THE NATIONAL COLLEGIATE CHORAL ORGANIZATION

— A POSITION PAPER —

VIRTUAL CHOIRS *in* HIGHER EDUCATION

JUNE 2020

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CREDITS

This position paper, **Virtual Choirs in Higher Education,** and the abridged Summary for Administrators was prepared by the National Collegiate Choral Organization's **Task Force on Ensembles in the Collegiate Curriculum** during spring 2020.

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THE VIRTUAL CHOIR

As the video[1] begins, the curtain opens to reveal 185 faces, poised, alert, ready to sing. The conductor lifts his hand in a preparatory gesture, the singers breathe as one, and a sound of ethereal beauty pours forth. The singers appear to be about the same age, but even from a distance, the viewer can see the diversity of gender expression and race; indeed, the introduction to the video boasts that the singers come from 12 different countries. The choir seems to be a model of community and cohesion.

When the camera moves in for a medium close-up shot, though, it becomes clear that the conductor and singers are not physically present, that even the stage itself is not real. The stunning visual is actually a composite of 185 separate videos, recorded by each singer in their own bedrooms and kitchens and uploaded to YouTube. The conductor is also on video, having recorded himself directing an imaginary choir. The rich sound is

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1   Eric Whitacre's Virtual Choir, "Eric Whitacre's Virtual Choir - *Lux Aurumque*," March 21, 2010, video, 6:20, https://youtu.be/D707BrlbaDs.

similarly a product of masterful editing, a combination of 243 separate audio tracks carefully synchronized to each other and to the videos. This is a virtual choir.

Interest in virtual choirs has flourished at the time of this writing, when the novel coronavirus has confined people to their homes and necessitated a move to remote instruction. A search for "virtual choir" from just the beginning of 2020 returns almost 700,000 results. Community groups, churches, and schools all over the world are creating composite videos of their members singing. These videos have been created for many purposes, including publicity, entertainment, and keeping choir members engaged with the group even though they cannot be physically together. While these objectives are valuable, it nevertheless remains true that the goals for collegiate ensembles include additional curricular, artistic and social outcomes that are difficult to achieve without in-person rehearsals and performances.

POSITION STATEMENT

The National Collegiate Choral Organization affirms that in-person rehearsal and performance are crucial to meet the artistic and educational goals of choral organizations in colleges and universities. Further, we recognize both the value of asynchronous learning experiences, including virtual choirs, and their inherent challenges, which arise from technological complexity, funding constraints, and inequity in student access to resources. The Organization also affirms the capability of our members to determine the combination of in-person and remote learning appropriate for their environment, and we celebrate their creativity in developing new uses for technology in choral education.

PEDAGOGY

It is possible for both virtual and traditional choirs to support some of the same pedagogical goals, even given the asynchronous nature of teaching through virtual choir. These shared learning outcomes include:

- » Music literacy
- » Critical listening
- » Understanding of performance practice and repertoire from all periods/styles
- » Developing skill in following a conductor
- » Acquiring techniques for effective practicing
- » Lyric diction in multiple languages

Other pedagogical goals can be achieved in a remote-learning context but rely more heavily on feedback from the director to individual singers, because singers typically do not hear themselves as they really sound. Achieving these outcomes may require synchronous, one-on-one instruction:

- » Improved vocal technique, including posture, breathing, and tone production
- » Development of steady beat and rhythmic accuracy
- » Accuracy of intonation
- » Fine-tuning of enunciation (diction)

Many of the learning outcomes of choral ensembles focus on the creation of a traditional "choral" sound as practiced in Western art music. These goals are difficult to support with a virtual choir, because they require the physical presence of other singers. They include:

- » Uniform vowel formation among all choir singers
- » Unity of rhythm and diction across the entire ensemble
- » Acute matching of pitches within one section of the choir
- » Careful tuning of multiple sections in relation to each other
- » Attention to the balance of one's voice within one's section
- » Attention to the relative balances of each section against the others

In a virtual choir recording, much of this is created by the audio engineer's adjustments in the studio, after all the parts have been performed and recorded by the individual singers. In an in-person setting, however, students learn to produce these "effects" themselves. They do so in real time, developing these skills through trial and error. The director guides this learning, offering instruction to the entire group or small sections, shaping the overall sound and musical direction.

Students also learn valuable lessons from in-person performance that are difficult to replicate in a virtual choir. In a virtual choir, singers can make as many recordings as they wish, until they have one they like. A universal truth of live performance, however, is that things cannot always go as planned. Singers and directors make mistakes, and there are many variables present in a live ensemble performance that an individual singer cannot control. Students learn to deal with this uncertainty by developing focus, resilience, and flexibility. These are traits that they can apply to their other coursework, their relationships, and their eventual careers.

ARTISTRY

[M]ost conductors and teachers can recall a particular collective emotional or meaningful aesthetic moment in a rehearsal or performance. There was one particular rehearsal with my community choir of Poulenc's Gloria that immediately comes to my mind… Somehow, all the conditions were in place for a communal recognition of something beautiful happening. I didn't have to say anything at the end—in fact I was unable to… There was a connection here, and the nature of the connection was dynamic: the dynamic interaction enabling special moments to occur.[2]

Dynamic interaction is the heart of artistic communication. The interaction of the composer's thought, the written page, and the conductor's imagination; the interaction between conductor and choir, among the choir members, between performers and audience: these are essential to creating music that has an impact on those who hear it. Often a key component of this connection is the freedom to make a new creative choice in the moment, led by some instinct or unexpected emotion.

[2] Collin Durrant, *Choral Conducting: Philosophy and Practice* (New York: Routledge, 2003), 83.

The virtual choir allows for less of this creative flexibility. Instead of listening to each other and following a conductor's inspired leadership in the moment, each singer performs alone while listening to a click track or backing track. The backing track makes it easier to synchronize the multiple recordings, but it also means that each time the singer "performs" the work, the result is likely to be very similar to their previous performances. It may lack the freedom and spontaneity of those magic moments performers and audiences cherish.

In an educational setting, it is especially critical that singers participate in artistic performances that exemplify this dynamic interaction. Each generation of musicians learns from the previous ones how to shape a musical phrase, how to be present onstage, how to breathe life into a collection of dots and lines on paper. The future of the art depends on students' developing their own sense of musicality and artistry, through a long process of study and exploration. Directors must be especially attentive to this need when working with choirs in a virtual setting, so that the emphasis on the final product does not eclipse the learning process.

SCHOLARSHIP

Collegiate choral directors are more than artist-teachers, of course. They are also scholars whose research may be expressed through traditional publication or through performance. The National Collegiate Choral Organization notes:

> *Scholarly performance is similar to publication: it is peer-reviewed through the medium of the audience, which may contain other music professionals. The conductor is, through her preparation and rehearsals, actively engaged in scholarship, and may, through public performance, add to the body of musical knowledge… A scholarly performance requires not only research into the composer, his/her times, and the specific piece(s) being performed, but also an intensive, lengthy rehearsal process that enables the musician to understand the composer's ideas and to clarify their execution.*[3]

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3   "The Conductor as Scholar: National Guidelines for the Promotion and Tenure of Collegiate Choral Conductors," National Collegiate Choral Organization, last modified December, 2016, 2-3, https://www.ncco-usa.org/wp-content/uploads/2016/12/ncco_tenure_promotion.pdf.

A virtual choir does not rehearse in the traditional sense. The director chooses the tempo of the backing track and may create voice-part recordings to help students learn their notes and rhythms. The director may also work with the audio engineer to adjust dynamics, balance, and possibly timbre. These efforts do not amount to the "intensive, lengthy rehearsal process" of a scholarly performance, however. Collegiate choral directors whose activity is primarily in this area may find that in-person choirs provide a better opportunity to advance their work.

Collegiate choral directors who do traditional research for publication may find that virtual choirs change their work significantly. The field of music education will likely realize multiple new avenues for research, while

directors who study group vocal technique might discover that their work cannot be easily applied to virtual choirs. Commissioning and analyzing new repertoire specifically for virtual choir may further broaden research opportunities. Research on standard choral repertoire may need to be adapted for virtual choirs, however, because not all traditional choral pieces lend themselves to a virtual choir format. Those with complex texture, a great deal of flexibility in tempo, or parts that are difficult for students to learn without significant assistance may be too complicated to attempt remotely.

STUDENT ENGAGEMENT

Many students recognize the opportunity to connect with other students as one of the benefits of the ensemble experience. They find meaning in collaboration, socializing, learning side-by-side with other students from other disciplines, and creating a musical product that is greater than the sum of its parts. They appreciate the work of their directors to build community and welcome all students, regardless of major. Since social connectivity leads to better health outcomes, both mental and physical,[4] engagement in choral ensembles may contribute to student success in all of their courses.

Choir singers are also more likely to be engaged in their communities in other ways. A Chorus America study found that 74% of adult choral singers agreed or strongly agreed that "singing in a chorus has helped them become better team leaders or team participants in other areas of their lives," and nearly two-thirds agreed or strongly

4   Julianne Holt-Lunstad , Timothy B. Smith , J. Bradley Layton, "Social Relationships and Mortality Risk: A Meta-analytic Review," *PLOS Medicine*, July 27, 2010, doi: 10.1371/journal.pmed.1000316.

agreed that "being in a chorus has helped them socialize better in other areas of their lives."

In addition, student engagement in choir is a valuable recruitment tool for universities. In an informal survey of choir members at St. Ambrose University, 81 percent said that ensemble participation impacted or highly impacted their decision to attend that school, and 68 percent said that the arts were highly important to them in their education. One student commented, "These programs are amazing and I'm glad I can integrate them into my other academic studies, especially as a non-music major."[5]

While these benefits may apply more naturally to in-person choral experiences, it is possible to experience them to some extent in a remote learning environment. Directors should be sure to create opportunities for choir members to connect, including synchronous online meetings and small-group work, as the ensemble prepares for a virtual choir video.

5   Nathan Windt, personal communication, April 19, 2020.

PRACTICAL CHALLENGES

Choral conductors are accustomed to investing many hours outside rehearsal into their work, including curating the concert program, studying scores, and preparing rehearsal plans. That time typically is devoted to a broad set of literature and results in a concert of 60 to 90 minutes. Creating a virtual choir video is similarly time-consuming, but because sound and video editing is a complicated and fastidious process, such a video usually comprises one piece and perhaps just 5 to 6 minutes of performance.

Creating a virtual choir video has three main stages:

1. The pre-recording preparation of materials and instructions by the conductor for the singers, which may include synchronous meetings or virtual rehearsals with the singers;
2. The creation of individual performance recordings by each student; and
3. The compilation, editing, mixing, and production of the individual audio and video tracks to create the final product.

To begin, the conductor must create a backing track or a video of them conducting to serve as a guide. Conductors may also have synchronous meetings or virtual rehearsals with students to help them prepare. Students will need to rehearse with the guide track until they are ready to record their individual performance, and then must record as many takes as necessary to arrive at one they want to include in the finished product.

Each student's recording will need to be converted to the same file format and imported to audio and video editing software. The person who edits the recordings will filter out noise from the audio and ensure that audio from each track is synchronized with the others, so that the sound is unified. The conductor might also use editing to make adjustments in balance, blend, and dynamic contrasts. The editor will trim the beginning and end of each video, resize them so that they all can appear on the same screen, and synchronize the audio track with the video. Lastly, the editor adds any visual effects and shares the final version.[6]

Virtual choir videos can be expensive to produce. Digital audio workstation software ranges

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[6]   Katie, "Dear Music Teachers: Please Stop Asking How To Create A Virtual Choir Video," Midnight Music, accessed April 28, 2020, https://midnightmusic.com.au/2020/03/dear-music-teachers-please-stop-asking-how-to-create-a-virtual-choir-video/.

in cost from free to $250 or more. To purchase video editing software that allows for multiple videos to be shown on screen simultaneously currently costs between $240 and $300.[7] Conductors who do not have the computer hardware, software, or expertise to create the video themselves might choose to hire an audio/video editor, which can significantly add to the expense, depending on the size of the ensemble and the length of the piece(s). In addition, to record music that is not in the public domain, a choir will need to purchase a synchronization license (for video) or a mechanical license (for audio only). Such licenses are separate from the performance rights that many universities already carry through agreement with ASCAP, BMI, or other performing rights organizations.

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7   Christopher Bill, "Christopher Bill's Multitrack Editing 101," accessed April 28, 2020, https://docs.google.com/document/d/1vmD5IaNOla-4M3ExGiyAjL86SIifvou-YUJewakebMCE/copy.

Another complication of virtual choirs that should concern both directors and university administrators is equitable access to resources. Not all students have a high-quality microphone and video recorder, or perhaps recording equipment of any kind. Since internet access varies greatly, some students may have difficulty uploading a large video file. Students who share bandwidth and computer equipment with family members, or who do not have a quiet place to make their recordings, may not be able to participate at all. Solving this problem may lie beyond the scope of the collegiate director's influence.

CONCLUSIONS

Virtual choirs can be useful to the collegiate choral program. They support important learning outcomes, provide a way for singers to feel momentarily connected with other choir members, and can foster artistic involvement and creativity while furthering external goals such as publicity and entertainment. At the same time, in-person rehearsal and performance provide a different and equally important set of pedagogical goals and artistic experiences. Synchronous experiences such as rehearsals may also allow for a greater depth of interpersonal connection that students value.

Virtual choirs may create new avenues for academic research, artistic expression, and creativity. For choral directors whose primary scholarly activity is performance, however, the in-person choral experience remains the best way to achieve their work, through the intensive preparation and rehearsal process expected of an artist-teacher at the collegiate level. In addition, the creation of a virtual choir video can introduce significant technological challenges, expense, and issues of access for all students.