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# Assessment of enhanced vocational skills through horticultural therapy for differently-abled individuals

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#### Abstract

Horticultural Therapy is a structured therapeutic approach using plant-based activities to enhance vocational skills and independence among differently-abled individuals. Traditional vocational programmes often overlook their specific needs. This study evaluated the impact of Horticultural Therapy on vocational skill development in 30 individuals with Intellectual Disability, Cerebral Palsy, Locomotor Disability and Down Syndrome. Participants engaged in structured activities such as microgreen propagation and greeting card making. Vocational skills were assessed using an adapted scale. Findings revealed that 67% of participants achieved a high level of vocational skills post-training, while 33% showed moderate improvement, with none remaining in the poor skill category. Those with prior Horticultural Therapy experience demonstrated greater engagement and independence. The Benefit-Cost ratio of microgreen production (4.35) and greeting card making (3.75) indicated economic viability. The study concludes that Horticultural Therapy is an effective, sustainable vocational training method that enhances employability, confidence, and social inclusion for differently-abled individuals.

**Keywords:** Horticultural therapy, differently-abled, vocational skill, intellectual disability, cerebral palsy, down syndrome, locomotor disability, Horticultural Therapy-Vocational Skill Assessment Scale (HT-VSAS).

#### 1. Introduction

fruits, vegetables, ornamentals (trees, shrubs and flowers), herbs and medicinal plants is known as horticulture. (Jaskani and Khan, 2021) [9]. Therapy is a treatment procedure which make a person feeling better. According to the American Horticultural Therapy Association (AHTA)<sup>[2]</sup>, operationalised Horticultural Therapy (HT) involves gardening and plant-based activities facilitated by trained professionals to achieve therapeutic goals. According to Beela et al. (2015) [4], the adaptability of Horticultural Therapy highlights its potential to cater to individuals with diverse disabilities by tailoring activities to specific abilities. Thus, Horticultural Therapy has emerged as an effective intervention for promoting overall well-being vocational readiness among differently abled individuals. A significant portion of the global population is covered by differently-abled individuals, with the World Health Organisation (WHO) [21] estimating that over one billion people experience some form of disability, which is 16% of the world's population. The Department of Empowerment of Persons with Disabilities, Government of India, reported that 21 types of disabilities are included under the RPwD Act, 2016, such as Visual Impairment, Locomotor

The art and science of cultivating high-value plants such as

Disabilities, Hearing Impairment, Speech and Language Disability, Intellectual Disability, Cerebral Palsy, and Down Syndrome [7]. Systemic barriers hinder access to education, employment, and social integration, emphasising the need for tailor-made interventions to promote skill development. Vocational skills empower differently-abled individuals to gain employment, achieve financial independence, and participate in society. Traditional vocational training often fails to meet their needs due to inaccessible facilities, lack of adaptive teaching, and social stigma. Hence, innovative approaches like Horticultural Therapy are essential for inclusivity and employability. Horticultural Therapy helps individuals become mentally, physically, cognitively, and socially more engaged, confident, and independent by enhancing overall well-being and vocational skills.

#### 1.1 Vocational Skill

Vocational skill-based education is vital for people with disabilities to develop skills and promote independence. Mitra and Sambamoorthi (2005) [15] reported low employment rates for persons with disabilities compared to the general working-age population in India. Individualised vocational training programs are needed, which have shown significant improvement in the skill development of

individuals with mild intellectual disabilities, aiding rehabilitation and societal integration (Gupta, 2021) [8]. Similar training across various disability categories will further enhance employability and inclusion.

The children with special needs, vocational education should match their talents, interests, and abilities, promoting work habits, positive attitudes, and social skills (Jauhari *et al.*, 2020) <sup>[11]</sup>. Jaya *et al.* (2018) <sup>[12]</sup> emphasise the importance of life skills education, recommending that general, academic, and vocational life skills be tailored to specific disabilities and cognitive abilities. Educational interventions and learning media aid in vocational skill acquisition, helping to reduce unemployment and support community integration.

#### 1.2 Horticultural Therapy (HT)

Experts across decades have operationalised Horticultural Therapy for vocational skill assessment. Beela and Reghunath (2010) <sup>[5]</sup> described Horticultural Therapy as the integration of behavioural science and horticulture. Davis (1995) <sup>[6]</sup> explained it as using gardening and nature in professional therapy and rehabilitation. According to Ackley and Cole (1987) <sup>[1]</sup> defined Horticultural Therapy as plant-related activities supporting medical and psychological therapies to enhance mental and physical health.

Horticultural Therapy engages individuals in plant-related activities to improve well-being (Porchey, 2007) [18], helping reduce stress, regulate emotions, increase self-awareness, and encourage social interaction (Zhou & Zeng, 2023) [22]. It has been implemented in hospitals, schools, and community gardens (Porchey, 2007) [18]. Horticultural Therapy also improves memory, reduces stress and anger, and supports motor coordination, task completion, self-esteem, and social interaction (Beela and Ragunath, 2010) [5].

Horticultural Therapy programmes show promising results for differently-abled individuals, improving hand function, emotional behaviour, and social skills (Joy *et al.*, 2020) <sup>[13]</sup>. Activities like succulent cultivation and upper body movements have enhanced vocational rehabilitation (Son *et al.*, 2022) <sup>[20]</sup>. Behaviour-modification-based Horticultural Therapy programs significantly improve social behaviour in children with intellectual disabilities (Kim *et al.*, 2012) <sup>[14]</sup>. Structured Horticultural Therapy training for adolescents with moderate impairments also improved self-sufficiency and self-image (Airhart *et al.*, 1987) <sup>[3]</sup>.

Beneficiaries of Horticultural Therapy show marked improvements in motor skills, task accuracy, and emotional resilience (Jasmeen, 2015) [10]. Horticultural Therapy bridges therapy and vocational training through practical gardening experiences aligned with therapeutic goals (Simson and Straus, 1998) [19]. Horticultural therapy not only builds practical skills but also supports mental and emotional well-being through calming activities like gardening. Nevil and Beela (2023) [16] demonstrated that Horticultural Therapy enhances social and emotional abilities, helping participants become more resilient and workplace-ready. Activities such as soil preparation, propagation, and marketing mirror real-world job tasks, fostering teamwork, problem-solving, and vocational competence.

#### 2. Materials and Methods

The sample for the study were selected from two locations, Horticultural Therapy Centre, Department of Community Science, College of Agriculture, Vellayani, Trivandrum and Mother Veronica Special School, Thalanji, Chungathara, Malappuram. The sample consists of 30 differently-abled individuals, including 21 boys and 9 girls, belong to the age group 12-30. There are 25 individuals with Intellectual Disability, 3 with Cerebral Palsy, and 1 each with Locomotor Disability and Down Syndrome.

Vocational skills training was given to 30 differently-abled individuals in 8 sessions, specifically focusing on microgreen production, greeting card making using dry flowers and leaves and their selling. After the Horticultural Therapy vocational training sessions, vocational skills of differently abled individuals were assessed using a Horticultural Therapy- Vocational Skill Assessment Scale (HT-VSAS). The scale consists of two parts focusing upon; a) the personal and socio- economic characters of the sample, b) aspects related to vocational skill assessment. First part consists of 19 questions and second part consists of 30 questions specifically made to assess the vocational skills of participants.

The tool was adapted from a standardised Vocational Assessment Scale, named NIMH- Vocational Assessment and Programing System (NIMH- VAPS), 1998 for persons with Mental Retardation [17]. The scale was initially prepared and a pre- test was carried out with 60 people of age category of 12-30 years old. The score of the rating scale was in an ascending order 0 to 2. Using the pre-test result the reliability and validity of the tool were checked. The reliability coefficient of the Horticultural Therapy-Vocational Skill Assessment Scale was calculated as 0.958, which indicates a high level of internal consistency, suggesting that the adapted vocational skill assessing scale is highly reliable. Overall Content Validity Ratio of the scale results indicate that most items have moderate and high validity, suggesting that the scale is appropriately measures the vocational skills and it is valid.

After the vocational skill assessment, individuals with a total score of 22-30 were classified as having high vocational skills, those scoring 15-21 were categorised as having moderate skills, and those with a score below 15 were considered to have poor vocational skills.

The Study: The study was carried out in the following stens:

- Pre-Horticultural Therapy Assessment
- Horticultural Therapy Training Sessions
- Post-Vocational Skill Assessment

#### 2.1. Pre-Horticultural Therapy Assessment

Before starting Horticultural Therapy, participant's personal and socio-economic backgrounds were assessed with input from their trainers, teachers, and parents. Additional information, such as prior experience with gardening, interest in horticulture, basic plant knowledge, required skills, and existing vocational abilities, was collected to evaluate their pre-vocational skills.

#### 2.2 Horticultural Therapy Training Sessions

# 2.2.1 Introduction to Horticulture: Identifying and Propagating Plants

Participants were introduced to horticulture through sensory-based learning. They explored plant textures, colors, and scents to identify common garden plants. They also recalled fruits and vegetables they consume and discussed propagation methods like seed sowing and stem cutting. This session aimed to enhance their observational skills, sensory awareness, and plant knowledge.



Fig 1: Identification of plants by sensory stimulation

# 2.2.2 Sensory Engagement: Collecting Leaves and Flowers for Drying

Participants collected leaves and flowers, engaging their senses to distinguish textures, fragrances, and colors. This hands-on activity improved sensory awareness, cognitive processing, and relaxation, helping them select materials for press drying.



Fig 2: Press drying of collected leaves and flowers

### 2.2.3 Creative Expression: Making Handmade Greeting Cards

Using dried flowers and leaves, participants created greeting cards, combining art with horticulture. This activity encouraged creativity, improved fine motor skills, and helped develop patience, concentration, and self-expression, opening pathways for vocational opportunities.



Fig 3: Making of greeting cards

#### 2.2.4 Practical Gardening: Sowing Microgreens

Participants sowed green gram (*Vigna radiata*) in trays lined with tissue paper. They learned about proper spacing and moisture control, promoting teamwork, responsibility, and problem-solving skills.



Fig 4: Sowing of microgreen seeds

#### 2.2.5 Responsibility Building: Caring for Microgreens

Participants monitored the growth of their microgreens, watering them daily and recording observations. This session emphasised the importance of consistency in plant care and improved their responsibility and attention to environmental factors affecting plant health.



Fig 5: Watering of microgreens

# 2.2.6 Harvesting Skills: Sorting and Preparing Microgreens

Once the microgreens matured, participants carefully harvested them, sorted, and cleaned the produce. This step developed fine motor skills, attention to detail, and an understanding of quality control in post-harvest handling.



Fig 6: Harvesting of microgreens

### **2.2.7** Product Development: Packaging Microgreens and Greeting Cards

Participants packaged their microgreens and greeting cards, learning about presentation, and labelling. This session introduced them to vocational skills and product marketing techniques.



Fig 7: Packed and labelled microgreens, B: Handmade greeting cards

### 2.2.8 Entrepreneurship Training: Selling Products to Teachers and Staff

Participants sold their microgreens and greeting cards to teachers and staff, gaining real-world experience in pricing, customer interaction, and money handling. Earnings were shared among them, enhancing motivation, confidence, and financial literacy.



Fig 8: Selling of greeting card, B: Selling of microgreens

#### 2.3 Post-Vocational Skill Assessment

After completing Horticultural Therapy training sessions, participant's vocational skills were assessed using an adapted scale with 30 questions, each rated on a two-point scale.

#### 3. Results and Discussion

#### 3.1. Impact of Horticultural Therapy training sessions

The study evaluated the impact of Horticultural Therapy through two vocational activities: Microgreen Production and Greeting Card Making. Key training sessions included sensory collection, crafting, sowing, caring, harvesting, packaging, and selling. Participants with over six months of structured therapy showed greater proficiency, independence, and engagement. Those without prior training needed support, sensory reinforcement, and repetitive practice. Activity-specific impacts are detailed below:

### 3.1.1. Microgreen Production: Enhancing Vocational and Life Skills

Participants from the Horticultural Therapy Centre, College of Agriculture, Vellayani, performed better than those from Mother Veronica Special School, Malappuram, due to prior therapy-based training. They retained plant names, propagation, and management techniques effectively. In contrast, the special school participants needed step-by-step guidance and repetition. Routine care fostered responsibility and patience. Trained participants independently monitored plant health and watering schedules. Untrained individuals needed reminders but improved with guided practice.

The harvesting phase revealed differences in fine motor skills. A participant with cerebral palsy (Sample 2) faced difficulty handling scissors and sprayers due to hand stiffness. In contrast, a participant with a similar condition (Sample 19) from the therapy centre showed better handling ability after two years of therapy. First-time participants at the special school improved with demonstrations, while trained participants showed readiness.

Packaging and selling improved entrepreneurial experience, communication, and teamwork. All participants contributed positively to packaging, but many struggled with initiating sales and managing money due to intellectual disabilities and low IQ, indicating a need for individualised training approaches. Overall, performance variations highlight the importance of disability-specific, structured training guided by qualified horticultural therapists.

# **3.1.2.** Greeting Card Making: Fostering Creativity and Vocational Skills

This activity combined sensory experiences, creativity, fine motor development, and sales. Trained participants showed better accuracy, creativity, and task initiation, while untrained participants needed structured help and demonstrations. Sensory exposure improved plant identification and memory. Trained participants recognised materials quickly, while untrained individuals, mostly with intellectual disabilities, required repetitive practice, showing the benefits of hands-on learning.

Crafting cards promoted problem-solving, emotional well-being, and vocational development. Those with previous exposure had stronger design skills and confidence; others improved with guided practice. Selling cards enhanced communication, social interaction, and scheduling skills. Trained individuals worked independently, while others progressed with instruction. Participants like Sample 12 (Down syndrome) struggled with communication, affecting selling effectiveness. Findings emphasise the need for customised training durations and approaches based on disability type and severity, to optimise vocational skill development for each individual.

#### 3.2. Assessment of vocational skill development

This study aims to evaluate the vocational skills of differently abled individuals. The vocational skill assessment was done using an adapted vocational skill assessment scale named Horticultural Therapy-Vocational Skill Assessment Scale (HT-VSAS), focusing on activities such as microgreen production and greeting card making using dry flowers and leaves.

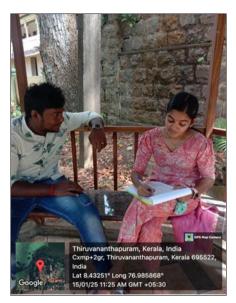


Fig 9: Researcher taking assessments

**Table 1:** Distribution of Horticultural Therapy- Vocational Skill Assessment Score

Sample Type of disability		Vocational skill assessment score
Sample 1	Intellectual Disability	18
Sample 2	Cerebral Palsy	19
Sample 3	Intellectual disability	27
Sample 4	Intellectual disability	26
Sample 5	Intellectual disability	24
Sample 6	Intellectual disability	26
Sample 7	Intellectual disability	20
Sample 8	Intellectual disability	17
Sample 9	Intellectual disability	18
Sample 10	Intellectual disability	20
Sample 11	Intellectual disability	26
Sample 12	Down syndrome	16
Sample 13	Intellectual disability	19
Sample 14	Intellectual disability	26
Sample 15	Cerebral palsy	21
Sample 16	Intellectual disability	23
Sample 17	Intellectual disability	27
Sample 18	Intellectual disability	27
Sample 19	Locomotor Disability	25
Sample 20	Intellectual disability	30
Sample 21	Intellectual disability	30
Sample 22	Intellectual disability	25
Sample 23	Intellectual disability	24
Sample 24	Intellectual disability	22
Sample 25	Intellectual disability	25
Sample 26	Cerebral palsy	30
Sample 27	Intellectual disability	25
Sample 28	Intellectual disability	26
Sample 29	Intellectual disability	22
Sample 30	Intellectual disability	17

The vocational skill assessment was conducted among 30 participants with Intellectual Disability, Cerebral Palsy, Locomotor Disability, and Down Syndrome who underwent Horticultural Therapy training. The assessment scores were categorised into three levels- high, moderate, and poor to determine the extent of vocational skill acquisition after training.

Table 2: Vocational skill level distribution of participants

Skill level	Score range	No. Of participants	Percentage (%)
High	22- 30	20	66.67
Moderate	15- 21	10	33.33
Poor	Below 15	0	0

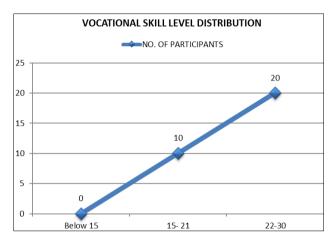


Fig 10: Vocational skill level distribution of participants.

From the above table, it is clear that the majority of participants (66.67%) achieved a high level of vocational skills, with scores ranging between 22 and 30, after undergoing Horticultural Therapy training. This indicates that more than two-thirds of the participants were able to develop strong vocational skills in activities such as

microgreen production and greeting card making using dried flowers and leaves.

Additionally, 33.33% of the participants fell into the moderate skill level category, with scores ranging between 15 and 21. This suggests that while they showed improvement, their skill development was not as advanced as those in the high-skill category. However, their scores still indicate a positive impact of the Horticultural Therapy involvement in enhancing their vocational abilities.

Notably, none of the participants fell into the poor skill category (below 15), meaning that all individuals who underwent the training were able to acquire at least a moderate level of vocational expertise. The complete absence of participants in the poor category strengthens the effectiveness of the training program in enhancing vocational skills across all participants, regardless of their initial skill levels.

Table 3: Vocational skill level distribution by type of disability

Disability Type	No. of Participants	High Level (22-30)	Moderate Level (15-21)	Poor Level (Below 15)
Intellectual Disability	25	18	7	0
Cerebral Palsy	3	1	2	0
Down Syndrome	1	0	1	0
Locomotor Disability	1	1	0	0

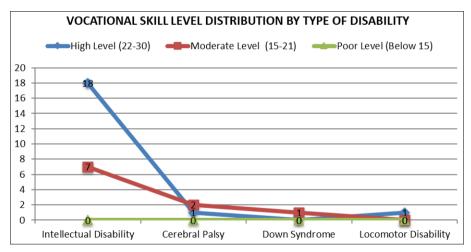


Fig 11: Vocational skill level distribution by type of disability

A comparative analysis was conducted to determine variations in vocational skill development among different disability groups. The findings indicated that participants with Intellectual Disability showed the highest levels of improvement, with 18 out of 25 individuals (72%) achieving high-level vocational skills and the remaining 7 (28%) attaining moderate levels. This suggests that individuals with Intellectual Disability responded well to the structured horticultural therapy program, likely benefiting from the repetitive nature of tasks and hands-on engagement.

In contrast, individuals with Cerebral Palsy demonstrated relatively lower skill acquisition, with only 1 out of 3 participants reaching a high skill level, while the remaining 2 participants were in the moderate category. This variation may have occurred due to limited hand movements that

impact fine motor coordination and dexterity, making certain horticultural tasks more challenging for them.

The participant with Down Syndrome who got training for 1 month attained a moderate level of vocational skills, indicating some improvement but possibly requiring additional time, support, or modifications to enhance their learning process. Similarly, the participant with Locomotor Disability was able to reach a high skill level, suggesting that physical movement constraints did not significantly hinder vocational skill acquisition in this case because the participant actively got Horticultural Therapy for two years. These differences in skill development across disability groups can be attributed to several factors, including cognitive ability, motor skills, task adaptability, and response to hands-on training. The findings highlight the

importance of tailoring Horticultural Therapy programs to accommodate the specific needs of each disability group, ensuring that interventions are inclusive, accessible, and effective in fostering vocational growth among all participants. The results strongly suggest that Horticultural Therapy is an effective vocational training tool for differently-abled individuals, as engaging in structured hands-on activities helped participants enhances their fine motor skills, cognitive abilities, and task execution skills, all of which are essential for vocational competence. Moreover, the findings imply that with continued training, those in the moderate skill category could potentially advance to a higher skill level over time.

In conclusion, the vocational skill assessment results demonstrate that Horticultural Therapy is a promising intervention for enhancing employability and self-sufficiency among differently-abled individuals. The high percentage of participants in the upper skill categories suggests that Horticultural Therapy can serve as an effective vocational training model, providing meaningful skill development opportunities and fostering long-term independence for individuals with disabilities.

#### 3.3 Net profit earned from selling horticultural products

In this study, the financial outcomes of the Horticultural Therapy program were analysed based on the revenue generated from selling products cultivated or created by the participants to assess the economic feasibility of Horticultural Therapy as a vocational training approach. This study also highlights how participation in the selling process enhances entrepreneurial and social skills development among differently-abled individuals.

To evaluate the financial viability, the Benefit-Cost (BC) ratio is calculated separately for microgreen production and greeting card making. This allows a detailed comparison of the profitability of each activity, helping to determine their income-generating ability.

The Benefit-Cost (BC) ratio was calculated using the formula:

#### BC Ratio = Total Revenue / Total Cost

For microgreen production, the total cost was ₹138, which includes ₹113 for green gram seeds (750g) and ₹25 for a packet of tissue paper. The total revenue earned was ₹600, calculated by selling 6 packs of microgreens at ₹100 each. Therefore, the BC ratio for microgreen production is 600 ÷ 138 = 4.35.

For greeting card making, the total cost was ₹120 for materials like chart paper, glue, etc. The total revenue was ₹450, calculated by selling 30 greeting cards at ₹15 each. Hence, the BC ratio for greeting card making is  $450 \div 120 = 3.75$ .

Since the BC ratio for both activities is greater than 1, ie, for microgreen production, the BC Ratio is 4.35, and for greeting card making, the BC Ratio is 3.75, so they are economically feasible vocational options.

#### 4. Conclusion

The study titled "Assessment of Enhanced Vocational Skills through Horticultural Therapy for Differently-Abled Individuals" aimed to evaluate the effectiveness of

Horticultural Therapy in enhancing vocational skills among differently-abled individuals. This research study included 30 participants aged 12-30 with varying disabilities.

Findings showed 66.67% achieved high vocational skills, and 33.33% achieved moderate skills and none showed poor skills. Participants with intellectual disabilities showed the most improvement, while those with cerebral palsy also benefited, albeit at a slower pace due to motor coordination challenges. The program was adaptable across disability types. Economic feasibility was confirmed through Benefit-Cost (BC) analysis, showing a BC ratio of 4.35 for microgreens and 3.75 for greeting cards, both above 1, indicating financial sustainability. Participation in sales boosted social skills, confidence, and practical moneyhandling exposure, though individuals with intellectual disabilities required support with financial management.

The study emphasises the value of incorporating Horticultural Therapy into special education and vocational training. Activities support both skill development and emotional well-being, with continuous exposure leading to skill advancement, especially for those starting at moderate levels. The Horticultural therapy's repetitive and structured nature suits individuals with intellectual disabilities, while those with cerebral palsy or Down syndrome may need additional support. Beyond vocational training, Horticultural Therapy fosters confidence, emotional stability, and social interaction, highlighting its holistic benefits. The study calls for government and NGO involvement to improve access and reach.

Apart from small sample size, short duration, and varied disability types, the study offers valuable insights. It concludes that Horticultural Therapy is a viable and inclusive method for skill development and income generation, supporting independence and community integration. Future research should explore its role in securing long-term employment and improving training methods for diverse disability groups, contributing to a more inclusive and empowered society.

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#### **Appendix**

Appendix I: Reliability coefficient obtained

Reliability test	Method used	Reliability coefficient	
Split- Half Reliability	Spearman- Brown Formula	0.958	

Appendix II: Content Validity Ratio

ITEM	CVR	ITEM	CVR
Q1	0.633	Q16	0.767
Q2	0.667	Q17	0.367
Q3	0.567	Q18	0.733
Q4	0.567	Q19	0.433
Q5	0.567	Q20	0.367
Q6	0.500	Q21	0.633
Q7	0.433	Q22	0.500
Q8	0.367	Q23	0.600
Q9	0.667	Q24	0.167
Q10	0.633	Q25	0.533
Q11	0.700	Q26	0.533
Q12	0.700	Q27	0.367
Q13	0.600	Q28	0.167
Q14	0.367	Q29	0.333
Q15	0.467	Q30	0.433

#### **Appendix III**

#### Kerala agricultural university

Faculty of Agriculture

College of Agriculture, Vellayani

Programme of research work for project for PGDHT Horticultural Therapy- Vocational Assessment Scale

### Section I- Demographic profile

### Sample

- 1. Name:
- 2. Age:
- 3. Gender: Male / Female
- 4. Birth order:
- 5. No. of siblings:
- 6. Religion:
- 7. Area of residence:
- 8. Family economic/income status:
- 9. Occupation of father:
- 10. Occupation of mother:
- 11. Educational level of father:
- 12. Educational level of mother:
- 13. Type of disability:
- 14. Disability percentage:
- 15. Current educational institution:
- 16. Grade level or educational program:
- 17. Areas of interest:
- 18. Specific vocational skill:

How long you have been into this Horticultural therapy program:

#### Appendix IV

Horticultural Therapy- Vocational Assessment Scale

### **Section II- Vocational Assessment Sample:**

Questions	Yes	No
1. Do you enjoy working with plants in the garden?		
2. Can you identify different types of plants or flowers?		
3. Are you comfortable using basic gardening tools like a watering can?		
4. Do you feel confident planting seeds in trays?		
5. Can you recognize and remove weeds or damaged plants?		
6. Do you enjoy making crafts from plant materials like flowers and leaves?		
7. Have you tried arranging dried flowers into designs or crafts?		
8. Are you interested in collecting plant materials like leaves and flowers for crafts?		
9. Do you like learning new skills related to gardening or crafts?		
10. Are you interested in creating artwork with natural materials like leaves or flowers?		
11. Are you interested in spending time outdoors in the garden?		
12. Do you enjoy seeing plants grow over time?		
13. Do you find it satisfying to complete tasks like planting or watering?		
14. Are you motivated to make creative crafts using plant materials?		
15. Do you find it rewarding to take care of plants?		
16. Is it important for you to see the results of your work, like a healthy plant?		
17. Do you prefer completing tasks like watering or crafting without being reminded?		
18. Are you interested in learning how to dry flowers or leaves?		
19. Can you follow verbal instructions for plant care or crafting?		
20. Do you enjoy teaching others about plants or crafts?		
21. Are you okay with getting your hands dirty while working with soil?		
22. Are you comfortable cutting plant parts with scissors for crafts?		
23. Can you use your hands to work with small and delicate dry leaves or flowers?		
24. Do you remember the names of plants or craft materials?		
25. Is it important for you to keep your gardening or crafting area organized?		
26. Do you feel proud when you finish a gardening or craft task?		
27. Are you able to sell your produce?		
28. Are you confident to market your produce?		
29. Are you prepared to take calculated risks in the field of agriculture?		
30. Are you confident to take up agriculture as your sole profession?		
Total		

Assessment taken by:  $\sqrt{\text{ for Yes}}$ ,  $\times$  for No