EFFECTIVE STRATEGIES IN CONDUCTING

A look at methods and factors

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The purpose of this study was to examine the rehearsal strategies and techniques that are essential to a successful ensemble. The conductor has control over the progression of the group, and there are a great deal of techniques as well as research that has gone into "what techniques make a great ensemble?" Finding if there is a correlation between great ensembles and the techniques used by the conductors was the focus of the study. Factors will be taken in account such as the type of ensemble (e.g. Choir, Band, or Orchestra) as well as age level (Middle School or High School).

The directors were surveyed on how they rate the importance of each rehearsal technique from a list of 10 common strategies. The top 3 were analyzed for patterns and trends in the ensemble type and age level. Additional questions such as "size of school/program", "Age", "Gender", and "Type of School" were incorporated to see if other (seemingly) unimportant factors may contribute to the success of the program. In considering other factors, there are infinite variables that affect the success of a group. I hope to examine the large contributing variables to determine "what techniques make a great ensemble".

Literature Review

What we knew before the survey is that there is a wide variety of techniques and approaches to large ensemble rehearsals. Those that are either observed or studied have high performing ensembles in their areas. At advanced levels the conductors of collegiate groups use several techniques. Although most of the primary sources are from honor bands or collegiate bands, the experience is what is necessary to study, not necessarily the conductor's current ensemble but how they got to be a successful conductor. Shelley Jagow observed four identified rehearsal elements (tuning, warm up,

announcements, and repertoire) comparing how much time is spent on each (repertoire was in the 95% and up range for each college), Three specified types of rehearsal activity (individual, section, full), Time spent with Verbal and Performance instruction, and Subcategories of Verbal and Performance instruction (historical, music info, analytical). A final table showed the time a week each group had in rehearsal total. The results indicated that the conductors used similar rehearsal techniques and just a difference in the amount of time spent on each. Michael Worthy observation was during an honor band and the rehearsals he noted how they spent time. The time was broken down into categories of articulations, dynamics, pitch accuracy, tone/intonation, rhythm and tempo, and multiple targets. These were compiled and given a percentage of time spent on the task. The conductor was also timed on time spend talking about information, directive, questions, and feedback. There was also a smaller section dedicated to the students and their time in full playing, sectional, individual, and talk. Glen Gillis' take on rehearsal strategies include repertoire selections, score preparation, delivery on the podium, rehearsal warm-up, and a macro-micro-macro approach to the music. He adds that time management, repertoire order, and anticipation of challenges are necessary to a positive rehearsal.

The strategies used in the survey are not the only reasons a program or teacher can be effective or ineffective. The factors that do not involve the teachers can range from money, administration, community, and facility. Frank Flora writes about how administration can help or hurt the music program. He says the superintendent has a lot of power when it comes to promoting the program and that it should be a two-way street between music and administration. The advocacy of the program through articles and social media can be a powerful tool if the administration is informed.

Dr. Denise Grant uses chamber music to improve the large ensemble. She claims it improves critical thinking, responsibility, work ethic, problem solving, communication, in addition to all of the musical components that are required in the chamber music setting. This creates a better musician and a better member of the large ensemble.

An effective director must also have certain traits that are necessary to lead an effective rehearsal. A.S. Barr gives a fairly comprehensive list of characteristics he qualifies as important or necessary. The list is of twelves traits that follow: Resourcefulness, intelligence, emotional stability, considerateness, buoyancy (optimism), objectivity, drive, dominance, attractiveness, refinement, cooperativeness, and reliability. There is detail on each one in regards to teaching although the characteristics are self-explanatory. We do not assume all teachers have these qualities and that every teacher is considered a high quality educator.

Method

In order to find the answer, I surveyed conductors at the elementary, middle, and high school level from CU's music program or conductors available in Colorado and directors on social media. The survey was used on an electronic medium (survey monkey). Each person that participated was asked to agree to a consent (see appendix a). The link to the survey was sent out via email, Facebook posts, messenger, and text.

The questions included: Gender? What type of ensemble do you teach (Band, Choir, and Orchestra)? In what type of school are you employed (private, public, charter)? What age level do you teach? How many students are currently enrolled at your school? What are the rehearsal strategies that are most effective? Results were compiled and analyzed for trends and patterns in effective rehearsal strategies. They are used to determine if certain strategies are used with more experienced music directors. Other aspects to be analyzed will be the frequency of votes, central tendency, and standard deviation for strategies.

Results

Over the course of 10 days the link to the survey was sent out to classmates in the CU MME program, directors in Colorado, and director groups pages on Facebook. The groups that were utilized on Facebook were “Band Directors”, “Network of Positive Orchestra Directors”, “Orchestra Teachers”, and “I’m a Choir Director”. The groups consisted of over 25,000 members and was without the boundaries of vicinity. The majority of the results came from these sources (over 75%). Some factors that would contribute to the narrowing of the population surveyed are: those available during the surveyed time frame (summer), CU MME students, Facebook users, and directors I personally know. This means groups that are excluded are: non-Facebook users, out of state directors, those on vacation, and those that are not active during summer. With these restrictions on the survey one can assume that many of the older directors that are not as active online were not surveyed, the Facebook groups with fewer members had fewer results represented, elementary school music teachers do not consider themselves conductors or do not have a large ensemble in their job requirements as often as middle and high school, and across the board there are not equal numbers of bands, orchestras, and choirs. Lastly, the directors that are surveyed did not have a process to determine the level of ensemble they direct, the success of their program, and/or the evaluation of the quality of their instruction. The survey could have unqualified and/or highly successful directors, directors that have less than a year experience, and a possibility of someone posing as a director that does not hold the position.

The questions formulated to understand the population follow. The gender numbers represented in the survey were 59 females and 93 males with percentages being 38.81% and 61.19% respectively. The obvious factor here is that there are less female music teachers in the secondary levels. Dawn Schloesser reported in a report in *School Band and Orchestra Magazine* that male band directors outnumber female by three to one according to a 2001 MENC study.

The results for the type of ensemble the participants conduct are as follows: band directors 102 at 67.1%, choir directors with 51 at 33.6%, and orchestra directors with 29 at 19.1%. Some of the

guiding factors here are the access to more band directors (through the Facebook groups) and personal contact with teachers I have been involved with being a choir and band director.

The type of school was also surveyed to see the possible variety. The survey showed that public teachers made up the majority with 86.2% of the survey at 131 responses. Private schools were represented with 12 responses at 7.9%, religious schools had 2% with 3 responses, and charter schools had 4% with 6 responses. The remaining two responses were from a magnet school and one from a university. In many cases a smaller school such as a charter school or private school might not have enough numbers or involvement to constitute a program in the performance spectrum of music.

The school levels were determined in groups of high school, middle school, and elementary school. The number of high school responses was 102 with 67.1%, middle school was 95 with 62.5%, and elementary was 36 with 23.7%. The percentages do not add to one hundred because there are districts that require a music teacher to have classes in more than one school during the day. Thus, a single teacher can have classes at all levels and not just one. The results show that a minimum of 89 possible teachers hold multi school positions.

Experience was surveyed to determine if a wide variety of teachers were represented. The range of experience was from 1 year to 47 years' experience. These results show every year being represented from 1 to 35 then a one-year jump to one response with 37 years, then a single response at 40 years, and one response at 45. The range for responses is 46 years. The experience mean for the survey was calculated at 14.69 year. The average does not hold a great deal of weight because the standard deviation is 9.69 years. This means the majority (or 68.2%) of the responses are between 24.38 and 5 years. The population used was spread out and experience for teachers can be enormous.

With the results to the most effective strategies the participants used a ranking system to judge the seven provided strategies. The ranking system used 1 as most effective and 7 as least effective within the seven. The mean and standard deviation to each are as follows:

Strategy	**Mean**	**Standard Deviation**
Real-time Direction/Correction (verbal instruction, bopping, singing etc.)	2.68	1.56
Modeling (teacher or student)	3.05	1.45
Pre-Rehearsal Planning and score study	3.18	2.02
Repetition (in direction and playing)	3.45	1.92
Student Self-Assessment	4.84	1.56
Baton/Conducting technique (facial cues, body and arm movement, gestures, etc.)	5.03	1.81
Post Rehearsal Reflection	5.76	1.40

When reading this the mean shows the central tendency for each strategy. Because the most efficient was ranked at 1 then lower the mean the more efficient the strategy on average. The most effective rehearsal strategy here is shown to be the Real-time Direction/Correction with a 2.68 mean and the least effective showing is the Post Rehearsal Reflection at a mean of 5.76 with a standard deviation of 1.40. The most effective strategies that are within the top ranking (1 rank) in the first standard deviation are Pre-Rehearsal Planning/Score study, Repetition, Modeling, and Real-time Direction/correction. The strategies that have only outliers or rankings beyond the first standard deviation for the least effective rankings are Modeling, Pre-Rehearsal Planning, Real-time Direction/Correction, and the Student Self-Assessment and Baton/Conducting are on the cusp of being within the first standard deviation for least effective. The strategy that is within the first standard deviation of being least effective is Post Rehearsal reflection.

The frequencies of the strategies are listed below as raw data. The frequencies show the strategies that have a normal distribution and ones with a skew on the positive or negative end. Post Rehearsal Reflection and Student Self-Assessment is clearly skewed more to the negative with fewer

Modeling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	22	14.5	14.5	14.5
	2	36	23.7	23.7	38.2
	3	42	27.6	27.6	65.8
	4	31	20.4	20.4	86.2
	5	11	7.2	7.2	93.4
	6	6	3.9	3.9	97.4
	7	4	2.6	2.6	100.0
	Total	152	100.0	100.0	

Repetition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	29	19.1	19.1	19.1
	2	28	18.4	18.4	37.5
	3	26	17.1	17.1	54.6
	4	25	16.4	16.4	71.1
	5	17	11.2	11.2	82.2
	6	12	7.9	7.9	90.1
	7	15	9.9	9.9	100.0
	Total	152	100.0	100.0	

Post Rehearsal Reflection

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.7	.7	.7
	2	7	4.6	4.6	5.3
	3	4	2.6	2.6	7.9
	4	11	7.2	7.2	15.1
	5	28	18.4	18.4	33.6
	6	42	27.6	27.6	61.2
	7	59	38.8	38.8	100.0
	Total	152	100.0	100.0	

Baton/Conducting Tech

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	5.3	5.3	5.3
	2	12	7.9	7.9	13.2
	3	12	7.9	7.9	21.1
	4	13	8.6	8.6	29.6
	5	40	26.3	26.3	55.9
	6	24	15.8	15.8	71.7
	7	43	28.3	28.3	100.0
	Total	152	100.0	100.0	

Real Time Direction/Correction

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	37	24.3	24.3	24.3
	2	49	32.2	32.2	56.6
	3	26	17.1	17.1	73.7
	4	21	13.8	13.8	87.5
	5	8	5.3	5.3	92.8
	6	6	3.9	3.9	96.7
	7	5	3.3	3.3	100.0
	Total	152	100.0	100.0	

Student Self-Assessment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1.3	1.3	1.3
	2	9	5.9	5.9	7.2
	3	17	11.2	11.2	18.4
	4	32	21.1	21.1	39.5
	5	34	22.4	22.4	61.8
	6	40	26.3	26.3	88.2
	7	18	11.8	11.8	100.0
	Total	152	100.0	100.0	

Pre-Rehearsal Planning / Score Study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	53	34.9	34.9	34.9
	2	11	7.2	7.2	42.1
	3	25	16.4	16.4	58.6
	4	19	12.5	12.5	71.1
	5	14	9.2	9.2	80.3
	6	22	14.5	14.5	94.7
	7	8	5.3	5.3	100.0
	Total	152	100.0	100.0	

votes on the one to three and more one the five through seven (lower end). The Pre-Rehearsal Planning and Score Study and the Real-Time Direction/Correction are skewed more towards the higher end with votes primarily in the one to four range, whereas repetition has a more even distribution through the rankings. Although there are not definite conclusions we can arrive at from the frequency tables there are some strategies that have more and less votes towards being effective as compared to the other strategies. It suggests that conductors see the strategies that are skewed towards the higher end (closer to a 1 rank) as more useful.

To see the bivariate correlation to the years of experience and the ranks the matrix below gives the P value of experience to each strategy. For clarification the frequency table will display the distribution of years' experience in raw numbers.

Nonparametric Correlations

Correlations

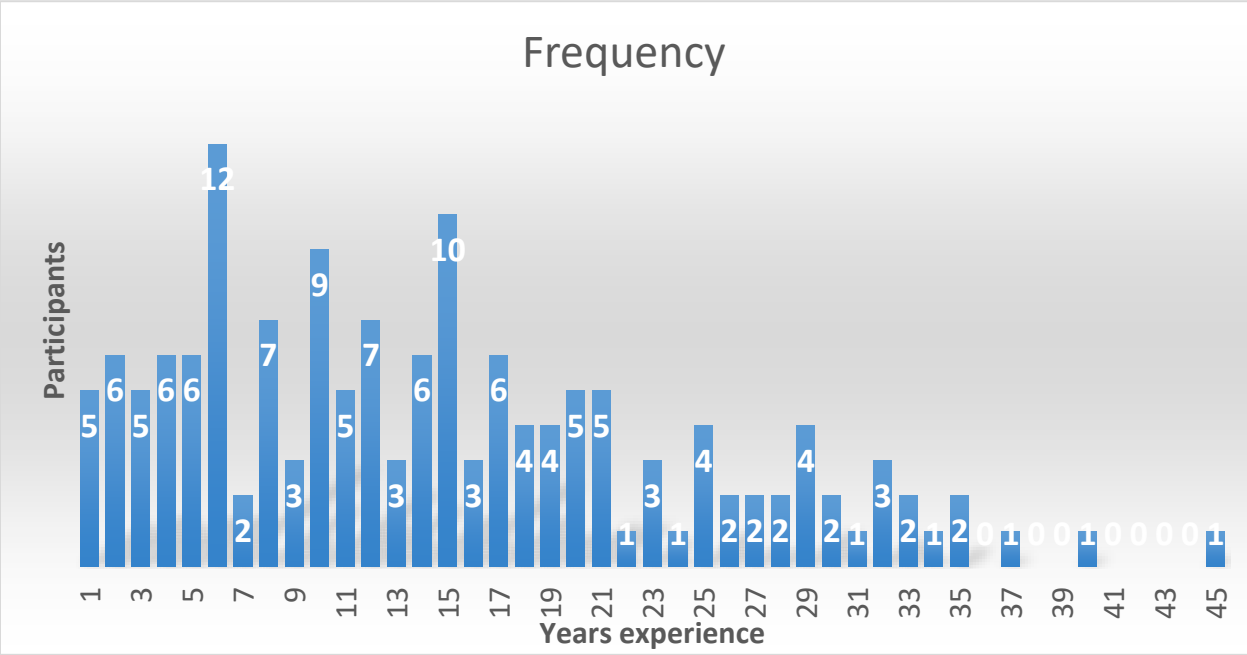
			Experience	Pre-Rehearsal Planning / Score Study	Student Self-Assessment	Repetition	Modeling	Post Rehearsal Reflection	Real Time Direction/Correction	Baton/Conducting Tech
Spearman's rho	Experience	Correlation Coefficient	1.000	-.160*	.056	.105	.179*	.052	.029	-.131
		Sig. (2-tailed)	.	.048	.494	.200	.028	.528	.724	.108
		N	152	152	152	152	152	152	152	152
	Pre-Rehearsal Planning / Score Study	Correlation Coefficient	-.160*	1.000	-.190*	-.471**	-.248**	-.014	-.193*	-.111
		Sig. (2-tailed)	.048	.	.019	.000	.002	.860	.017	.174
		N	152	152	152	152	152	152	152	152
	Student Self-Assessment	Correlation Coefficient	.056	-.190*	1.000	-.177*	-.248**	.036	-.191*	-.063
		Sig. (2-tailed)	.494	.019	.	.029	.002	.658	.018	.438
		N	152	152	152	152	152	152	152	152
	Repetition	Correlation Coefficient	.105	-.471**	-.177*	1.000	.138	-.214**	-.061	-.226**
		Sig. (2-tailed)	.200	.000	.029	.	.091	.008	.458	.005
		N	152	152	152	152	152	152	152	152
	Modeling	Correlation Coefficient	.179*	-.248**	-.248**	.138	1.000	-.148	-.037	-.250**
		Sig. (2-tailed)	.028	.002	.002	.091	.	.068	.655	.002
		N	152	152	152	152	152	152	152	152
	Post Rehearsal Reflection	Correlation Coefficient	.052	-.014	.036	-.214**	-.148	1.000	-.147	-.264**
		Sig. (2-tailed)	.528	.860	.658	.008	.068	.	.071	.001
		N	152	152	152	152	152	152	152	152
	Real Time Direction/Correction	Correlation Coefficient	.029	-.193*	-.191*	-.061	-.037	-.147	1.000	-.207*
		Sig. (2-tailed)	.724	.017	.018	.458	.655	.071	.	.010
		N	152	152	152	152	152	152	152	152
	Baton/Conducting Tech	Correlation Coefficient	-.131	-.111	-.063	-.226**	-.250**	-.264**	-.207*	1.000
		Sig. (2-tailed)	.108	.174	.438	.005	.002	.001	.010	.
		N	152	152	152	152	152	152	152	152

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Years	Frequency
1	5
2	6
3	5
4	6
5	6
6	12
7	2
8	7
9	3
10	9
11	5
12	7
13	3
14	6
15	10
16	3
17	6
18	4
19	4
20	5
21	5
22	1
23	3

Years	Frequency
24.5	1
25	4
26	2
27	2
28	2
29	4
30	2
31	1
32	3
33	2
34	1
35	2
36	0
37	1
38	0
39	0
40	1
41	0
42	0
43	0
44	0
45	1



The bivariate correlation between experience and the different strategies yielding no strong or moderate relationships. The R values for the strategies are: -.160 for Pre-Rehearsal Planning/Score study, .056 for Student Self-Assessment, .105 for Repetition, .179 for Modeling, .052 for Post Rehearsal

Reflection, .029 for Real Time Direction/Correction, and -.131 for Baton/Conducting Technique. The Experience to real time direction was the weakest connection and Repetition was the strongest within the set. For this section of the study the Null hypothesis is accepted and no significance was found of any of the pairings. The correlation between several of the strategies yielded weak correlation and no correlation. For future use, the correlation between the strategies and the gender, school type, level, or ensemble could be analyzed for other relationships possible.

Discussion

The expectations was to find that the most effective strategies (which I thought would be more universal) would show some sort of correlation to the more experienced conductors and that the younger conductors might vary (be more unexpected). The results yielded low to zero correlation using the bivariate correlation of the specific strategies to the level of experience. The strategies used were not determined to more or less effective by experience and showed no correlation of the pairings of strategies themselves. The strategies showed significance in the raw number of how many ranked certain strategies effective or non-effective. The effective strategies ranked could be interpreted as consistently effective to moderately effective across all experience levels.

The future implications of this study would be to find a correlation between the other variables (gender, school, ensemble, and level) and to find a method to judge the success of the programs to see if the strategies were related to the success of the program. This would be a useful study to see if the success stems from certain strategies. The effectiveness of a teacher will always be a priority but the variables are extensive and the study could expand into teacher characteristics, school characteristics, parental involvement, funding, number of music teachers/mentor, and number of students involved in the music program.

In retrospect, the purpose to find the most effective strategies was semi successful in that many of the strategies were voted towards the top or the bottom. The correlations between the effectiveness of strategies and other variables could have been more beneficial or have more practical applications.

Survey
Gender:

What do you find to be the most important rehearsal techniques when conducting a large ensemble? List in order of most important to least (1 being most effective 7 being least effective).

- Pre-rehearsal planning (score study, anticipation of challenges, etc.)
- Repetition
- Real time delivery (baton, verbal instruction, in class corrections)
- Post rehearsal Reflection
- Modeling
- Student self-assessment
- Baton/conducting technique

What do you teach (circle the ones that apply)?
Band Choir Orchestra

Type of school
Public Charter Private

Grade Level (circle the ones that apply)
Elementary Middle School High School

References

Grant, Denise (2007). Improve Large Ensembles with Chamber Music. *The Canadian Music Educator.* 39-41.

Worthy, M. (2006). Observations of Three Expert Wind Conductors in College Rehearsals. *Bulletin of the Council for Research in Music Education,* (168), 51-61.

Barr, A.S. (1958). Characteristics of Successful Teachers. *Phi Delta Kappa International. 282-284.*

Jagow, S. (2003). Rehearsal structures of college wind-band conductors. *Canadian Winds: The Journal of the Canadian Band Association, 2*(1), 31-34.

Flora, Frank (2016). Successful Administrative Relationships Make Successful Music Program. *Music educators Journal.* 66-67.

Barry, N., & Henry, D. (2015). The connoisseurship of conducting: A qualitative study of exemplary wind band conductors. *Contributions to Music Education,40*, 111-130.

Silvey, B. (2011). The Effect of Ensemble Performance Quality on the Evaluation of Conducting Expressivity. *Journal of Research in Music Education, 59*(2), 162-173.

Schloesser, Dawn (2002). Report: Where are all the women directors? *School Band and Orchestra Magazine.*

Appendix A

Title of research study: The value of different rehearsal strategies from conductors in secondary music.

Investigator: Thomas Willmann

Why am I being invited to take part in a research study?

We invite you to take part in a research study because you fit the description of the population being surveyed.

What should I know about a research study?

- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you decide.
- Your name will not be used.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk Thomas Willmann. Contact 314-749-3701.

This research has been reviewed and approved by an Institutional Review Board ("IRB"). You may talk to them at (303) 735-3702 or irbadmin@colorado.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research subject.
- You want to get information or provide input about this research.

Why is this research being done?

As apart of a course from the University of Colorado at Boulder.

How long will the research last?

We expect that you will be in this research study for 3 weeks.

How many people will be studied?

We expect about 10-15 people will be in this research study.

What happens if I say yes, I want to be in this research?

- ***Your answers will be compiled with others in order to find patterns and trends in the thoughts towards rehearsal strategies.***
- ***Your answers will be presented to a professor and students at CU Boulder.***

What happens if I do not want to be in this research?

You can leave the research at any time and it will not be held against you.

What happens if I say yes, but I change my mind later?

You can leave the research at any time it will not be held against you.

If you decide to leave the research, contact the investigator so that the investigator can remove your data.

If you stop being in the research, already collected data may not be removed from the study database.

What happens to the information collected for the research?

Efforts will be made to limit the use and disclosure of your personal information, including research study and medical records, to people who have a need to review this information. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the IRB and other representatives of this organization.

Signature Block for Capable Adult

Your signature documents your permission to take part in this research.

Signature of subject	Date
Printed name of subject	