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Transforming Counseling Pedagogy With Horticulture Therapy Techniques

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Horticulture therapy is the purposeful use of plants in treatment plans to improve mental health (American Horticultural Therapy Association [AHTA], 2009). While we know that we could not survive without food and oxygen supplied by plants, research also indicates that plants are connected with our physical, mental, social, and emotional wellness (Acquaah, 2004; Haller & Kramer, 2006).

Some of our earliest historical records talk about the Garden of Eden and the Hanging Gardens of Babylon (Haller & Kramer, 2006). As early as the 1700s, horticulture therapy techniques were used with institutionalized individuals diagnosed with mental illnesses (Haller and Kramer, 2006). In 1878 Pontiac State Hospital in Pontiac, Michigan, began using farming and gardening as part of a work therapy program (Haller & Kramer, 2006).

Haller and Kramer's (2006) and Acquaah's (2004) research indicates that horticulture therapy techniques are also effective for promoting mental wellness. Based on our own experiences with Horticulture Therapy and its success with clients, we decided to develop an elective course on Horticulture Therapy for the Master of Science program in Counselor Education (Porter & Porter, 2009). The course was offered for the first time in the summer semester 2007 and has been offered once a year since that time.

Our first experience with horticulture therapy techniques was a collaborative School-to-Career Program for students in grades 9 through 12. The program focused on career opportunities for students. The students presented a continuum of ability -- from those with diagnosed learning disorders to those who were gifted (Porter, Owen, et al., 1995). The goal was to help students acquire work skills that would provide opportunities for employment after graduation or that would serve as a foundation for additional educational opportunities. Some students with diagnosed learning disorders had trouble following directions and needed a simple repetitive routine in order to be successful.

They were very successful at routine tasks such as filling pots with dirt and planting bulbs in pots. Other students were able to learn the scientific names for plants and explain chemical processes such as the making of fertilizer. Horticulture therapy techniques combined with behavior modification techniques were effective with students who were from different gender, race, socioeconomic, and ability groups. Students who participated in this project developed life coping skills that could lead to employment after school as an employee of a nursery, skills for starting their own nursery business, or skills for pursuing an Associate's degree or Bachelor's degree which could be followed by the Master's and Ph.D. degrees in Horticulture.

In the past 15 years, we have also found that horticulture therapy techniques are effective with older adults regardless of diagnosis (Haller & Kramer, 2006). For some older adults, performing a horticulture therapy activity that they remember doing with their family or friends brings back the memory of happier times and helps relieve depression. The repetition of some horticulture therapy activities, such as transplanting seedlings, has been found to be beneficial with clients who have a mental illness diagnosis such as Alzheimer's (Haller & Kramer, 2006).

Some of the practicum and internship students who have taken the elective horticulture therapy class are implementing horticulture therapy techniques with children and young adults. One of the sites that has reported the most effective results from the use of horticulture therapy techniques has been an addiction recovery center for females. The clients are required to attend group sessions several times a day. In the past, these sessions have been talk sessions where group members discussed contributing factors to their addiction and how they will overcome the contributing factors. Many of the clients have been in counseling and in drug rehabs before and know the routine including the "correct answers." Clients participating in the horticulture therapy techniques report that they are enthusiastic about participating in the horticulture projects and see the horticulture techniques as less threatening and more interesting than the talk sessions. While they are focused on the horticulture activity, they relax and share information more comfortably than when they are asked a series of questions about their attitudes, future plans, weaknesses, etc.

Class Materials

The goals of the class were to present content about horticulture therapy techniques that would be useful to students in their counseling practice and to provide opportunities to implement the techniques so students could become competent in the use of the techniques with clients. The class syllabus is a combination of counseling and horticulture content with an emphasis on techniques and implementation (see appendix for a copy of the syllabus). The first part of the class is content focused with modules on Botany as well as on counseling techniques. As the class progresses, the emphasis shifts to practice of the techniques and knowledge learned in the class with clients. The final exam for the class is a detailed report describing the student's selection and implementation of horticulture therapy techniques and the challenges and successes they experienced with clients using the techniques.

Students learn to develop and implement a detailed horticulture therapy treatment plan that combines behavioral and cognitive behavioral techniques with horticulture

therapy techniques (see appendix for a copy of a treatment plan). While many of the elements in the treatment plan are found in most treatment plans, we included a place for physical, cognitive, emotional, and social goals. A goal was set for each of these dimensions. There is also a list of supplies and procedures included in the treatment plan. The procedures list requires flexibility when clients do not understand instructions or a project does not work as well as the counselor thought. The plan included in the appendix of this paper was successfully implemented by a counseling practicum student with a group of adolescent males who were involved in a drug rehabilitation program. Many of the males were repeat admits and very resistant to mandated counseling sessions. The student implemented the plan in 2007 and continues to use horticulture therapy techniques successfully with her clients at the same facility.

Also attached is a copy of an assessment observation form that works well with a variety of client issues. Students report that they especially like this form as it is easy to use and provides a good tool for tracking client progress.

Summary of Benefits of Horticulture Therapy Techniques

Some of the benefits of horticulture therapy techniques documented through research and practice are: 1) can be used with many counseling theories; 2) assists in helping clients reach therapeutic goals; 3) are appropriate for individual and group sessions; 4) can be adapted to meet age or cultural needs; 5) offer non-threatening opportunities for client socialization; 6) help clients renew enthusiasm for living; 7) provide active involvement and exercise; 8) provide sensory stimulation; 9) improve clients' concentration, motivation, manual dexterity, and work skills; 10) provide relief from stressors of life; and 11) help clients reconnect with the natural rhythms of nature (Cohen, 2009; Haller & Kramer, 2006; Porter & Porter, 2009).

Student responses on course evaluation forms for the class have identified the following course benefits: 1) learn how to adapt techniques to the needs of clients; 2) practice writing and implementing treatment plans; 3) like the more concrete system of evaluating client progress; and 4) increase self-confidence about their ability to provide appropriate interventions for clients.

References

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Note: This paper is part of the annual VISTAS project sponsored by the American Counseling Association. Find more information on the project at: http://counselingoutfitters.com/vistas/VISTAS_Home.htm

COE 8990 Special Topic in Counselor Education: Horticulture Therapy COURSE SYLLABUS

COURSE DESCRIPTION:

Three hours credit. Seminar/workshop/technology (Hybrid class). Interactive instruction that emphasizes the people-plant connection through the use of horticulture therapy in counseling practice. Practical interventions that promote mental and physical wellness will be emphasized.

Objectives:

To successfully complete this course, you will be able to:

- 1. Define and explain Horticulture Therapy.
- 2. Utilize Horticulture Therapy techniques in counseling.
- 3. Design and implement Horticulture Therapy treatment plans.
- 4. Design and implement Horticulture Therapy group sessions.
- 5. Utilize research in the area of Horticulture Therapy.
- 6. Demonstrate sensitivity to the special needs of minorities and special populations in counseling through the use of Horticulture Therapy techniques.

Topics to be Covered:

- 1. Historical development of Horticulture Therapy.
- 2. People/plant connections.
- 3. Basics of botany.
- 4. Basics of plant care.
- 5. Behavior modification and Horticulture Therapy.
- 6. Designing Horticulture Therapy treatment plans.
- 7. Incorporating Horticulture Therapy techniques in counseling practice.
- 8. Assessing the effectiveness of Horticulture Therapy plans.
- 9. Promoting mental wellness using Horticulture Therapy techniques.

COURSE REQUIREMENTS:

- 1. Written Examinations:
 - A. **Mid-Term Exam** (100 points). Horticulture Therapy treatment plans for clients.
 - B. **Final Exam** (100 points). Horticulture Therapy Activity Report. During the semester you will practice Horticulture Therapy techniques you are learning at an approved site (**minimum of 10 hours**). You will then prepare a 5-8 page, typed report describing the site, the techniques/activities used with the clients, the results, and a self-evaluation of the process. APA guidelines will be used for the format.
- **2. Horticulture Therapy Techniques Presentation** (50 points): You will select a Horticulture Therapy technique or strategy to share with the class (approximately 25 minutes). Include a brief explanation of the theory from which the technique originated, a materials list for items needed to implement the technique, and an explanation or demonstration of how to implement the technique.
- **3. Internet Assignments** (3 at 30 points each): You will participate in internet assignments to increase your ability to utilize horticulture therapy techniques.

HORTICULTURAL THERAPY PLAN

CLIENT: Adolescent boys group **SESSION DATE(S):** August 3 and 6, 2007 September 17, 2007

2.5 hours

PRESENTING PROBLEM: Substance dependence and abuse. Group purpose is to address low frustration tolerance, impulsivity, and poor problem-solving skills.

GOALS: To help the adolescent understand the concept of nurturing and learn to nurture himself and others.

- 1) Physical: To increase fine motor skills through painting.
- 2) Emotional: To increase self-esteem. To increase ability to nurture.
- 3) Cognitive: To increase self-awareness and make better personal choices.
- 4) Social: To encourage positive interaction with others.

SUPPLIES: 15 flower growing kits (Sunflowers, Forget-Me-Not, and Lucky-Clover), flower pots, paint trays, paint brushes, water, napkins

PROCEDURES:

- 1) Define and discuss the word "nurture."
- 2) Discussion question: Who has nurtured you? Answers often given are mother and family members.
- 3) Discussion question: Who have you nurtured? Answers often given are animals such as dogs, cats, and birds. Also sometimes get the response that they are fathers.
- 4) Explanation of the purpose of this group activity which is to nurture a plant.
- 5) Explanation of steps in project.
- 6) Paint pots decoratively in first session.
- 7) Select a plant and pot plant in second session.
- 8) Care for plant for six weeks.
- 9) Session on September 17 will talk about successes and challenges in caring for a living thing like a plant.
- 10) After September 17th session, each group participant will give the plant to someone who has nurtured him.

EVALUATION METHOD: Horticulture Therapy Assessment Observation Form checklist of appropriate life skill behaviors observed during session for each participant.

REVIEW AND FOLLOW-UP NOTES: Counselor will check with group participants each week for an update on nurturing project.

HORTICULTURAL THERAPY ASSESSMENT OBSERVATION FORM*

CLIENT: SESSION DATE(S):

SESSION ACTIVITY:

GENERAL	RATING	COMMENTS
Willing to engage		
Shows initiative and motivation		
Responsible with tools/plants		
Works till task is completed		
Follows safety precautions		
Punctual/effective time management		
Understands task purpose		
Seeks help appropriately		
EMOTIONAL		
Patient/delays gratification		
Tolerates frustration appropriately		
Modulates own mood		
Shows impulse control		
Focuses on positives		
Manages anxiety		
COGNITION		
Understands/recalls instructions		
Follows appropriate sequence		
Aware of own errors		
Can organize own task		
Able to problem solve		
SOCIAL		
Socializes/tolerates peers		
Cooperates with others		
Accepts supervision/assistance		
Shares tools/equipment/space		
Initiates interaction		
Responds to interaction		
Shows flexibility/tolerates change		
Behaves appropriately		
Shares own experiences/feelings		
Shows self-confidence		

PHYSICAL	
Understandable speech	
Adequate hearing	
Adequate vision	
Adequate sitting/standing balance	
Adequate gross motor skills	
Adequate fine motor/eye hand skills	
Adequate muscle strength	
Adequate endurance/energy level	

^{*}Adapted from S. Sieradzki's "Hanna University Geropsychiatric Center Situational Assessment Observations" form.

RATING SCALE:

- 5 = Able/independent
- 4 = Able with minimal assistance
- 3 = Able with moderate assistance
- 2 = Able with significant assistance
- 1 = Unable

Functions best with (circle):

Written instructions
Visual cues
Physical assistance

Demonstration
Constant cuing
Hand over hand

Adaptive tools/techniques (describe):

Client strengths:	
Client limitations:	
COUNSELOR:	DATE: