

Government of Pakistan

National Vocational and Technical Training Commission

Prime Minister's Hunarmand Pakistan Program

"Skills for All"



Course Contents / Lesson Plan

Course Title: Computerized Braille Composition

Duration: 3 Months

Revised Edition

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| Trainer Name | |
| Course Title | Computerized Braille Composition |
| Objectives and Expectations | <p data-bbox="384 344 1485 427">Employable skills and hands-on practice in Computerized Braille Composition</p> <p data-bbox="384 501 1449 629"><i>As an instructor of computerized Braille composition, there are several strategies you can employ to motivate your trainees. Here are some suggestions:</i></p> <p data-bbox="384 667 699 705"><u>Main Expectations:</u></p> <p data-bbox="384 712 1485 853"><i>In short, the course under reference should be delivered by professional instructors in such a robust hands-on manner that the trainees are comfortably able to employ their skills for earning money (through wage/self-employment) at its conclusion.</i></p> <p data-bbox="384 860 1485 1115"><i>This course thus clearly goes beyond the domain of the traditional training practices in vogue and underscores an expectation that a market-centric approach will be adopted as the main driving force while delivering it. The instructors should therefore be experienced enough to be able to identify the training needs for the possible market roles available out there. Moreover, they should also know the strengths and weaknesses of each trainee to prepare them for such market roles during/after the training.</i></p> <p data-bbox="384 1218 416 1256">1.</p> <p data-bbox="384 1330 1449 1541">Set clear goals: Clearly communicate the learning objectives and goals for your trainees. Break down the learning process into achievable milestones, and track their progress along the way. This helps trainees see their advancement and stay motivated.</p> <p data-bbox="384 1608 416 1646">2.</p> <p data-bbox="384 1720 1449 1930">Provide a supportive learning environment: Create a positive and inclusive atmosphere where trainees feel comfortable asking questions and expressing their challenges. Encourage peer interaction and collaboration to foster a sense of community and support among the trainees.</p> |

3.

Showcase real-world applications: Highlight the practical applications and benefits of computerized Braille composition. Demonstrate how these skills can open up employment opportunities, improve accessibility, and empower individuals with visual impairments to participate fully in society.

4.

Offer varied learning experiences: Incorporate a mix of teaching methods, such as lectures, hands-on exercises, group projects, and interactive discussions. This helps cater to different learning styles and keeps the training engaging and dynamic.

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5.

Provide constructive feedback: Offer regular feedback and praise when trainees make progress or achieve milestones. Constructive feedback helps them understand areas for improvement while recognizing their efforts and accomplishments.

6.

Gamify the learning process: Introduce gamification elements, such as challenges, quizzes, or competitions, to make the learning process more enjoyable and interactive. Reward trainees for their achievements and create a friendly competitive environment.

7.

Personalize the training: Recognize that each trainee has unique strengths, weaknesses, and learning preferences. Tailor

your instruction to accommodate individual needs and provide additional resources or guidance where required.

8.

Guest speakers and success stories: Invite guest speakers who have successfully used computerized Braille composition in their careers or personal lives. Hearing firsthand accounts of how these skills have made a difference can inspire trainees and provide role models.

9.

Celebrate milestones and achievements: Acknowledge trainees' accomplishments by celebrating milestones or organizing recognition events. This can be as simple as certificates of achievement or a small ceremony to mark the successful completion of the training program.

10.

Continuous learning opportunities: Emphasize the importance of lifelong learning in the field of computerized Braille composition. Encourage trainees to explore further resources, attend conferences, or participate in online communities related to accessibility and assistive technologies.

Remember, motivation is individual and can vary among trainees. By employing a combination of these strategies and adapting them to the specific needs of your trainees, you can create an engaging and motivating learning environment for computerized Braille composition.

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| Entry-level of trainees | Intermediate / Matric Science |
| Learning Outcomes of the course | <p>By the end of this course, students will be able to:</p> <ul style="list-style-type: none"> • Communicate ideas through artworks by selecting and applying media techniques and processes, subject matter, and themes • Demonstrate a verbal-working use of the vocabulary relating to computerized Braille composition • Develop an understanding of the properties and the preparation of composition • Respond aesthetically to artworks based upon their personal experience and cultural values • Understand the role and functions of computerized Braille composition. |
| Course Execution Plan | <p>The total duration of the course: 3 months (13 Weeks) Class hours: 5 hours per day Theory: 20% Practical: 80% Weekly hours: 25 hours per week Total contact hours: 130 hours</p> |
| Companies offering jobs in the respective trade | |
| <ol style="list-style-type: none"> 1. transcription Pakistan association of blind, 2. Pakistan blind resource foundation 3. National books foundation of Pakistan 4. Punjab and KPK brail Press. | |
| No of Students | 25 |
| Learning Place | Classroom / Lab |
| | |

| Scheduled Weeks | Module Title | Days | Learning Units | |
|-----------------|----------------------------------------------------|-------|--------------------------------------------------------------------------------------|--|
| Week 1 | Introduction to Braille and Assistive Technologies | Day 1 | Introduction to Braille system | |
| | | Day 2 | History and significance of Braille | |
| | | Day 3 | <p>- Overview of assistive technologies for visually impaired individuals</p> | |
| | | Day 4 | Introduction to Braille embossers and Braille displays | |
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| Week 2 | Braille Basics | Day 1 | - Braille alphabet and punctuation marks |
| | | Day 2 | Braille contractions and abbreviations |
| | | Day 3 | Writing and reading Braille characters |

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| | | Day 4 | Braille formatting and layout |
| | | Day 5 | <i>Revision</i> |
| Week 3 | Braille Translation Software | Day 1 | Introduction to Braille translation software |
| | | Day 2 | - Using Braille translation software to convert text into Braille |

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| | | Day 3 | <ul style="list-style-type: none"> • Editing and proofreading Braille documents |
| | | Day-4 | Revision |
| | | Day-5 | Revision |
| Week 4 | Braille Embossers and Braille Displays | Day 1 | - Types of Braille embossers and Braille displays |
| | | Day 2 | Setting up and configuring Braille embossers and displays |
| | | Day 3 | <ul style="list-style-type: none"> ▪ Using Braille embossers and displays for Braille output and input |

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| | | Day 4 | <i>Revision</i> |
| | | Day 5 | <i>Revision</i> |
| Week 5 | Document Conversion | Day 1 | Converting printed text into Braille using scanners and OCR software |
| | | Day 2 | Importing and exporting Braille files |
| | | Day 3 | Editing and formatting converted Braille documents |
| | | Day 4 | <i>Revision</i> |
| | | Day 5 | <i>Revision</i> |
| Week 6 | Braille Music Notation | Day 1 | Introduction to Braille music notation |

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| | | Day 2 | Reading and writing music in Braille |
| | | Day 3 | <i>Revision</i> |
| | | Day 4 | • <i>Revision</i> |
| | | Day 5 | • <i>Revision</i> |
| Week 7 | Nemeth Braille Code for Mathematics | Day 1 | Introduction to Nemeth Braille Code |
| | | Day 2 | - Transcribing mathematical equations and symbols into Braille |

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| | | Day 3 | Using Nemeth code software for mathematical Braille notation |
| | | Day 4 | <i>Revision</i> |
| | | Day 5 | |
| Week 8 | Braille Printing and Production | Day 1 | Techniques for printing Braille documents |
| | | Day 2 | Braille production processes and quality control |
| | | Day 3 | Braille bookbinding and finishing techniques |
| | | Day 4 | <i>Revision</i> |

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| | | Day 5 | <i>Revision</i> |
| Week 9 | Assistive Technologies for Braille Users | Day 1 | Overview of Braille notetakers and electronic Braille devices |
| | | Day 2 | Accessible software and apps for Braille users |
| | | Day 3 | Assistive technologies for Braille literacy and education |
| | | Day 4 | <i>Revision</i> |
| | | Day 5 | <i>Revision</i> |
| Week 10 | Braille and Digital Accessibility | Day 1 | Introduction to web accessibility and Braille |

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| | | Day 2 | Creating accessible Braille content for websites and digital platforms |
| | | Day 3 | Testing and evaluating the accessibility of Braille materials |
| | | Day 4 | <i>Revision</i> |
| | | Day 5 | <i>Revision</i> |
| Week 11 | Braille Translation for Different Languages | Day 1 | Braille translation for languages other than English |
| | | Day 2 | Challenges and considerations for Braille translation in different languages |

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| | | Day 3 | Resources and tools for multilingual Braille production |
| | | Day 4 | <i>Revision</i> |
| | | Day 5 | <i>Revision</i> |
| Week 12 | Braille Transcription Guidelines and Ethics | Day 1 | International guidelines for Braille transcription |
| | | Day 2 | Ethical considerations in Braille transcription |
| | | Day 3 | - Professional standards and certifications in Braille transcription |
| | | Day 4 | <i>Revision</i> |
| | | Day 5 | <i>Revision</i> |

Tasks For Certificate in Computerized Braille Composition

| Task No. | Task | Description | |
|----------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | | <p>Note: The weekly distribution of tasks and practical exercises should be incorporated into the lesson plan to ensure hands-on practice and assessment of the trainees' skills. The lesson plan should also include assessments, quizzes, and projects to evaluate the trainees' progress throughout the course. Additionally, motivational lectures, success stories, and case studies can be included to inspire and engage the trainees in their learning journey</p> | |
| 1. | | 1. Subject(s): | |
| 2. | | 2. Topic or Unit of Study: | |
| | | 3. Grade/Level: | |
| | | 4. Objective: | |
| 3. | | <p>Reading Rainbow Tip: Think about how you will INSPIRE your students and consider what you want them to take away from today's lesson plan.</p> <ul style="list-style-type: none"> • | |
| 4. | | 5. Time Allotment: | |
| 5. | | | |
| 6. | | <i>IMPLEMENTATION</i> | |
| 7. | Learning Context | | |
| 8. | | <ul style="list-style-type: none"> • Reading Rainbow Tip: Have your students learned everything they need to know in order to complete this lesson? This might be a good time to review some previous lessons so that they feel prepared to learn something exciting and new | |
| 9. | Procedure | • | |

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| 10. | a. Anticipatory Set | • | |
| 11. | <p>Reading Rainbow Tip: Do something to really GRAB their attention! Find a really great book, use a quick video clip, or a sing a song that relates to this lesson plan. Here’s where you can spark a child’s love for learning.</p> | | |
| 12. | b. Direct Instruction c. Guided Practice d. Check for Understanding | • | |
| 13. | <p>Reading Rainbow Tip: Ask lots of questions throughout your lesson to make sure that your students are feeling comfortable with all of this exciting new information.</p> | | |
| 14. | • | | |
| 15. | e. Independent Practice f. Closing | • | |
| 16. | <p>Reading Rainbow Tip: This is the perfect opportunity to open up the class for a group discussion. Ask your students questions that help them realize the importance of today’s lesson with questions like, “how will you use this information in your everyday lives?”</p> | | |
| 17. | | | |
| 18. | <p>DIFFERENTIATED INSTRUCTION</p> | | |
| 19. | <p>Reading Rainbow Tip: Try to keep in mind that children learn in many different ways. By consciously thinking about this, you’ll be able</p> | | |
| 20. | | | |

