

Family Life Education Methodology: An Evaluation of a University Family Life Education Course

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There are few published evaluative studies on the educational preparation of Family Life Educators. This research used principles of good practice in the Scholarship of Teaching and Learning (SoTL) in evaluation of an undergraduate Family Life Education (FLE) methods course that provided students applied experiences completing low-, medium-, and high-dosage FLE projects. Undergraduate students ($n = 29$) reported perceived educational outcomes from completing the FLE methods course. Researchers derived results from a qualitative priority analysis and included quantitative results for triangulation purposes. Students reported significant increases in their knowledge regarding FLE through course participation. They also reported learning processes related to collaboration in FLE, skills for planning and implementing FLE, and knowledge regarding low-, medium-, and high-dosage FLE. Discussion focuses on results in terms of consistency with learning objectives and instructional theory.

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The Scholarship of Teaching and Learning (SoTL) represents a diverse field of inquiry (Felten, 2013). Multiple methods and approaches are considered appropriate for conducting SoTL projects (Hutchings, 2000). Because of the diversity in SoTL, Felten (2013) introduced common principles of good practice in SoTL projects. Good practice in SoTL includes projects that focused on student learning, grounded in context (e.g., classroom, institution, relevant theory), methodologically sound, and conducted in partnership with students. Felten (2013) also suggests making results from the inquiry public so “colleagues can critique and use the work” (p. 124). The current project relied on Felten’s (2013) principles for best practice in SoTL while evaluating an undergraduate Family Life Education (FLE) methods course.

Family Life Education

Family Life Education (FLE) is a professional field that takes “family science principles and practices to the general public—individuals, couples, parents, whole families—in varied educational settings” (Duncan & Goddard, 2011, p. 3). Due to the field’s breadth, FLE has been difficult to define (Arcus, Schvaneveldt, & Moss, 1993). The National Council on Family Relations (NCFR) has formalized FLE by creating standards and criteria for becoming a Certified Family Life Educator (CFLE; Darling, Fleming, & Cassidy, 2009). Individuals seeking CFLE certification must demonstrate competency for each of the following criteria that NCFR established (2011):

1. Families and individuals in societal contexts
2. Internal dynamics of families
3. Human growth and development across the lifespan
4. Human sexuality
5. Interpersonal relationships
6. Family resource management
7. Parent education and guidance
8. Family Law and public policy
9. Professional ethics and practice
10. FLE methodology

Designation of CFLE and the required content areas are a step toward professionalizing the FLE field (Darling et al., 2009). Hennon, Radina, and Wilson (2013) identified some current challenges facing FLE as the field evolves, such as (a) increasing the professional profile and (b) choosing approaches appropriate to FLE.

Enhancing undergraduate students’ understanding of FLE methodology may address current challenges FLE faces. Within the SoTL, Linkon (2000) encourages teachers to consider students’ points of view to inform change. The NCFR (2011) explanation of FLE Methodology

criterion includes planning and implementing programs, program evaluation, educational techniques, sensitivity to others, and sensitivity to community concerns and values (e.g., public relations). Research indicates that family professionals have ranked FLE methodology low compared to NCFR's other ten criteria. For example, when family practitioners (CFLE and non-CFLE) were asked to rank the aforementioned NCFR criteria in order of importance they ranked FLE methodology sixth (Darling et al., 2009). An international study asked family professionals to rank the same 10 criteria in terms of access to available university-level education that would provide information needed to meet all NCFR criteria. This time, FLE methodology ranked last (Darling & Turkki, 2009). We suggest that higher prioritization of FLE methodology may contribute to increased professionalization of the FLE field. If, in addition to being strong educators (e.g., proficient in planning and implementing programs), CFLEs were also strong in program evaluation—if they could more readily publish program effectiveness studies or if CFLEs were educated more on public relations—public recognition of FLE would increase.

At present, it is unclear how the profession is improving FLE Methods education of CFLE candidates. In our search for peer-reviewed articles specific to educating FLEs we consulted *Family Relations*, *Family Science Review*, *The Forum for Family and Consumer Issues*, *The Journal of Couple and Relationship Therapy*, *The Journal of Extension*, and *Marriage and Family Review*, *The Journal of Teaching in Marriage and Family*, and *The Journal of Family and Consumer Sciences* and found just one article (see Duncan, 2009). However, several publications relevant to FLE program evaluation appeared in these journals (e.g., Hawkins, Higginbotham, & Hatch, 2016; Ma, Pittman, Kerpelman, & Adler-Baeder, 2014; Schmidt, Luquet, & Gehlert, 2016; Stanley et al., 2014), which is evidence of continued public and scholarly interest in FLE. Duncan's (2009) article summarizes an innovative instructional method for preparing graduate students to be effective in outreach efforts as FLEs and a brief student evaluation ($N = 4$) of the course. The paucity of published evaluative efforts in educating FLEs undermines abilities to determine how well FLE students are trained, what formal education methods may work best in training future FLEs to work in various settings, and most important, where the field needs to improve in preparing successful CFLEs. As a starting point, we created and evaluated student learning in a based on FLE instructional theory and focused on NCFR's description of FLE Methods.

Family Life Education Methods: Low-, Medium-, and High-Dosages

There is much breadth within NCFR's (2011) description of FLE methods. FLE textbooks cover the topics NCFR includes within the FLE Methodology criteria. These subjects include program planning (e.g., knowing audience's needs, educational settings, modes of instruction), implementation (e.g., varied teaching techniques, program management, and collaboration), evaluation (e.g., developing an evaluation plan, using evaluation data), and participant and community considerations (e.g., working with diverse populations, ethics) (see Ballard & Taylor, 2012; Darling & Cassidy, 2014; Duncan & Goddard, 2011). This may indicate general agreement on essential components of FLE methodology. As Hennon and colleagues (2013) indicated, one contemporary challenge in FLE involves selecting appropriate approaches (e.g., methods of designing, implementing, and evaluating educational interventions). To

navigate this challenge it may be essential to expose educators-in-training to various approaches because “Some practicing FLE could be in environments where approaches are being used that differ from what the educator would prefer” (Hennon et al., 2013, p. 832). To capture various FLE methods we relied on Hawkins, Carroll, Doherty, and Willoughby’s (2004) description of intensity or dosage (i.e., low-, medium-, and high-) of Relationship Education (a topic area in FLE). Each dosage of FLE involves unique variations within planning, implementation, evaluation, and participant considerations. In this section, we introduce each dosage with an example of how the dosage has been implemented and evaluated in FLE.

Low-Dosage Family Life Education

One can conceptualize low-dosage FLE as educational interventions that provide basic information to large audiences (e.g., media campaigns, pamphlet distribution, websites; Hawkins et al., 2004). This level of FLE requires little effort from learners but has potential to increase interest in higher dosages of FLE. Hawkins and colleagues (2016) reported evaluative findings of a low-dosage media campaign associated with the Utah Healthy Relationship Initiative. Their study illustrates unique FLE methods involved in this dosage of FLE. The low-dosage FLE targeted 18-29 year old residents with a media campaign aimed at promoting participation in higher doses of marriage and relationship enrichment classes. The researchers used focus groups and qualitative interviews with residents from this age group to develop a media campaign they disseminated through various media platforms (i.e., television, print, Internet, radio). To evaluate their efforts, they used random digit dialing to interview members of the targeted population in 2008 ($n = 416$) and again in 2013 ($n = 801$). Based on their results, Hawkins and colleagues (2016) concluded that “... media campaigns may increase participation in premarital education, at least for more at-risk populations (i.e., less-educated and non-European Americans) who may benefit the most from marriage and relationship education” (p. 29).

Medium-Dosage Family Life Education

Medium-dosage FLE includes educational interventions that are moderate in expectations for the learner (Hawkins et al., 2004). This approach provides more detailed information than does low-dosage FLE, but the offering is still brief in nature (e.g., a half-day seminar, an educational date night, or completing a self-guided workbook). Bradford, Higginbotham, and Skogrand (2014) evaluated a statewide relationship initiative that included medium-dosage FLE offerings ($n = 74$) in the form of one-time educational events facilitated by county Cooperative Extension Agents. One-time FLE events were thought to reach a different population of attendees than audiences that higher-dosage FLE programs attract. The county Cooperative Extension Agents planned these events as “date nights” with diverse educational content across the one-time events. Educational topics at the date nights included “effective communication, enhancing friendship, managing conflict, and characteristics of healthy relationships” (p. 98). At the conclusion of events, participants completed evaluation forms that measured satisfaction and changes in knowledge about relationships. Participants self-reported a large ($d = .997$) change in their knowledge about relationships resulting from their participation in a one-time relationship education event.

High-Dosage Family Life Education

High-dosage FLE contains educational interventions that explore FLE topics in-depth (Hawkins et al., 2004). This dosage of FLE requires high learner investment (e.g., several day/week workshop or program) as participants complete a multi-session FLE curriculum. Schmidt and colleagues (2016) evaluated participant outcomes after their completion of the *Getting the Love You Want* (GTLYW; Hendrix, 2005) workshop. Workshop content focuses on enhancing couple dialogue (e.g., listening, validating, and empathy) and on how childhood experiences affect mate selection. The curriculum required participants to attend three day-long workshops (i.e., 15-20 contact hours). Participants ($n = 114$ couple dyads) completed measures of marital satisfaction and communication before participating and at the end of the GTLYW workshop. Evaluation results indicated that participants increased their levels of relational satisfaction significantly and took part more often in positive communication interactions.

Family Life Education Methods Course

Objectives and Instructional Theory

The FLE methods course evaluated in this study was designed for implementation with undergraduate students at a Midwestern university. Foundational course objectives were based on NCFR's (2011) FLE methodology criterion description, focusing on developing student knowledge and application of FLE methods during the 18-week course. Objectives were as follows: (a) students will gain factual knowledge concerning FLE; (b) students will gain practical knowledge about the development, implementation, and evaluation of FLE; and (c) students will have practical experience within the field of Family Science. To meet these course objectives, the course developer reviewed and implemented instructional theories that would promote development of factual knowledge and applied experience.

Three instructional theories/approaches were identified and integrated to provide a framework for course development and implementation. A major challenge that educators face is finding a balance between covering required content to meet educational standards/expectations (e.g., set by accrediting bodies) and implementing engaged learning techniques (Herreid & Schiller, 2013). Some educators may even "equate [content] coverage with learning" (Herreid & Schiller, 2013, p. 62). To navigate this challenge educators can implement a "flipped classroom" approach, where the traditional model of teaching content in the classroom and applying content through homework are flipped (Herreid & Schiller, 2013). Herreid and Schiller explain that "A guiding principle of the flipped classroom is that work typically done as homework (e.g., problem solving, essay writing) is better undertaken in class with the guidance of the instructor" (p. 62). This approach was appealing in course development because it allowed students to spend time developing fact-based knowledge about FLE outside class (and through short in-class lectures). Then, the instructor could use class time to mentor students as they applied information that they had learned.

The flipped classroom approach provided overall direction for the course, but theoretical tenets of Student Involvement Theory (SIT; Astin, 1999) and Differentiated Instruction (DI; Hall, 2002) were foundational to assignment construction. Vaterlaus, Bradford, Skogrand, and Higginbotham (2012) reported the experiences of FLEs providing for low-income and diverse populations. The FLEs credited their ability to provide services for intended audiences to their commitment and involvement in their communities. Student Involvement Theory posits that

the amount of personal development and student learning within any educational program is directly proportionate to the quality and involvement in that program. Thus, educational program effectiveness can be based on the capacity of educational practice to increase student involvement. (Vaterlaus, Beckert, Fauth, & Teemant, 2012, p. 293)

For students to develop as FLEs, it was determined that assignments would need to promote involvement with peers in the class and facilitate involvement with their campus and local community. One potential challenge in student involvement could be addressing various student learning styles within one classroom. Differential Instruction is a possible solution to this problem because it attempts to engage all learners in the classroom through varying student tasks (e.g., not all lecture, not all written papers) and having flexible assessment procedures (e.g., formal, informal, surveys, pre- and on-going assessment; Hall, 2002). Differential Instruction also assumes that students are active and responsible. Allowing for student choice is paramount to implementing DI.

Course Structure

Course structure was developed following formalization of course objectives and identification of the guiding instructional theory. The course met twice a week for 75 minutes per session. To provide a variety of experiences with FLE methods, course creators used Hawkins and colleagues' description of FLE dosages to create three learning modules. The culmination of each learning module was a final project relating to low-, medium-, and high-dosage FLE. Due to the flipped course design (Herreid & Schiller, 2013), students completed reading assignments, self-reflection/evaluation assignments, and quizzes outside of class time. The instructor also included several brief (fewer than 15 minutes) lectures at the beginning of selected class meetings to provide additional content. Table 1 provides a list of content areas covered in each module using the aforementioned implementation methods. The instructor selected content areas for each module to enhance the major project students would be completing. For instance, the instructor covered the use of media and technology in FLE while students created low-dosage projects. These projects could include reaching audiences through media and collaboration principles as students worked with community members to develop a program.

Because of the flipped approach, much class time was allocated to working on three major projects. Table 2 provides descriptions of each major project and Table 3 includes required assignment descriptions within each project. Consistent with DI (Hall, 2002), the instructor provided students with a variety of assignment/assessment formats (see Table 3) and gave students choices throughout the projects in terms of topics and implementation. Additionally, in

line with SIT (Astin, 1999), the course structure promoted student involvement. There were high levels of involvement between students at each stage of program development, implementation, and evaluation. Furthermore, students implemented their low- and medium-dosage projects to actual audiences.

Role of the Instructor

One major purpose of the flipped classroom approach is allowing students to apply and practice skills under their instructor's mentorship (Herreid & Schiller, 2013). The instructor's in this course was congruous with this principle; the instructor served as an active mentor for students. During in-class workdays, the instructor checked in with every small group and remained available throughout the class as questions emerged. Throughout the course, the instructor provided formal support (e.g., approval of project proposal) and informal support (e.g., asking questions to highlight potential challenges) for students. When the instructor delivered in-class lectures, the goal was to model FLE skills that students learned about in out-of-class assignments.

Purpose of the Current Study

The Family Life Education field is increasing in professionalization as specific criteria for becoming a CFLE have been established by NCFR (Darling et al., 2009). Family scholars have reported low prioritization of the FLE methodology criterion (Darling et al., 2009; Darling & Turkki, 2009) and there appears to be limited published research on the effectiveness of educating FLEs. Hawkins and colleagues (2004) indicated there are different dosages of FLE that require educators' unique methodological considerations. Recent published program evaluations indicate that different dosages of FLE are being implemented in the field (see Bradford et al., 2014; Hawkins et al., 2016; Schmidt et al., 2016). The current evaluative study was designed as a starting point for understanding effectiveness of educating students specific to FLE methodology in one undergraduate FLE methods course. The instructor based the course on Hawkins and colleagues' (2004) dosages of FLE and framed it with an integrated theoretical approach. In line with Felten's (2013) principles for best practices in SoTL, the study focused on student learning. This research question guided the evaluative study: What were student-perceived learning outcomes from participating in the FLE methods course?

Methods

Procedures and Sample

Consistent with best practices in SoTL (Felten, 2013), there was IRB approval of study protocols. The instructor invited students enrolled ($N = 32$) in a university FLE course at a Midwestern university to participate. On the first day of the course, the instructor introduced the study by indicating that (a) data would include and be limited to assignments/exams completed in the course and (b) there would be no penalty for declining participation. The instructor

distributed informed consent forms, which students completed outside of the instructor's presence. A departmental secretary stored these forms in a sealed envelope until final grades were posted. Twenty-nine students elected to participate, resulting in a 91% participation rate. Females (93%) composed the preponderance of participants, which is consistent with enrollments in the FLE course from previous semesters at the university. Most participants were seniors (67%) with the remainder being juniors (30%) and sophomores (3%). Participant ages ranged from 20 to 45 years old (mean age = 22 years old). Most participants were family studies majors (80%), while the remainder were working toward family studies minors (10%) or pursuing degrees in health/exercise disciplines (10%).

Prior to the beginning of the course, the instructor developed a collaborative relationship with the Director of Resident Life on the university campus. The Director of Resident Life supervised Resident Assistants (RAs) who provide monthly education programs for residents in their dorms. The instructor made arrangements to have small groups of FLE students (2 to 3) partner with a Resident Assistant (RA) and provide FLE for students assigned to the RA. RAs have predetermined topics for educational offerings each semester and their topics correlated with NCFR's ten content areas (NCFR, 2011). For all project implementation and information dissemination, students were required to obtain documented permission from and follow the regulations of the director/manager of the group/organization. The instructor assigned students to groups of two to three for the first two projects and students selected their own groups for the final project.

Data Collection and Analysis

Felten (2013) advocated using intentional and sound methodology within SoTL. The evaluation plan for the course was designed concurrently with course objectives, structure, and assignments. We relied on theory to ensure our methods were appropriate for working within our discipline and with our participants. Consistent with recommendations from SIT (Astin, 1999), the instructor collected qualitative and quantitative data from students. Table 3 presents each assignment and brief assignment descriptions from the course. We selected a qualitative evaluation (Vaterlaus & Higginbotham, 2011) as the primary approach for this evaluation. Use of multiple data sources (Kimchi, Polivka, & Stevenson, 1991) and quantitative methods (Jick, 1979) established triangulation methods. The study included both approaches.

Two researchers reviewed all course assignments and identified the items that captured student perceptions of their learning outcomes. Table 4 provides quantitative and open-ended items selected for analysis. A method of qualitative thematic analysis as described by Bogdan and Biklen (2006) was implemented with the qualitative data. Two researchers independently read and re-read the complete data set to gain a sense of the data's totality. The two researchers agreed on three major themes that reflected commonalities among participants' perceptions regarding their learning outcomes. One researcher then coded the data by theme, and a second researcher checked for accuracy (93% agreement). The two researchers resolved coding discrepancies through consulting the original data and engaging in discussion. Quantitative items were included as a method of triangulation and descriptive statistics and paired *t* test procedures were used to analyze these items. Through discussion, the researchers identified logical places to

integrate quantitative results within the qualitative themes. Finally, upon reviewing all participant responses, one participant who was deemed generally representative (by the two researchers) of the majority of participants was selected to provide a detailed case example of the course's major assignments. One researcher used all assignments listed in Table 3 to construct this case study and the second researcher reviewed the data and case study to check for accuracy in the presentation of the participant's experience.

Results

Students reported that participation in the FLE methods course significantly increased their general knowledge of FLE when comparing their FLE knowledge from the beginning of the course ($M = 1.41, SD = .68$) and at the conclusion of the course ($M = 3.34, SD = .67$), $t(28) = 10.43, p < .000, d = 1.94$. To gain in-depth perspective on the students' learning experience in the course, student ($n = 29$) open-ended responses from course assignments were analyzed qualitatively. Three themes were identified: collaboration, planning and implementing effective FLE, and FLE dosages.

Collaboration

Participants ($n = 29$) explained that collaboration was essential to creating successful low-, medium-, and high-dosage FLE. Students described their experiences collaborating with their group members, resident assistants (RA), campus organizations (e.g., campus health organization), and community members (e.g., nursing home, homeless shelter, local police officer) as they reflected on completing each of the three major projects.

Interpersonal Skills. Participants explained that participating in collaborative projects helped them recognize and develop interpersonal skills. Students recognized their personal contributions to their group in terms of "creativity," "flexibility," "patience," "respect," "appreciation," and willingness to "negotiate" and saw them as essential to making collaboration work. Students also commented on how class experiences let them evaluate and identify new skills that would help them in collaboration. For instance, a student (female, 40) explained:

I learned to be an active member in a group setting rather than working individually. This in itself challenged my normative style of working and completing tasks. I learned that I need to evaluate my professional skills so that I may be better in voicing my preferences in group work. I also learned that I am a leader in disguise and I need to further develop confidence in this area.

Participants also recognized collaborators' interpersonal skills as important contributions to successful collaborations. One student (female, 20) shared this: "[Our RA] was very easy to work with. We had a good experience working with her because she was flexible, easy to communicate with, and was also very helpful."

The majority ($n = 21$) also shared that the collaborative opportunities helped them understand “Communication is key” (female, 20). Communication was discussed as a conglomeration of skills--listening, sending clear messages, negotiation, and conflict resolution. Some participants explained they enhanced their communication skills through collaborative experiences during the course. For example, one male student (21) shared, “Working with an RA has definitely helped me with my communication skills and adapting to other people’s personalities.” Another female student (20) summarized the general sentiment of peers:

From taking this course, I learned the importance in being able to work with others. With FLE programs, no matter what you teach, you are going to have to be able to talk with others and work out different plans or meetings. This means that it is very important to be able to communicate effectively with others, even if you don't necessarily get along with them. In order to have an effective program take place, it is very important that you and your fellow [collaborators] have strong communication skills with one another.

Value of collaboration. Students acknowledged the value of working with peers. One female student (20) explained, “I liked collaborating rather than taking on a project like this by myself. I loved how we all kind of bounced around ideas and got different perspectives.” Collaborating with outside resources was seen as a good way to meet the target audiences’ needs because the persons with whom they collaborated lived and worked with the audience. Another female student (22) articulated this point:

Our RA was a really good person to work with. He had done these community projects for his [residence] hall many times before, so he knew what we were getting into. He knew how to implement it the best way possible, like for example what time more people would show up and also what would attract people to come, like foods or games.

However, not all of the collaborative experiences were positive. As some students put it, “collaborating with people is HARD” (female, 23). A few students indicated that their collaborators were not “very motivated, professional, or responsive.” Students still reported the experience was valuable, however, because of what they learned. For example, “What I learned is that you just have to take things in stride and roll with it. Keep your end of the deal, but don't expect too much from someone who may not have the same expectations as you do” (female, 20).

Participants also explained that working through challenges in their collaborations with the instructor’s mentorship helped them develop skills to use when entering the workforce and experiencing challenges in working with people. For example, a female student (22) explained how the course instructor provided mentorship when program goals varied between the group and the RA. The RA wanted their project to be “more of a fun activity than something educational” while the group wanted “it to be fun and educational, rather than just a little party [for the residents].” This resulted in conflict, with the RA rejecting all ideas that the group proposed. The student reflected:

The most helpful aspect was having [the instructor] help us through all of the conflict and helping us [decide] what would be proper to email. That to me was wonderful to have, so we would know what to say without being rude... That will be something that I use in the workforce. ... I really did take a lot from all the conflict overall. It's good to learn the differences in opinion that one person could have from another. Also working with a person like our RA really helps you understand another's point of view and what they could also be expecting.

Planning and Implementing Effective Family Life Education

Students quantitatively indicated a significant increase in their knowledge of how to plan, implement, and evaluate FLE as they reflected on their knowledge from before ($M = 1.72$; $SD = .88$) and after ($M = 4.10$; $SD = .86$) course completion, $t(28) = 13.09$, $p < .000$, $d = 2.43$. Participants' ($n = 29$) open-ended responses detailed skills that they perceived essential to planning and implementing effective FLE. Students explained that it was essential to "identify a target audience" (female, 22) when planning a FLE program, so that the program would center on "educational needs the audience would benefit from most" (female, 29). This included researching various backgrounds and cultures of target audience members in order to inform curriculum and participant recruitment planning.

According to students, planning and implementing programs increased their knowledge about what and how to teach FLE. This involved using empirical research to inform the curriculum/program. For example, one student (female, 22) shared:

One major thing I learned was how to implement research into a program. I have had zero experience putting on programs before, so the easiest thing for me to do was to try to put too much of my opinions into my programs. This class helped me to find good research and put it into words that all audiences could understand.

Students also explained that they learned multiple methods for engaging learners in FLE. A student (female, 29) explained, "I also learned how to make sure to teach to all learning styles and include activities to get people involved and entertained in the learning process." A few students also explained the importance of planning program evaluations and evaluating FLE.

Finally, participants reported greater understanding of resources required and/or available (e.g., different technologies) for planning and implementing FLE. "Time and effort" were the resources that students mentioned most often. Students explained that having in-class time to work on projects proved essential to their successful completion. Upon reflecting on their experiences after completing their projects, students explained that they would have focused on managing their time more efficiently.

Family Life Education Dosages

Participants ($n = 29$) indicated the experience of the course helped them learn to distinguish between different dosages of FLE while recognizing similarities. A similarity between dosages that students reported was that “all [dosages] should have research bases!” (male, 20). Furthermore, participants reiterated the importance of considering the audience’s needs regardless of the dosage level. When asked what dosage level they were most comfortable with, participants reported feeling most comfortable with medium-dosage FLE (45%), followed by low-dosage (38%) and high-dosage (17%) FLE. Participants perceived that they were significantly more likely to implement low-dosage FLE ($M = 4.0$; $SD = .89$) in their future careers when compared to high-dosage FLE ($M = 3.07$; $SD = 1.00$), $t(28) = -4.85$, $p < .000$, $d = .90$. Similarly, participants were significantly more likely to implement medium-dosage FLE ($M = 3.79$; $SD = .86$) when compared to high-dosage FLE, $t(28) = -4.64$, $p < .000$, $d = .86$. No significant differences existed in participant perceptions of the likelihood of medium-dosage or low-dosage FLE in their future careers, $t(28) = -1.10$, $p = .281$. Students elaborated on specific things they learned from completing low-, medium-, and high-dosage projects.

Low-dosage. Students stated that low-dosage FLE was “short and sweet to draw people in” (female, 22). The level of FLE could take the form of “flyers,” “brochures,” “blogs,” “social media campaigns” containing research-based information and requiring no large commitment from the targeted audience. Participants indicated that low-dosage FLE provides “a way to get people to go look up information on their own to learn about things” (female, 20) by “directing people to other resources for more information” (female, 20). Students that preferred low-dosage FLE appreciated the lower time commitment in developing materials, the opportunity to influence people without having to do so face-to-face, and the potential to reach a large group of people. One student (female, 21) shared:

I was most comfortable with the low dosage level because we still got to research and present that research, but it was in an easy, "here you go" way. My group did a Facebook page and it was entertaining to see all of the people who liked our page and who would comment on the research we present. People would also like the research we presented, so we could see that we were reaching people and that they were reading what we were posting.

Medium-dosage. Students distinguished between low-dosage and medium-dosage FLE by the amount of involvement of the participant and the educator. A student (female, 20) summarized the consensus:

Medium-dosage is usually a one-time event and involves a little bit more of a time commitment compared to Low-dosage. It usually has more research, more face-to-face interactions, and requires more work for the Family Life Educator and the participants. The majority of students reported preferring medium-dosage FLE because they enjoyed face-to-face interaction, collaboration with community resources, and the moderate time commitment.

High-dosage. “High-dosage projects get the most in-depth” (female student, 21). Students explained that this level of FLE is focused on a specific audience and topic. They reported that high-dosage FLE includes “several” or “multiple” sessions and “requires a lot more time to design and requires a lot of interaction between targeted audience and educator” (female, 40). Students who preferred high-dosage FLE valued the opportunity to explore topics in more depth and felt that this level of FLE would have the most impact for participants.

Case Study

The case study that follows provides an in-depth look at a student’s experience in the course. The pseudonym Rachel is employed to protect the student’s identity. Rachel was a 21-year-old senior majoring in Family Studies. Through taking the FLE course Rachel hoped to “gain knowledge of how to work with families in the future...how to effectively communicate with the members of the classes I am directing, how to have a professional relationship with them, while making the classes interesting and effective.” She articulated her apprehension about group work expectations in the class in regard to scheduling times to meet with group members and the chance that her group members would not fulfill their parts.

For the low-dosage project, the instructor assigned Rachel to work with a group of four students (3 female, 1 male). Her group consulted NCFR’s 10 content areas (NCFR, 2011) and selected “Families and individuals in societal contexts” to guide their project. The group decided to focus their FLE efforts on college students’ social media posts and future employment. They identified peer-reviewed research on the topic, decided on an implementation technique, and submitted a proposal for instructor approval. The group decided to hand out fliers in the student union building and to create a Twitter campaign. The group created fliers with the heading “Don’t be a Dum Dum ThinkB4Upost” that also included a Twitter handle and a research statistic regarding how many employers decide not to hire based on a potential employee’s social media posts. The group distributed these fliers with candy in the student union building to encourage students to follow on Twitter. The group posted brief research findings on their Twitter page once daily and linked to additional research on the topic. Rachel was surprised that “even though it is a low-dosage project, there is still a large amount of work to be done to get your project into the public.” She valued having class time to work on the project. After completing the project, Rachel was satisfied with her group’s outcomes, but identified ways she would improve the project if there were a chance to complete it again (e.g., use more than one day handing out fliers, partnering with the university’s Twitter account). Rachel felt that “working with my group was a great experience... I think that all of our group members did an equal amount of work and shared responsibility for the project.”

The instructor assigned Rachel to work with one peer (female) and a resident assistant (RA) not affiliated with the course for the medium-dosage project. To begin, Rachel and her peer contacted the RA to set a time to do a needs analysis. In their first meeting, they identified a topic that would fit the RA’s employment requirements, the audience’s needs, and an NCFR content area (i.e., interpersonal relationships; NCFR, 2011). Collectively, they decided to implement FLE regarding respectful communication, specifically focusing on hurtful, racist, and insensitive words that could be eliminated from conversation to relate to others with more

respect. Rachel and her peer in the class each completed literature searches for relevant research to guide them during the planning stage of the project. Rachel and her two collaborators worked together to develop activities, material, and discussion questions for the event. This process incorporated email communication and in-person meetings. Rachel stated, "When we met in person [the RA] had goals for the program and shared her ideas with us on how to meet those goals. She also listened and considered our suggestions." They developed a proposal that the course instructor and the RA's supervisor approved. The group advertised their event by creating posters to hang in the dormitory of their target audience and went door-to-door to invite residents to attend. On the night of the event, 10 residents attended their educational event. At the conclusion of the event, Rachel and her colleagues provided the opportunity for participants to evaluate their event. In her summary of these evaluations, Rachel indicated that (a) participants would have appreciated mailbox stuffers or flyers on their door on the day of the event to remind them, (b) participants saw strength in their instructional method, especially the discussion questions, but would have also liked to play a game, and (c) participants indicated that they identified specific words they wanted to eliminate from their vocabulary in order to be more respectful. Evaluating her experience, Rachel shared:

I learned that creating an effective program takes time, creativity, and cooperation between the facilitators. I liked meeting in a face-to-face setting during this project. I felt that being in an actual program setting made it easier and more relatable for the participants. I did not think it would take the time and preparation that I did take, but I felt that the extra effort was worth it in the end when we were doing the event.

In the high-dosage project, Rachel selected to work with two of her peers (both female) because of common interests in gerontology. In their first meeting, they evaluated existing programs for quality and to ascertain what published curricula included. The group created a program proposal that fit the 10 NCFR content areas entitled "Understanding your loved one with Alzheimer's disease: Managing stress and maintaining relationships." All group members completed annotated bibliographies of peer-reviewed research articles to inform their proposals. Once approved by the instructor, the group began developing their curriculum for a five-session (welcome session, three content specific sessions, and goodbye session) program. Rachel and her collaborators used research to develop sessions focused on communicating with a loved one who has Alzheimer's disease, meaningful interactions, routines caregivers could use, and self-care for the caregiver. They included objectives, activities, and detailed prompts in lesson plans for their program. The completed draft of the group's program included an engaging cover, title page, research summary, introduction for facilitators, detailed lesson plans, and an appendix with supporting materials. The group submitted a digital version of their high-dosage program for peer review on the online course management page.

Rachel reported that her group worked well together because they "have similar personalities and work ethics so our group work was fun and enjoyable." As Rachel reflected on her experience completing development of a program, she stated, "The high-dosage program was the most challenging, but also the most rewarding. It required much more work and detail, but through the process I felt we created a large project that would be fun to implement." She

thought that having the opportunity to facilitate one of their sessions would have added to her experience and allowed her group to evaluate “how we did putting together our session.”

In her final evaluation of the course, Rachel reported feeling most comfortable with medium-dosage FLE, but she also was very likely to implement low-dosage, medium-dosage, and high-dosage FLE in her future career. Rachel explained that she learned about the planning process that goes into facilitating a program in FLE. “I did not realize how much the facilitator needed to do before starting each session of the class and because of this class I will be more prepared for the future.”

Discussion

This Scholarship of Teaching and Learning (SoTL) project focused on evaluating an undergraduate FLE methods course that aimed to increase students’ factual and applied knowledge about FLE. Evaluation results indicated that students identified personal educational gains regarding collaboration within FLE, planning and implementing FLE programs, and distinguishing between dosages of FLE. This section discusses results in terms of consistency with course objectives, instructional theory, and SoTL.

Course Objectives

Student learning objectives for the course included gaining (a) factual knowledge about FLE, (b) practical knowledge about the development, implementation, and evaluation of FLE, and (c) practical experience within the field of family science. Results indicated that students perceived these objectives were met. Students reported significant increases in their knowledge relating to FLE from participating in the course. Consistent with Hawkins and colleagues’ (2004) descriptions of the different types of FLE, students detailed major differences between low-, medium-, and high-dosage FLE offerings. Furthermore, students practically discussed the benefits and challenges of each approach to FLE. For example, low-dosage FLE was discussed as a small time investment for participants that could increase their interest in FLE. By contrast, high-dosage FLE requires larger participant time investment, which could lead to the highest impact on participant well-being.

Students reported learning gains consistent with NCFE’s (2011) description of the FLE methods criterion (i.e., planning and implementing programs, program evaluation, educational techniques, sensitivity to others, and sensitivity to community concerns and values). Students conveyed that they gained practical skills in program planning by considering their audience (e.g., sensitivity to others), working with collaborators, identifying peer-reviewed research to inform program content, and varied instructional methods to engage participants. Fewer students mentioned the importance of program evaluation. This may be important for more inclusion of evaluation training within the course format.

Instructional Theory

The course relied on the flipped course approach (Herreid & Schiller, 2013), Differentiated Instruction (DI; Hall, 2002) and on Student Involvement Theory (SIT; Astin, 1999) to inform the format, assignments, and instruction. Results provide some support for these instructional approaches and theories. Students indicated that in-class time to work on projects proved essential to success. In-class time was made available by using the flipped course approach (Herreid & Schiller, 2013)—coursework that could be completed independently was done outside class, while students used class time to complete group projects under the instructor's direction. By framing the class using the distinction of low-, medium-, and high-dosages of FLE for assignment and assessment, formats naturally varied, which are key tenets within DI (Hall, 2002). This variation allowed shy or timid students (e.g., some students who found low-dosage most comfortable) to participate in some assignments where they experienced more comfort and others that stretched their comfort zones. Finally, SIT postulates that student learning and personal development in academic programs is directly proportionate to student involvement in the program (Vaterlaus, Beckert, et al., 2012). With completion of three major group projects, the course included many opportunities for student involvement. Students reported increased development of personal and professional skills through involvement in each project. Rachel's case study demonstrates the level of dedication and commitment students experienced by being directly involved in developing and implementing FLE.

The Scholarship of Teaching and Learning

The connection to the field of Scholarship of Teaching and Learning (SoTL; Felten, 2013; Hutchings, 2000) is found within this study. Hutchings (2000) summarized a taxonomy of question types that have guided SoTL projects. Our project relied on the "what works" question within this taxonomy because we focused on "seeking evidence about the relative effectiveness" (Hutchings, 2000, p. 4) of an applied and theoretically grounded method for teaching an FLE methods course. Hutchings (2000) explained that SoTL investigations can include more than one question from the taxonomy. This project also addressed the question "visions of the possible," a title which encompasses inquiries about meeting goals for teaching and learning that have not come to fruition. Course development began with a vision of the possible, as the instructor contemplated the possibility of deviating from the traditional lecture-focused approach to teaching and instead flipping the classroom to meet students' educational needs regarding FLE. Intertwining the two questions resulted in a novel method for teaching FLE methods and some preliminary support for the educational approach from student perspectives.

Common principles of good practice in SoTL, which Felten (2013) identified, can be found throughout. The study's focus was on student learning that included not only FLE methods skills, but also students' perceptions of their own learning experiences in the course. The study was grounded in context of the specific problem within the FLE classroom, within the university (e.g., Resident Life), and with relevant theory. Sound methodology supported by theory was implemented to address the problem posed. Felten (2013) indicated that at a minimum, SoTL projects should follow guidelines for working with human subjects, but he also encouraged scholars to involve students more fully as partners in the scholarship. The current project met

Felten's minimum requirements for student involvement, but the partnership with students in the inquiry process could be enhanced. For instance, students who have already completed the course may be able to facilitate focus groups with current students. Finally, as good practice evolves we are publicly sharing our process and findings with others.

Implications

Results from this SoTL project also provide important implications in terms of instructional theory and methods. Herried and Schiller (2013) indicated there are challenges to implementation of flipped classrooms. These include "greater preparation time, student resistance to novel teaching methods, and a concern on the part of many teachers about content coverage" (p. 62). The course creator found these concerns to be formidable obstacles in the course's developmental stages—how will students respond to three major group projects and a large amount of out-of-class work? Starting with clear course objectives and instructional theory increased confidence in the process of course development. Results in the evaluative study indicated that students found value in collaboration, learned core aspects of program planning and implementation, and could identify the qualities of different FLE dosages. These results provide some support for using a flipped classroom approach in teaching FLE. The evaluation highlighted areas for improvement for future implementation. Although program evaluation was a component of each major project and out-of-class material, very few students commented on the importance of evaluation as they reflected on their learning. It may be helpful to include an introduction (e.g., short reading or online lecture) to the topic of evaluation in module one and then build on the topic in the next two modules.

According to Hennon and colleagues (2013), one challenge that the FLE faces is selecting appropriate approaches to FLE. Using the low-, medium-, and high-dosage frameworks allowed students to have applied experience with various approaches to FLE. Students could clarify different reasons each dosage level might be used and recognize the level of commitment each dosage required of participants. As indicated in the case study, some students reported they wanted the opportunity to implement at least one of their sessions from the high-dosage project. Peer-evaluations alone may have limited the learning experience for some students. In the future, it may be beneficial to do peer-peer presentations in the high-dosage project—pairing two groups and allowing them each to present one of their sessions to each other. This would allow multiple presentations to occur concurrently and would take less time than would having every group present a session to the class as whole.

Consistent with Felten's (2013) recommendations, we grounded our study in our classroom and institutional context, which may vary for other family science instructors. Some FLE class sizes may be larger than 30 students or may be offered in online formats. Larger class sizes may still consider implementing this instructional approach to FLE with larger group sizes for each project. In this instance, having a graduate teaching assistant with FLE experience to provide support in the classroom may help. We encourage evaluation of this method with larger class sizes. Online classes could consider adapting some features of this course design; framing the online course using FLE dosages as modules could highlight the variety of approaches to FLE. The nature of low-dosage FLE often involves implementation of FLE through technology.

This may be an effective way of engaging an online class with applied experience executing their own FLE.

Limitations and Conclusions

The evaluation of one FLE methods course using the aforementioned methods was an important first step, but also limits the ability to generalize about the results. Students in this class were homogeneous in terms of gender and ethnicity; perceived outcomes may vary in more diverse classroom settings. The evaluation also did not include a comparison group, which makes it unclear if the course design is responsible for perceived learning gains. Future research should consider using a comparison group (e.g., a lecture based FLE course) to address this limitation. Furthermore, to move past student perceptions of knowledge gains researchers might consider creating standard measures of FLE methods knowledge that could be used to compare knowledge differences in undergraduate FLE courses using different instructional approaches.

Despite its limitations, this study begins to add much needed family science-focused SoTL literature, evaluation regarding training experiences of FLEs, and provides support for an innovative way of instructing an undergraduate FLE methods course. Students reported increased general knowledge about FLE, practical knowledge of FLE methods, and identification of different approaches (low-, medium-, and high-dosages) to implementing FLE. Students in this study indicated they learned applied FLE skills in this course they could use in their future profession—creating professionals who feel prepared to implement FLE. Perhaps professionalization of the field could be increased with greater focus on FLE methodology during undergraduate training. Continued evaluative efforts are needed to understand best practices in training FLEs of the future who can address current professional challenges in the field and meet the needs of families and individuals in their professional positions.

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Table 1

Summary of Family Life Education Content Covered in Each Learning Module

Module 1	
History of Family Life Education (FLE)	Research-Based Programming
Defining FLE	Education versus Advocacy
Approaches of Facilitator in FLE	Technology/Media in FLE
NCFR Content Areas	Intensity/Dosages of FLE
Personal Philosophy of FLE	Low-Dosage FLE
Program Development (e.g., goals, objectives)	
Module 2	
Collaboration in FLE	Formative and Summative Assessment
Professionalism	Diversity Issues in FLE
Student Learning Styles	Medium-Dosage FLE
Group management/engagement	
Designing FLE to meet audiences' needs	
Principles of Instruction	
Effective instructional technique and skills	
Module 3	
High-Dosage FLE	
Designing Comprehensive FLE programs	
Evaluating quality of existing FLE curricula	
Program Evaluation	
Careers in FLE	
Improving the Practice of FLE	

Table 2

Overview of Major Student Projects in Family Life Education Methods Course

Low-Dosage Project	Students were assigned to groups (3 students) where they identified a population to target, a topic to address (based on NCFR's 10 FLE Criteria areas; NCFR, 2011), and a low-dosage method for reaching people (e.g., social media, flyers, posters). Students implemented and evaluated their projects.
Medium-Dosage Project	Assigned student groups (2-3 students) had the opportunity to collaboratively develop and implement a one-time educational event for college students in partnership with University Resident Life employees. Resident Assistants (RA) in various dorms volunteered to collaborate with students in the course. Students conducted a needs analysis with their RA, identified topic area consistent with NCFR's criteria areas (NCFR, 2011) and RA's employment guidelines, and planned, implemented, and evaluated the event.
High-Dosage Project	Students self-selected groups (3 students) and NCFR criteria (NCFR, 2011) based topics for this project. Groups developed multi-session research-based program manuals and materials (e.g., research justified introduction to the program, complete lesson plans, evaluation materials, and advertising materials). Program manuals were digitally created and displayed on the course website when completed. Students critically evaluated programs created by other groups in the course.

Table 3

Family Life Education Assignment Descriptions

Module 1 Low-Dosage Family Life Education	
Assignment	Description
Pre-Test	The test was administered online and used both quantitative and qualitative items to measure current knowledge of FLE and preferred learning styles.
Topic Selection	Groups of 3-4 Students identified an audience they would like to reach and a specific need for the selected audience.
Annotated Bibliography	Each group member found and summarized four peer-reviewed research articles relating to their topic/audience.
Proposal	Using research the students created a proposal indicating the content they would disseminate and their methods for implementation, and evaluation. Instructor approval was required for implementation.
In-Class Presentation	Students presented an overview of their project implementation and evaluation in class.
Final Report	Students responded to four open-ended questions about what they learned from the project, evaluated group performance, what they would do different in the future, and what questions were generated about FLE.
Mastery Quiz	Students had two attempts on an online quiz about the topics covered in their reading and lecture.
Module 2 Medium-Dosage Family Life Education	
Assignment	Description
Needs Analysis	2-3 students met with a university resident assistant (RA) to identify the educational needs of the college students in their assigned dorm and ensure the project would meet the RA's job requirements.
Annotated Bibliography	See description in module 1
Proposal	See description in module 1
Evaluation	Students had their participants and the RA complete evaluations of their educational offering. This assignment required students to summarize these evaluations and include their own observations.
Final Report	See description in module 1
Round Tables	5-6 students who were in different project groups were placed in round tables during class to discuss the successes, challenges, and obtained knowledge from implementing their medium-dosage education.
Mastery Quiz	See description in module 1
Module 3 High-Dosage Family Life Education	
Assignment	Description
Topic Selection	See description in module 1
Annotated Bibliography	See description in module 1
Proposal	See description in module 1
Final Project	2-3 students created a complete completely FLE program that included a research justification, a welcome session, three topic sessions, a closing session, and an evaluation plan. Instructions and materials for session activities were included in appendices.
Final Report	See description in module 1
Online Peer Evaluations	PDF versions of student complete high-dosage programs were posted as links on discussion boards on a course management system. Students were required to each select two programs and provide structured feedback on content, engagement, format, and materials.
Post-Test	The test was administered online and used quantitative and qualitative questions to assess student learning regarding FLE.

Table 4

Items Selected to Answer Research Question

Item	Source(s)	Item Format
Which response below best represents your current knowledge of Family Life Education?	Pre-Test Post-Test	5-Point Likert Scale
Rate your knowledge from BEFORE/AFTER taking this course concerning how to plan, implement, and evaluate Family Life Education programs.	Post-Test	Pre-then-Post-Retrospective Design: 5-Point Likert Scale
Describe what knowledge or skills you obtained from this course about planning and implementing Family Life Education.	Post-Test	Open-ended response
Describe the difference between low, medium, and high dosage FLE.	Post-Test	Open-ended response
How likely are you to implement low dosage FLE into your future career? (repeated for each dosages)	Post-Test	5-Point Likert Scale
Which dosage level (low, medium, or high) were you most comfortable with? Why?	Post-Test	Open-ended response
What would you say the most challenging part of this course was for you and why?	Post-Test	Open-ended response
What did you learn about [low, medium, or high] dosage FLE from accomplishing this project?	Module 1 Final Report Module 2 Final Report Module 3 Final Report	Open-ended response
What was your experience working with your group?	Module 1 Final Report Module 2 Final Report Module 3 Final Report	Open-ended response
What aspects of the project were most helpful for you?	Module 1 Final Report Module 2 Final Report Module 3 Final Report	Open-ended response
What would you do differently if you completed this project again?	Module 1 Final Report Module 2 Final Report Module 3 Final Report	Open-ended response