# THE CHORAL TRAINER™

Decision Making Training for Choral Music Educators

# **DESIGN DOCUMENT**

**Instructional Designer** 

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Revision Date: 7/18/2002

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## INTRODUCTION

This project is based on prior research that has been documented in a paper entitled "Interactive Multimedia Instruction: Developing a Model for Use in Choral Music Education". The paper describes the benefits of producing a multimedia program for the purpose of providing preservice choral students with a basic model of problem solving techniques. To obtain further background information and details about this research, a copy of the research paper cited above is provided at the end of this design document. Additionally, I was asked, by Professor Abigail Butler, Ph.D. to assist with designing and developing an initial prototype for a Computer-Based Training (CBT) program, under an educational research grant funded by Wayne State University Music Department. Since the start of this endeavor, we have augmented our delivery methods to include a Web-based version and a computer-based version of this program. There will be a stand-alone desktop application (CBT) as well as a Web-based Training (WBT) application. This program will be produced commercially for delivery via CD-ROM for both versions.

## **Program Length**

Students should be able to complete this training program in approximately two-hours. There are six main areas in the program: main menu, introduction, tutorials, practice, reflections, and assessment. Thirty minutes should be used to complete modules one, two, and three, one-hour should be used to complete modules four and five, and thirty-minutes should be used for module six.

## **Program Description**

This interactive training program will help choral music education students understand more fully the role of the choral conductor during rehearsal. Specifically, this program will focus on the choral conductor as a problem solver and reflective educator. Through interaction with this program, students will encounter common problems in the areas of tone, blend and balance, intonation, diction, and rhythmic integrity and they will learn how to solve these problems effectively and efficiently. They will also learn how experienced conductors address choral problems and the dynamic mix of problem solving techniques that are implemented as they solve choral issues during the live rehearsal session.

## **Program Objectives**

Upon completion of this training program, students will be able to:

- ♦ Develop a routine for problem solving common musical problems within a simulated choral rehearsal.
- ♦ Identify, diagnose, and provide solutions for common musical problems in the following areas: tone, diction, blend and balance, intonation, rhythmic integrity, style and expression.
- Reflect on alternative problem-solving strategies in relation to their own choices.

## Prerequisite Knowledge and Skills

This program will be more effective if users have prior knowledge of basic conducting technique and rehearsal strategies, understand the essentials of healthy singing, and recognize the elements of effective choral singing. This program is intended to supplement instruction that students would typically receive in an undergraduate choral class.

## AUDIENCE, GOALS AND ENVIRONMENT

## AUDIENCE, GOALS AND ENVIRONMENT

The Choral Trainer training program is designed for undergraduate students who 1) want to acquire the knowledge and skills for successful podium delivery 2) are enrolled in a choral music education degree program and need to fulfill course requirements, and 3) seek to develop their problem-solving skills through individualized, self-directed instruction. Additionally, this program provides students with a solid foundation of decision making and problem solving skills through guided instruction, interactive practice, and stimulating reflections.

#### **Target Audience**

The training program is designed for undergraduate choral music students who are in their second, third, and four year of undergraduate studies.

## **Required Facilities**

- ◆ If used as individualized instruction, a single computer with a CD-ROM drive (and/or a web browser) is sufficient.
- If used in a lab setting, headphones would be necessary.
- ◆ For use in the classroom required items would include a single computer with a CD-ROM drive (and/or web-browser), a projector and screen. External speakers might be useful depending on the size of the room.

#### **Teaching and Facilitation**

The instructor should 1) be a subject matter expert in choral music education/choral conducting, 2) be familiar with the training program prior to use, 3) determine how the program should be used to best support the choral music education curriculum (i.e. individualized instruction for all students, remedial instruction for weaker students, class instruction and/or discussion, or as an assessment tool), and 4) consider how best to evaluate student learning (i.e. scores based on program use, pen & paper evaluations, class discussion, journaling, performance demonstrations or a combination of methods).

## Alternate Delivery Strategy

This program can be presented via either CD-ROM format or Web-based delivery using a browser. It can support individualized instruction within a lab setting or group instruction within a classroom setting.

## AUDIENCE, GOALS AND ENVIRONMENT

## **Instructional Materials**

This training program should be used to supplement a college level choral class. In addition to the CD-ROM, there should be an instructor and student user's guide to accompany the program and possibly supplementary instructional materials.

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## **DESIGN CONSIDERATIONS**

This training program encompasses both tutorial and drill and practice components of traditional computer assisted instructional components. The program should provide instruction in effective problem solving techniques in addition to providing feedback regarding user's responses to prompts. Furthermore, in order to encourage users to become reflective practitioners, the software should allow for flexible practice. The user should be presented with a variety of choices while navigating through the program including opportunities to consider alternative solutions. Finally, if assessment is to be a component of this program, it will be necessary to include a system for tracking student responses and evaluating reflective thinking.

#### Potential Obstacles and Issues

## Technical problem

Some technical issues might include the following: computer memory, quality of video and audio, access to equipment for video shoot, and insuring that hardware requirements for the user aren't too high end.

#### **Educational issues**

Some educational concerns might include: finding proper balance of instruction and interaction with appropriate feedback, will video/audio stimuli be of sufficient quality and length to account for correct student responses, will students have enough opportunity to practice problem solving skills to the extent that they will actually be able to improve these skills (and how will we measure this?).

#### Other issues

Other concerns might include: obtaining copyright permission for use of musical examples (either audio performance or printed music), obtaining permission to videotape students in the choral groups, and finally, development of a flexible design and development schedule considering the busy work schedule of the developers.

This training program is divided into five separate modules: introduction, tutorials, practice, and reflections. The introduction module provides an overview of the training program. The tutorials module presents guided practice with an expert choral educator. The practice module provides interactive practice for employing the problem solving routine in simulated rehearsals. The reflections module provides case-study scenarios that stimulates reflective thinking to alternative problem-solving strategies in relation to the users own choices. The assessment module is where users will be presented with assessment items in the form of case-studies. This assessment piece is necessary to verify that they have acquired the ability to employ the problem solving routine to new learning situations.

#### Module One: Introduction

In this module, the learner will be presented with background information about the program, instructions on how to use the program, and the rationale for learning and applying a problem solving routine to develop choral conducting skills within live choral sessions.

**Terminal Objective:** Upon completion of this module, the students will be able to:

 Recognize, identify, and understand the overall purpose and usefulness of this program to enhance their professional development.

**Enabling Objective:** Given specific background information, students will be able to:

- ◆ Identify the characteristics of an effective and efficient Choral Trainer.
- ♦ List the purpose and benefits of this program.
- ♦ List the training tips that every Choral Trainer should know and be able to employ.

#### Module Two: Tutorials

In this module, the learner will be presented with several simulated rehearsals through guided practice with an expert choral music educator. In part one, the learner will be introduced to each step in a problem solving routine process. In part two, the learner

will be lead through each step of the problem solving routine. In part three, the leaner will be presented with a series of simulated rehearsal where they will apply the problem solving routine with guided practice and feedback.

**Terminal Objective:** Upon completion of this module, the students will be able to:

• Develop a routine for problem solving common musical problems within a simulated choral rehearsal.

**Enabling Objective:** Given a rehearsal scenario (guided practice), students will be able to:

- ◆ Identify the components of a choral rehearsal problem solving routine.
- Describe the sequence of steps used in this routine.
- Explain some of the actions a conductor might take to accomplish each of the steps.
- Discuss (and reflect upon) circumstances, which might interfere with the conductor's ability to effectively follow this routine.
- ◆ Select appropriate conductor actions for the corresponding problem solving component.
- ◆ Identify obstacles preventing the conductor from following the problem solving routine.

#### Module Three: Practice

In this module, the learner will be presented with several simulated rehearsals where they will employ the problem solving routine to each simulated situation. Upon completion of each simulated rehearsal, the learner will be given the opportunity to 1) respond to a series of questions about the decisions that they have made and explain the rationale for their decisions and 2) engage in an interactive analysis with guided response and feedback.

**Terminal Objective:** Upon completion of these units, students will be able to:

◆ Identify, diagnose, and provide solutions for common musical problems in the following areas: tone, diction, blend & balance, intonation, rhythmic integrity, style

and expression.

**Enabling Objective:** 

Given a live rehearsal scenario (self-directed), students will be able to:

- ♦ Identify common musical problems relating to each unit
- ♦ Diagnose the cause of the problem
- ♦ Choose a viable solution to the problem
- Given a video/audio clip of an actual high school choral rehearsal, students will listen to and view the rehearsal clip.
- ♦ Given a series of prompts coupled with guided instruction for each sub-unit, students will.
- ◆ Identify the specific problem by choosing the correct multiple-choice answer.
- Determine the probable cause of the problem by choosing the correct multiple-choice answer.
- Select an appropriate solution by choosing the correct multiple-choice answer.

**Note:** Guided instruction in the form of positive or negative feedback will allow students to reconsider less effective choices. Prompts designed to follow the problem solving routine presented in module one will reinforce students' acquisition of the routine.

#### Module Four: Reflections

In this module, the learner will revisit simulated rehearsals where they have previously employed the problem solving routine. Upon reviewing each simulated rehearsal, the learner will be given the opportunity to 1) engage in reflective thinking simulations, where they compare their own decisions to an expert and 2) engage in several case-study scenarios that stimulate reflective thinking to alternative problem-solving strategies in relation to their own choices.

**Terminal Objective:** Upon completion of this module, students will be able to:

♦ Reflect on alternative problem-solving strategies in relation to their own choices.

**Enabling Objective:** Given a specific problem, students will:

- Engage in reflective practice as part of the problem solving process
- Use reflective practice to identify alternative problem solving strategies and enhance their problem solving skills
- Recognize the possibility of multiple solutions.
- ♦ Identify alternative solutions
- ◆ Provide a rationale for their choices
- ♦ Compare their solutions to those of an experienced conductor.

#### Module Five: Assessment

In this module, the learner will be presented with several case-study scenarios and test items to validate their ability to employ the problem solving routine to new learning situations. Each test item will validate the users' ability to correctly isolate the problem area, identify the source of the problem, diagnosis the cause of the problem, solve the problem, place the solution back into context, provide adequate feedback, and reflect on their problem solving skills and explain the rationale for their for their responses and actions. Students that repeatedly show a inconsistent patterns in employing the decision-making strategy that is not in alignment with the principle, structure, and sequence of the successful strategy execution will be redirected to additional training modules for remediation.

**Terminal Objective:** Upon completion of this module, students will be able to:

- List the components of the problem solving routine.
- ♦ Identify common issues and problem through simulated rehearsals.
- ◆ Analyze musical problems in a specific context and prescribe alternative solutions.
- Effectively and efficiently employ the decision-making

process to complex situations through simulation that can easily be transferred to real-world.

- Recognize the possibility of multiple solutions.
- Provide a rationale for their choices.
- ◆ Compare their solutions to those of an experienced conductor.

## FORMATIVE EVALUATION PLAN

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See "The Choral Trainer" Formative Evaluation Plan

## **DEVELOPMENT PLAN**

This project will be developed for two delivery mediums: Computer-based and Web-based. A set of supplementary course materials will also be produced. The supplementary materials for this project will include an instructor and student manual, final evaluation exam and sheet music to accompany the CD-ROM. The actual CBT and WBT programs will require full design, development, testing and evaluation of each module at specified milestones in order to properly prepare each module and supporting media components to meet the objectives of the program. The following development plan should be used to develop all materials for this project.

## Development of Module One and Two

	Deliverables	Components
e One	Design Documentation	Design Document
		Design Instruments
		♦ Style Guide
		♦ Navigation Map
		♦ Content Documents
		♦ Video Production Script
Phase (		♦ Audio Production Script
둡	Development: WBT Version	Choral Trainer CD (Prototype 1)
	Formative Evaluation: Phase One	Formative Evaluation Plan
		♦ Phase One Executed
	Revisions: Design Documentation	Revised Design Documentation
	Revisions: WBT Version	Revised WBT Version

#### Development of Module Three and Four

	Deliverables	Components
	Design Documentation	Design Document
		Design Instruments
		♦ Style Guide
		♦ Navigation Map
Two		♦ Content Documents
<del> </del>		♦ Video Production Script
ase		◆ Audio Production Script
Phase	Development: WBT Version	Choral Trainer CD (Prototype 2)
	Formative Evaluation: Phase Two	Formative Evaluation Plan
		♦ Phase Two Executed
	Revisions: Design Documentation	Revised Design Documentation
	Revisions: WBT Version	Revised WBT Version

## **Development of Module Five**

	Deliverables	Components
	Design Documentation	Design Document
		Design Instruments
		♦ Style Guide
		♦ Navigation Map
O)		♦ Content Documents
<u>ē</u>		♦ Video Production Script
Phase Three		◆ Audio Production Script
ISe	Development: WBT Version	Choral Trainer CD (Prototype 3)
ha	Formative Evaluation: Phase Three	Formative Evaluation Plan
-		◆ Phase Three Executed
	Revisions: Design Documentation	Revised Design Documentation
	Revisions: WBT Version	Revised WBT Version
	Summative Evaluation: Levels 1-4	Summative Evaluation Plan
		♦ Executed Summative Evaluation

## **Development of CBT Version**

	Deliverables	Components
5	Conversion to CBT Version	Choral Trainer CD (Prototype 1)
Phase Four	Summative Evaluation: Levels 1-4	Summative Evaluation Plan  • Executed Summative Evaluation

## **IMPLEMENTATION PLAN**

Once the finished training programs are complete, it is our intent to design and develop additional paper-based materials to supplement the training programs. These supporting materials will be a workbook, textbook or both. In addition to these materials, the complete CD-ROM will be mastered and replicated for mass production. It is our intent to develop a marketing and sales plan for publication and distribution with a large textbook distributor, such as Jossey-Bass or John Wiley & Sons.

## FINAL EVALUATION PLAN

This section will be added at a later date once all versions of the training program are completed.

## **Summative Evaluation**

This section will be added at a later date once all versions of the training program are completed.

#### **Confirmative Evaluation**

This section will be added at a later date once all versions of the training program are completed.

## **DESIGN INSTRUMENTS**

The design instruments are special documents that supplement the design document. These documents are used by the production team to produce each version of the training program. The production team consists of a project manager, instructional designer, graphic designer, media developer and programmer.

#### Style Guide

The style guide is a global document that specifies the visual and technical requirements for each version of the training program. This document contains information about screen sizes, resolutions, typography, color schemes, fonts, headings, sub-headings, buttons and icons and any other relevant formatting information needed to produce a consistent look and feel for the program.

## **Navigation Map**

The navigation map is a visual representation of how users will navigate through each version of the training program. The document is a high-level illustration of the number of modules, lessons, units, and topics that will be a part of the entire program.

#### **Content Documents**

The content documents are the actual production scripts that identify the specific objects and interactive elements that will be seen in each module, lesson, and topic. These documents contain such elements as navigation and sequence, headings, text messages, audio, video, graphic, buttons, practice exercises, simulations and games, test items, responses and feedback information and any other necessary elements.

#### **Audio Production Script**

The audio production script is the actual production script for voice-over narrations, sound clips, and music sound tracks. This document contains the text messages that are to be recorded or composed.

## **DESIGN INSTRUMENTS**

## **Video Production Script**

The video production script is the actual production script for shooting, editing, and producing video and movie clips. This document contains the actual text messages, cues, camera angles, and video production elements that are to be recorded or produced.

## **Interface Templates**

The interface template is the actual visual look and feel of the entire interface. This document illustrates the position of each key screen element that is consistent between modules and screens.