95(2), 38-43.
- Author Unknown. (2003). Eisenhower National Clearinghouse. Retrieved on December 17, 2003 from http://www.enc.org
- Author Unknown. (2003). *Fact sheets*. Columbia University, Mailman School of Public Health: National Center for Children in Poverty. Retrieved on September 9, 2003 from http://www.ncep.org/fact.html
- Author unknown. (2002). *Difficulty speaking English*. U.S. Department of Education, National Center for Education Statistics. Retrieved on April 9, 2003 from http://childstats.gov/ac2002/indicators.asp?IID=11&id=1
- Author unknown. (2002). *Key facts about education*. Children's Defense Fund. Retrieved on September 11, 2003 from http://www.childrensdefense.org/keyfacts_education.htm
- Author unknown. (1999). *Issues education- malnutrition and poverty*. Kids Care Clubs, Points of Light Foundation. Retrieved on September 10, 2003 from http://www.kidscare.org/kidscare/fthpoverty.html
- Bellamy, C. (1998). *The state of the world's children: Focus on nutrition*. United Nations Children's Fund (UNICEF). Retrieved on September 10, 2003 from http://www.unicef.org/sowc98/
- Clausell, M. (1998). Challenges and opportunities for family and consumer sciences professionals in the new America. *Journal of Family and Consumer Sciences*, 90(1), 3-7.
- Coballes-Vega, C. (1992). Considerations in teaching culturally diverse children (Report No. EDO-SP-90-2). Washington, D.C.: ERIC Clearinghouse on Teacher Education. (Eric Document Reproduction Service No. ED 341 648)
- Darling, C. Greenwood, B.B., Hansen-Gandy, S. (1998). Multicultural education in collegiate family and consumer sciences programs: Developing cultural competence. *Journal of Family and Consumer Sciences*, 90(1), 42-48.
- Hodgkinson, H. (2001). Educational demographics: What teachers should know. *Educational Leadership*, 58(4), 6-11.

- Hohensee, J.B. & Derman-Sparks, L. (1992). *Implementing an anti-bias curriculum in early childhood classrooms*. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED351146)
- Meyer, W. (1997). A turn down the harbor with at-risk children. *Phi Delta Kappan*, 79, 312-316.
- Parish, R. & Aquila, F. (1996). Cultural ways of working and believing in school: Preserving the way things are. *Phi Delta Kappan*, 78(4), 298-305.
- Payne, R.K. (2001). A framework for understanding poverty. Highlands, TX: aha! Process, Inc.
- Roach, V. (1995). Supporting inclusion: Beyond the rhetoric. *Phi Delta Kappan*, 77(4), 295-299.
- Sapon-Shevin, M. (2001). Schools fit for all. Educational Leadership, 58(4), 34-39.
- Slavin, R.E. (1997). Can education reduce social inequity? *Educational Leadership*, 55(4), 7-10.
- Toppo, G. (2003, July 2). The face of the American teacher; White and female while her students are ethnically diverse. USA Today. Retrieved October 12, 2003 from http://www.teachforamerica.org/pdfs/media/USAToday_07_02_03.pdf

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EDUCATIONAL EFFORTS TO REDUCE RADON LEVELS IN THE HOME

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Radon has been identified as the second leading cause of lung cancer in the U.S., and is present in millions of homes. For eight years Cooperative Extension has partnered with the U.S. Department of Agriculture and the U.S. Environmental Protection Agency in a radon educational program as part of the national initiative Healthy Indoor Air for America's Homes. The purpose of this paper was to describe the development, implementation, and evaluation of this radon educational program consisting of a training manual, fact sheets, workshops, a poster contest, and Internet materials. Based on impact data, it is estimated that 14,620 consumers had their homes tested for radon and 4.827 corrected radon problems. Suggestions were provided for family and consumer sciences educators interested in joining efforts to help consumers become aware of potential radon problems in their homes and to reduce radon levels based on testing results.

The purpose of this paper is to describe Cooperative Extension's educational efforts to reduce radon levels in homes. In 1996, the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA) launched a national initiative through Cooperative Extension entitled Healthy Indoor Air for America's Homes. The goal of this program is to deliver basic but comprehensive indoor air quality information to consumers. The objective of Healthy Indoor Air for America's Homes is to educate consumers about sources, health risks, and control measures related to common residential indoor air problems and to help them reduce health risks from these problems (Vogel & McMindes, 1999). One potential indoor air hazard is radon, estimated to be the second leading cause of lung cancer in the U.S.

The need for this program was based on research showing that the quality of indoor air can be worse than that of outdoor air (EPA, 1995). This occurs because many homes are being built and remodeled more tightly without regard to the factors that assure fresh and healthy indoor air. Homes today also contain furnishings, combustion appliances, and household products that can result in poor indoor air quality (EPA, 1995). Of particular concern is radon - a radioactive gas created from the natural decay of uranium in soil and rock beneath and around the home's foundation and in groundwater wells, and found in some building materials. It is a common pollutant found in millions of homes throughout the country.

Program Development

Activities in the Healthy Indoor Air for America's Homes program have consisted of:

- 1. A programming workshop to develop the program and learning materials.
- 2. An indoor air quality program training manual (including both subject matter content and process information) for use by Cooperative Extension educators.
- 3. A national train-the-trainer workshop to prepare Cooperative Extension specialists from each state to become program managers for their respective states. In 2003 there were program managers for 45 states, three territories, and Washington, DC.
- 4. A train-the-trainer program by state program managers to train county Extension agents.
- 5. A training program by county agents to educate consumers who are at risk concerning indoor air quality issues and to encourage them to reduce their health risks from indoor air quality problems.
- 6. A web site, maintained at Montana State University, which is updated on a regular basis (www.healthyindoorair.org).



As part of the program consumers learn to identify possible signs of indoor air quality problems (Healthy Indoor Air for America's Homes, 2001). These include noticeable lack of air movement, unusual and noticeable odors, dirty or faulty central heating or air conditioning equipment, unvented combustion air sources for fossil fuel appliances, presence of molds and mildew, health reaction after remodeling, and feeling noticeably healthier outside. Consumers are also instructed in common sources of indoor air quality problems such as moisture, combustion products, formaldehyde, household products and furnishings, asbestos, lead, particulates, tobacco smoke, and radon (Tremblay & Vogel, 2003)

The training manual for this program contains twelve self-guided and self-contained modules consisting of lesson plans, overhead transparencies, and videos. There are also consumer self-assessments, marketing and media materials, program record-keeping materials, and evaluation tools. Dozens of ideas are provided for program implementation (Vogel & McMindes, 1999). One of the modules focuses on radon. Almost the entire entire network of over 3,000 county Cooperative Extension offices in the nation has this training manual, and thousands of county agents have been trained to use the program materials.

Radon Module

The module on radon considers topics such as radon sources, where to locate help, how radon enters the home, radon risk, testing, professional monitoring, and mitigation strategies (Seifert, 1999). Local radon and family and consumer sciences professionals can work with county Extension agents to shape the specific programs delivered to consumers in the community using local data. The learning objectives of the radon lesson module are:

- Radon is known to cause lung cancer in humans over a long period of exposure.
- Radon is present nearly everywhere in small concentrations and is the largest source of radiation exposure for the U.S. population.
- Radon cannot be detected without testing for it specifically because it is invisible, odorless, and chemically inert.
- Testing is simple, relatively inexpensive, and harmless to perform.

• Radon is a manageable risk and help is available to assist the consumer. In addition to the radon module, there are four EPA supporting publications in the training manual: A Citizen's Guide to Radon (1993a), Home Buyer's and Seller's Guide to Radon (1993b), Radon: A Physicians Guide (1993c), and Building a New Home: Have You Considered Radon? (1998). The training manual also references a video on radon available from the American Lung Association (1991). To make this information readily accessible to consumers, Healthy Indoor Air for America's Homes (2001) published a thirteen-page booklet entitled Indoor Air Hazards Every Homeowner Should Know About. This booklet, available in both English and Spanish, is available at county Extension offices and the Federal Consumer Information Center (www.pueblo.gov). The booklet would be useful as a handout to educate consumers on radon as a health risk and the importance of testing and, if necessary, mitigation.

Program Implementation

Many creative ideas have been applied over the Healthy Indoor Air for America's Homes program's existence. For example, program participants cooperate with EPA in promoting National Radon Action Month in January. This past year, the EPA and Healthy Indoor Air for America's Homes coordinated the National Radon Action Month 2003 Poster Contest to increase children's knowledge of radon in the home. "State leads" in participating states promoted the contest to area fifth-grade classes, coordinated educational programs for the schools, collected posters, and helped select state winners. They encouraged educators to deliver a lesson on radon, place a radon test kit in the classroom, provide materials to be shared with parents, and assist children in making posters about radon's dangers and solutions. Schools displayed posters in October 2003 during the Healthy Indoor Air for America's Homes' Radon Action Week. Winners at the state level were forwarded for a national competition. The winning poster, shown below, can be ordered from the Healthy Indoor Air for America's Homes web site.



Many of the states involved in the project have developed fact sheets (4-6 pages long) that are available to consumers in print form or on state Cooperative Extension web sites (refer to Pope, 2000; Versch & Niemeyer, 2000). Check your local land-grant university's web site to determine if your state has fact sheets or other materials on radon. Most of the radon fact sheets follow a similar format:

1. Description of what radon is, where it comes from, and its health risk. The likelihood of radon in a specific state and how that risk compares to other states is also discussed.

- 2. Radon testing using short-term detectors and long-term detectors. Information is provided on how to purchase and use test kits.
- 3. Understanding test results, especially how radon is measured and what radon levels mean. Consumers are instructed to have an experienced radon contractor fix their homes if the radon level is four picocuries per liter or higher.
- 4. Radon mitigation, including methods (such as sub-slab, drain tile, sump hole, and block wall suction) and costs. The method and cost estimate is presented in detail for the most commonly used technique of sub-slab depressurization.
- 5. Selection of a radon mitigater. Consumers are recommended to contact their local health and human services system or state radon office to locate qualified contactors. It is suggested that in choosing the mitigation method, consumers should consider the radon levels, system operation, structural changes, cost, house size, and foundation types.
- 6. Radon resistant new construction is discussed for those building a new home, with the idea that installation costs are generally much lower during construction and careful planning can allow a variety of strategies to be integrated, ensuring the most effective radon reduction system possible. An option is a passive subslab or crawlspace depressurization system.
- 7. Issues for home buyers and renters, suggesting that they ask if the home has been tested for radon and what the test results showed.
- 8. Available resources such as:

American Association of Radon Scientists and Technologists (www.aarst.org) American Lung Association (www.lungusa.org/air/envradon.html) Environmental Protection Agency (www.epa.gov/iag/radon/) National Radon Information Line: 1-800-767-7236

Radon Fix-It Program of the Consumer Federation of America (www.radonfixit.org)

State Radon Contact

The coordinating office for Healthy Indoor Air for America's Homes at Montana State University publishes a newsletter entitled *Breathing Room*. State activities are highlighted in the newsletter to provide ideas for program managers around the country. Other ways that states and counties disseminate information to consumers include workshops, the distribution of an annual poster "Kids Care about Clean Air" that features a calendar with helpful indoor air quality tips listed for each week of the year (a poster can be ordered at the Healthy Indoor Air for America's Homes web site), exhibits at county fairs and home shows, newspaper columns, articles in state and county Cooperative Extension newsletters, and press releases. The web site includes an air quality home tour in which consumers can click on a room to discover possible radon problems and remedies. A number of materials can be ordered at the web site, including the training manual and a radon book cover and book mark.

Evaluation and Recommendations

Based on Healthy Indoor Air for America's Homes program impact data from 1996 to 2003, an estimated 122,232 educators and professionals have been trained by the national program. Other audiences included parents, children, child care providers, health department nurses, social workers, and school principals. Additionally, as a direct result of this program 14,620 consumers had their homes tested for radon and 4,827 consumers had their homes

mitigated for radon. The numbers are most likely higher as follow-up of behavior from workshop participants can be difficult to fully track.

As the program continues to expand, efforts are underway for greater cooperation with other educators. A starting point is to locate your county Extension office in the county government section of the telephone directory. Often the family and consumer sciences agent is the radon contact person. Ask what radon programs are in place, how you might participate, and what materials are available for your educational efforts. Contact at the state level can be made by going to the Healthy Indoor Air for America's Homes web site which contains names, addresses, telephone numbers, and e-mail addresses for each state program manager. State program managers will welcome the opportunity to help you in radon education.

References

- American Lung Association. (1991). [Video] *Radon: The risk indoors*. New York: American Lung Association.
- Healthy Indoor Air for America's Homes. (2001). *Indoor air hazards every homeowner should know about*. Bozeman, MT: Montana State University Extension Service.
- Pope, S. (2000). *Radon information*. Raleigh, NC: North Carolina State University Cooperative Education.
- Seifert, R. D. (1999). Instructional module: Radon in the home. In M. P. Vogel & K. McMindes (Compilers) (3rd Ed.), *Healthy indoor air for America's homes: A training and reference manual for state program managers and community educators*. Bozeman, MT: Montana State University Extension Service.
- Tremblay, K. R., Jr., & Vogel, M. P. (2003). *Improving air quality in the home*. Fort Collins, CO: Colorado State University Cooperative Extension.
- U.S. Environmental Protection Agency. (1993a). *A citizen's guide to radon*. Washington, DC: EPA.
- U.S. Environmental Protection Agency. (1993b). *Home buyer's and seller's guide to radon*. Washington, DC: EPA.
- U.S. Environmental Protection Agency. (1993c). *Radon: A physician's guide*. Washington, DC: EPA.
- U.S. Environmental Protection Agency. (1995). *The inside story: A guide to indoor air quality*. Washington, DC: EPA.
- U.S. Environmental Protection Agency. (1998). *Building a new home: Have you considered radon?* Washington, DC: EPA.
- Versch, B., & Niemeyer, S. (2000). *Radon in Nebraska's homes*. Lincoln, NE: University of Nebraska Cooperative Extension.
- Vogel, M. P., & McMindes, K. (Compilers). (3rd Ed.). (1999). Healthy indoor air for America's homes: A training and reference manual for state program managers and community educators. Bozeman, MT: Montana State University Extension Service.

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