The Growth of Music Education Research: TMEA 1978-2020

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As part of the centennial of the Texas Music Educators Association (TMEA), I created a spreadsheet of all research posters listed in TMEA Conference Programs (1981-2020) and manuscripts published in Texas Music Education Research (1978-2018), including 1393 studies by 488 researchers. Factors examined included: growth of the research poster session (11-80 entries per year), research leadership, milestones in Texas research, productivity of researchers based on participation in research poster sessions (1-69 entries per researcher), productivity of affiliated universities involved (state, national and international), and an examination of participants studied, research methodologies employed by decade, and a consideration of research topics chosen then and now with speculation about possible changes in focus over the past 42 years of research activity in Texas.

The examination of past events and past documents can be a vital part of understanding the future. As the Texas Music Educators Association celebrates its centennial (1920-2020), it may benefit us to examine the growth of TMEA research activities during that time. The College Division of TMEA was formed in 1952, the last division to appear (following Band, Orchestra, Choir, Elementary). Examination of available early TMEA conference programs demonstrated that research was not mentioned specifically during College Divisions' first decade. Instead, the focus was on presentations about "Articulation of Junior and Senior College Music Curricula" and "Recruiting Music Teachers for Texas Schools" (1957 TMEA Convention-Clinic Program).

I was not successful in finding exactly when in the convention programs mention of "research" began to appear. That will be an area ripe for future research. By 1978, however, research and the publication of research had become of importance because 1978 is the date of the first appearance of the *Texas Music Education Research (TMER)*. Full-text *TMER* studies are available at tmea.org beginning with 1978. In that period, an examination of conference programs in 1978 and the first papers published in *TMER* revealed that TMEA conference research presentations were eligible for consideration (or perhaps automatically included) in the *TMER*. See "A Content Analysis of *Texas Music Education Research* (1978-2018)" by Rebecca Tast for more details on the *TMER*.

Leadership & Milestones

I begin this investigation by providing background about the TMEA College Division and the growth of research by listing college leadership, research poster session events, as well as *Texas Music Education Research* (TMER) publication events. *TMER*, first published in 1978, consisted of research papers presented during the TMEA conferences. It was initially published in hard copy and consisted of compilations of typed hard copies of any papers presented. Thus originally, those in charge of the publication were listed as "compilers," and only later as "editors." The publication appeared as typeset beginning with the 1989 issue (tmea.org).

The College Division, formed in 1952 (TMEA conference program 2020), required that a College Division Chair be elected every two years. The College Division Chair was responsible for

representing the College Division's interests on the TMEA Executive Board and spearheading the College Division conference sessions. Thus the research poster session and *TMER* oversight became one of his/her duties. Apparently, at some point, a research chair was elected and took over oversight of the *TMER*. The research chair and those who helped compile each *TMER* were, with a few exceptions, listed in each year of the *TMER*, as appears in Table 1.

Table 1

Date	TMEA College Division Chairs	TMER Compiled or Edited	Milestones
1978	James Kincaid	Richard Bentley	1978-1 st TMER
1979	Richard Bentley	Sam Miller	
1980-1982	Sam Miller	Manny Brand & Sam Miller	1981-1st poster session
1983-1984	Wesley Coffman	Sam Miller, Manny Brand & Will May	
1985-1987	Hunter March	Sam Miller, Manny Brand & Will May	
1988	Margaret Hudnall	Sam Miller & Bob Duke	1988 - 1 st female chair
1989	Will May	Bob Duke	1989 - TMER first typeset
1990-1991	Peggy Bennett	Tom Tunks	
1992	Darhyl Ramsey	Richard Fiese, Bob Duke & Tom Tunks	
1993	Darhyl Ramsey	Richard Fiese & Bob Duke	
1994-1996	Richard Fiese/	TMER leadership not listed	
	Bob Henry		
1997	Robert Henry	Bob Duke & Jacqueline Henninger	1997 - 1 st person of color & 1997 - 1977 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
1998-1999	Ken Raessler	TMER leadership not listed	
2000	Janice Killian	Bob Duke Research Chair; Charlotte Mizener, Editor	2000 - 1 st editor (not compiler)
2001-2014	Georgia Green / Brian Miller / Sheri Neill / Caia McCullar/ Richard Fiese/ Keith Dye	Bob Duke, Research Chair; Mary Ellen Cavitt, Editor	2013 - posters first grouped by topics
2015-2020	Si Millican / Vicki Baker	Amy Simmons, Research Chair	1981-2015 - full papers
	Paul Sikes	Sarah Allen, Editor	required 2016 abstract only required if submitting for TMER publication 2016 TMER indexed in EBSCO 2016 Posters placed in hallways

TMEA College Division Leadership, TMER Compiler/Editors & Related Milestone Events

We owe a debt to the vision and leadership of those who have continued to emphasize research within TMEA. A few details may illustrate the work involved, decisions needed, and changes that occurred. Full papers were required at the poster sessions from the beginning, although acceptance was based on peer-reviewed abstracts. For example, in a personal letter notifying me on the acceptance of my peer-reviewed research poster for TMEA 1988, the following instructions appeared: Note that I received this letter via US mail.

Each presenter should plan to bring five copies of his or her <u>completed</u> paper. 100 copies of a brief abstract (that includes the author's name and address), and a 30" X 40" poster that presents pertinent information concerning the research design and results. Signed: Robert Duke, Chair, TMEA Research Committee Dated: December 9, 1987

By 1996, the following was added to the research poster instructions:

If you would like your paper to be considered for inclusion in the publication, you should bring with you to the convention a copy of your report on a 3.5" floppy disk. Signed: Robert Duke, Chair, TMEA Research Committee Dated: December 12, 1996

By 2013, instructions had been updated, but full papers were still required. Note I received the following notification by email. Instructions at the bottom of the letter involving posters lead to the conclusion that by 2013, we were transitioning to large printed slides.

In order to participate in the poster session, you must send me by e-mail prior to the convention date an electronic copy of your full, completed report. You should indicate in your e-mail whether you would like your paper to be considered for inclusion in *Texas Music Education Research Online*. In addition, each presenter should bring all of the following to the convention: (1) 2 printed copies of the complete report, (2) 75 copies of a brief abstract (that includes the author's name and e-mail address), and (3) a poster that presents pertinent information concerning the research design and results. Each presenter will have a space that measures 45 X 45 inches. You may assemble multiple documents in a clear and attractive arrangement or you may use a software application like Adobe Illustrator or PowerPoint to create a single poster of larger dimensions that can be printed on an oversize printer (such printers are available at most Kinko's and other copy centers). Signed: Amy Simmons, Dated: December 11, 2012

A more recent acceptance email from Amy Simmons (December 14, 2015) indicated that

beginning in TMEA 2016 TMER would be indexed and fully searchable through EBSCO, paper copies of the complete paper would no longer be required, and poster abstracts would be made available as an appendix in TMER.

Method

This current historical examination is limited to the growth of research as evidenced by manuscripts published in *TMER* 1978-2018 and manuscripts presented as TMEA research

posters 1981- 2020. For the purposes of this paper, I compiled a database of all research posters listed in TMEA conference programs 1981-2020 and included all TMER papers published 1978-1918 (the most recent date for which TMEA papers are available). Available listings included paper titles, author(s) names, author(s) affiliations and year presented. The compilation resulted in 1393 individual papers presented by 488 different researchers.

Thus the purpose of this study was to compile all available information and sort the resulting spreadsheet to allow examination of changes over time in size of research poster sessions with speculation about why changes occurred, productivity of individual authors, productivity of individual universities, and characteristics of presenters including Texas vs. national vs. international presenters. Further analysis involved a study of the research titles themselves, including the age and characteristics of study participants/respondents, a variety of topics studied, and possible changes in research methodologies employed with an eye to possible changes across decades. This study is limited exclusively to an examination of the titles of studies as listed, so conclusions are drawn based solely on the title of individual papers rather than a careful reading of the actual abstract or paper.

Growth of Research Poster Sessions

Figure 1 allows examination of the changes in the numbers of research posters presented each year, 1981-2020. Research poster sessions generally increased in size over time, ranging from 11 posters in 1985 to 70 posters in 2018. On a personal note, I first came to Texas as a doctoral student in 1977, and I have a distinct memory of bringing a poster to TMEA in 1979 or 1980 where there were perhaps 6 posters laid flat on a table in a tiny room. However, I can find no one else who can confirm that memory (noting that some of the researchers involved are no longer with us) or knows the decisions that led to posters instead of paper presentations. My own CV revealed that the National Association for Music Therapy (now American Music Therapy Association) and Music Educators National Conference-MENC (now National Association for Music Education-NAfME) had instituted research poster sessions by 1979 and 1980 respectively.

So music organizations were using research poster sessions during this time period. Specifically, in Texas, conference programs show that TMEA research poster sessions had begun by 1981. Thus the majority of this paper will be limited to research presented and/or published between 1981 and 2020. Figure 1 allows graphic comparison of changes in the number of research posters 1981-2020.

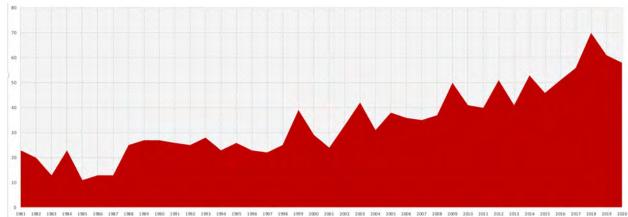


Figure 1

Number of TMEA Research Posters, 1981-2020

One might question what events affected the changes in numbers. Examination of national music education research situations during peak TMEA poster numbers may help explain the changes in numbers of posters. After the 2008 MENC (now NAfME) conference in Milwaukee, membership was informed that there would no longer be biennial conferences, long a staple for music researchers. Note the spike in research posters at TMEA 2009. These spikes continued, perhaps reflecting the expectation of biennial research conferences (2012, 2014, 2018). NAfME will return to the biennial conference, including both researchers and practitioners in November 2020. The anticipation of participation in the national conference might explain the slight dip in TMEA poster numbers for 2020. Further examination of the effect of national events on Texas research is certainly warranted.

Researcher Productivity

The database allowed me to examine the names of individual authors and the number of times they presented at the TMEA research poster session, as displayed in Table 2. As appropriate, I collapsed any name changes into a single researcher based on my personal knowledge of the individuals; errors are possible. There were 488 researchers (including both sole and collaborative authorships) presenting between 1981 and 2020. Of those, 43.4% (212) presented a single time, 33.7% (111) presented twice, and 28.3% (138) presented 3-9 times. Overall, 94.5% (461) presented fewer than 10 times. The remaining 5.5% (27 researchers) presented more than 10 times, with one researcher, Bob Duke, presenting a remarkable 69 times.

Sole and co-authorship is a factor that perhaps implies purposeful mentoring. The majority of poster presentations (369 or 75.6%) listed co-authors. Based on my knowledge of many of the researchers, co-authors appeared to be colleagues, graduate students, or graduate students who became colleagues. The three most productive researchers (See Table 2) frequently included co-authors: Duke = 84.9% co-authored (58 of 69), Killian = 60.4% co-authored (29 of 46), Jellison = 80.5% co-authored (33 of 41). All three mentioned in private conversations that their co-authorship was designed to mentor doctoral students. See Table 2.

Table 2

Frequency of TMEA Research Poster Presentations by Individual Researchers

Poster Presentation Frequency 1981-2020	Researcher Names / = ties
69 Robert Duke 46 Janice Killian	
41 Judith Jellison	
33 Amy Simmons	
29 Diane Persellin	
28 Debbie Rohwer	
26 Eugenia Costa-G	Giomi

21 Vicki Baker

- 19 Carla Cash / Charlotte Mizener / Don Taylor
- 18 Jacqueline Henninger
- 17 John Flohr / Rosemary Watkins
- 16 Don Hodges
- 15 Michele Henry
- 14 Sarah Allen / Kris Chesky
- 13 Lisa Maynard / John Wayman
- 12 Dennis Siebenaler / Catherine Tu
- 11 Elaine Colprit / Virginia Davis / Marilyn Kostka / Laurie Scott
- 10 Mary Ellen Cavitt

Note: Includes all with 10 or more studies 1981-2020

Professional Affiliations

For tabulations of professional affiliations, I took into account the affiliations of both first authors and co-authors. For example, I counted the same poster twice if it had two authors. The majority of authors (1215 or 80.9%) listed Texas affiliations. Out-of-state affiliations were listed by 279 (18.6%) and international affiliations were listed by 7 (00.5%) for a total of 1501 authors. Other potentially informative divisions of these affiliation data included Community Colleges = 12, Commercial Businesses = 2, and Pre-College (K-12) affiliations = 128. Table 3 lists Texas affiliations. Table 4 lists out-of-state affiliations.

Table 3

Name of School	1 st Author Affiliation	Co-Author Affiliation	Total # Studies
UT-Austin	269	15	284
Texas Tech University	134	14	148
Univ. of North Texas (135) + North Texas State (6)	141	6	147
Baylor University	74	1	75
Texas Woman's University	68	6	74
UT-San Antonio	57	5	62
Southern Methodist University	32	17	49
Texas State U (27) + Southwest Texas State (3)	30	4	34
Trinity University	31	2	33
University of Houston	31	1	32
UT-Arlington	28	2	30
UT-Rio Grande Valley (10)+UT-Pan American (18)	28		28
Texas Christian University	19	1	20

Numbers of TMEA Research Posters Affiliated with Texas Institutions of Higher Education

14	14
14	14
11	11
8	8
	14

Note: Includes all with 8 or more studies 1981- 2020

Texas Higher Education Affiliations

Researchers affiliated with 48 Texas higher education institutions produced 1114 studies that resulted in research posters between 1981-2020. The number of studies per school ranged from 1 to 284. Table 2 lists the 17 institutions producing 8 or more studies and producing 95.8% (1063) of the 1114 studies. Remaining 31 institutions produced 1-4 studies (51 studies or 4.6%).

Out-of-State Affiliations

Thirty-seven states (excluding Texas) were represented, including 104 different out-of-state universities. Table 4 allows examination of the names of out-of-state universities which were represented 4 -23 times One could conclude that, although TMEA is by definition a state of Texas conference, the fact that 75% of the US states are represented argues that TMEA has become a national conference, at least as far as research is concerned.

Table 4

Frequency of Out-of-State Universities Presenting Research Posters 4 or More Times at TMEA 1981-2020.

Name of School	1 st Author Affiliation	Co-Author Affiliation	Total # Studies	
Florida State, FL	21	2	23	
Bowling Green State, OH	14	2	16	
University of Utah, UT	8	2	10	
University of Memphis, TN	7	1	8	
Arizona State University, AZ	6	1	7	
Louisiana State University, LA	7	•	, 7	
University of the Pacific, CA	6	1	7	
Michigan State University, MI	3	3	6	
Ohio State University, OH	6	C C	6	
University of Central Arkansas, AR	6		6	
University of Oklahoma, OK	4	1	5	
Cal State U-Fullerton, CA	4		4	
Eastman School of Music, NY	4		4	
Georgia Southwestern State, GA	4		4	
Iowa State University, IO	4		4	
University of Missouri, MO	1	3	4	

One might argue that researchers from states contiguous to Texas predominate because of geography. An examination of Table 5 reveals that this assumption is not the case with Florida, Ohio, and California ranked highest based on the frequency of presentations. Table 5 ranks states by numbers of posters presented (5-1142). Not listed are 14 additional states that accumulated 1-4 presentations.

Table 5

Frequency of Poster Presentations by State

State	Number of Presentations	
Texas	1142	
Florida	34	
Ohio	29	
California	16	
Louisiana	16	
Utah	15	
Oklahoma	14	
Arkansas	12	
New York	12	
Tennessee	12	
Arizona	11	
Georgia	10	
Missouri	9	
Illinois	7	
Alabama	6	
Indiana	6	
Michigan	6	
Pennsylvania	6	
Virginia	6	
Kansas	5	
North Carolina	5	
South Carolina	5	
Wisconsin	5	

Another possible explanation for the participation of out-of-state universities is the idea that several Texas universities prepare PhD students to become researchers and teachers of future music educators. Those former PhD students, who accept university positions across the nation, may tend to return to TMEA. One could question, however, why these students return to a <u>state</u> conference rather than focusing on national conferences plus their own state conference. These results speak to the eminence of TMEA as a national research conference and to the eminence of Texas universities which prepare PhD students to enter university teaching. Future research might benefit from tracing the careers of graduates from the three or four Texas universities most frequently preparing PhD music education students (see Table 3) to determine the growing diasporas of graduates from Texas universities.

International Affiliations

The number of authors listing international affiliations (7) included China, Brazil, Uganda, Thailand, Japan, and the UK. International students who recorded only their US university affiliation were not counted as international. Thus, actual international presence at TMEA research may be larger than shown here.

Authors with K-12 Affiliations

It would seem informative to examine non-university authors and their research. Several studies (128) were authored or co-authored by researchers listing a K-12 affiliation. I would contend that these K-12 teachers may have access to asking the right questions about what research can best be applied in the classroom; thus, their presence is extremely important. Of those 128, 40 co-authored with someone with a university affiliation. However, 88 of these K-12 people had no co-author. Some affiliations may be skewed because of incomplete reporting, i.e., a university was involved, but was not listed. But based on these data, these 88 were researchers on their own, lending credence to the idea that a university affiliation is not required for research productivity. Of the 128, four listed music therapy affiliations (119 in Texas and 18 out-of-state). Numbers included the fact that co-authored studies are counted more than once (one count for each co-author).

Of particular interest is the number of non-university-affiliated researchers who presented more than once. Eleven individuals presented more than once with frequency ranging from 2-7. Of those 11 individuals, several have gone on to take higher education positions. These known to me include Richard Holsomback (Northwestern State Louisiana & elsewhere), Janice Killian (Texas Woman's, Texas Tech), Marilyn Kostka (Northern Arizona), Dennis Siebenaler (California State-Fullerton), Mark Turner (Stephen F. Austin University), Dwayne Wasson (Kent State University) and Richard Watkins (Austin Community College).

Several have gone on to publish their research in *TMER*. It is not known whether these eleven continued to do research because of the love of the activity, or because of future goals toward careers in higher education, or for some other unexplored reason. Their career paths certainly exemplify the idea that one should act like the position one desires. Future research might benefit from interviewing these public school researchers to identify what kept them involved in research when their peers were not.

Participants/Subjects Studied

An examination of the participants studied revealed 669 titles that mentioned who was researched, allowing consideration of the participants/subjects themselves. After careful review of the titles, I collapsed titles into categories comprised of K-12 students (296 studies): adults (180), college students (155), and undeterminable (38). Table 6 allows the examination of types of participants using these categories.

Table 6

Categories of Participants Mentioned in Titles of 669 Studies

K-12 Students	Adults	College Students	Indeterminable
296	180	155	38
High school students = 59 Children= 51 Middle/Jr High students= 45 Elementary students = 39 Preschool students = 28 Infants = 24 Beginning students = 16 Adolescents = 14 Secondary students = 7 Music students = 5 Vocal students = 4 K-12 students = 3 Students with disabilities = 1	Conductors = 33 Music teachers = 30 Adults = 29 Teachers = 24 Choral directors = 12 Band directors = 11 Judges = 7 Administrators = 5 Cooperating teachers Faculty = 2 Music therapists = 2 Researchers = 2 Senior citizens = 2 Parents = 1 Secondary teachers = Veterans = 1	Music ed Grad students= = 3	Musicians = 19 Students= 17 Music schools = Jail inmates = 1

Methodologies Used

Titles were perused carefully for the apparent method (based only on the title). The resulting methodologies were collapsed into the following categories: Descriptive, Historical, Quantitative, Qualitative, Literature Review, Music Theory Analysis, and Philosophical. Across the decades, Descriptive appeared in more than two-thirds (68.5%) of the titles, and Quantitative appeared in a quarter of the titles (25.3%). No other methodology appeared in more than 2.5% of the titles. Table 7 allows examination of changes in the relative frequencies of these identified methodologies over the four decades under discussion, recognizing that there are no doubt multiple ways to divide the methodologies.

The first decade (1981-1990) was characterized by emphasis on Quantitative rather than Descriptive. The following three decades reversed this trend with a notable increase in Descriptive methodologies, a circumstance undoubtedly worthy of future examination. Qualitative methodology first appeared in a study in 1991 by Richard Fiese, "An Examination of

Public Secondary School Band Directors' Qualitative Judgements of Wind Band Scores." It wasn't until the most recent decade that qualitative studies were mentioned more frequently. But even in the last decade (2011-2020), qualitative studies appeared only 4.6% of the time (25 out of 527 studies during that period. Reviews of related literature rarely occurred during the first three decades (see Table 7) but increased during 2011-2020, with 26 of 527 studies (4.9%).

Table 7

Frequency of Methodologies Used Across Four Decades of Papers Accepted for the TMEA Research Poster Sessions

	1001	1000	1000	1004	1005	100/	1007	1000	1000		
Descriptive	1981 ′	1982	1983 2	1984 7	1985 10	1986	1987 5	1988	1989 14	1990 10	
Descriptive	6	9	3	7	10	0	5	8	14	10	
Historical	4	1	2	4	0	0	0	0	0	0	NA 4
Quantitative	10	10	8	10	1	13	8	17	15	16	Mean #
Qualitative	0	0	0	0	0	0	0	0	0	0	Posters
Lit Review	1	0	0	1	0	0	0	0	0	0	per
Theory Analysis	1	0	0	1	0	0	0	0	0	0	Decade
Philosophy	0	0	0	0	0	0	0	0	0	0	19.5
	1001	1000	1000	100.4	1005	100/	1007	1000	1000	2000	
Descriptive	1991 20	1992 10	1993 22	1994 24	1995 15	1996 17	1997 14	1998 10	1999 22	2000	
Descriptive	20	18	22	24	15	17	14	18	33	29	
Historical	0	0	0	0	0	0	0	0	0	0	NA 4
Quantitative	5	7	5	1	11	6	8	8	6	4	Mean #
Qualitative	1	0	0	0	0	0	0	0	1	0	Posters
Lit Review	0	0	0	0	0	0	0	0	0	0	per
Theory Analysis	0	0	0	0	0	0	0	0	0	1	Decade
Philosophy	0	0	0	0	0	0	0	0	0	0	27.4
	2001	2002	2002	2004	2005	2007	2007	2000	2000	2010	
Decorintivo	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Descriptive	18	25	33	22	27	30	24	27	37	30	
Historical	18 0	25 0	33 0	22 0	27 0	30 0	24 0	27 0	37 2	30 1	B 4000 #
Historical Quantitative	18 0 4	25 O 6	33 0 9	22 0 7	27 O 11	30 0 6	24 0 10	27 O 11	37 2 8	30 1 8	Mean #
Historical Quantitative Qualitative	18 0 4 0	25 O 6 O	33 O 9 O	22 O 7 O	27 0 11 0	30 0 6 0	24 0 10 0	27 O 11 1	37 2 8 3	30 1 8 1	Posters
Historical Quantitative Qualitative Lit Review	18 0 4 0 2	25 O 6 O 1	33 0 9 0 0	22 0 7 0 2	27 0 11 0 0	30 0 6 0 0	24 0 10 0 0	27 O 11 1 O	37 2 8 3 0	30 1 8 1 0	Posters per
Historical Quantitative Qualitative Lit Review Theory Analysis	18 0 4 0 2 0	25 0 6 0 1 0	33 0 9 0 0 0	22 0 7 0 2 0	27 0 11 0 0 0	30 0 6 0 0 0	24 0 10 0 0 0	27 0 11 1 0 0	37 2 8 3 0 0	30 1 8 1 0 0	Posters per Decade
Historical Quantitative Qualitative Lit Review	18 0 4 0 2	25 O 6 O 1	33 0 9 0 0	22 0 7 0 2	27 0 11 0 0	30 0 6 0 0	24 0 10 0 0	27 O 11 1 O	37 2 8 3 0	30 1 8 1 0	Posters per
Historical Quantitative Qualitative Lit Review Theory Analysis	18 0 4 0 2 0 0	25 0 6 0 1 0 0	33 0 9 0 0 0 0	22 0 7 0 2 0 0	27 0 11 0 0 0	30 0 6 0 0 0 0	24 0 10 0 0 0	27 0 11 1 0 0 1	37 2 8 3 0 0 0	30 1 8 1 0 0 0	Posters per Decade
Historical Quantitative Qualitative Lit Review Theory Analysis Philosophy	18 0 4 0 2 0 0 2011	25 0 6 0 1 0 0 2012	33 0 9 0 0 0 0 2013	22 0 7 0 2 0 0 0 2014	27 0 11 0 0 0 0 2015	30 0 6 0 0 0 0 2016	24 0 10 0 0 0 2017	27 0 11 1 0 0 1 2018	37 2 8 3 0 0 0 0 2019	30 1 8 1 0 0 0 2020	Posters per Decade
Historical Quantitative Qualitative Lit Review Theory Analysis Philosophy Descriptive	18 0 4 0 2 0 0 2 0 2 011 27	25 0 6 0 1 0 0 2012 32	33 0 9 0 0 0 0 2013 29	22 0 7 0 2 0 0 0 2014 31	27 0 11 0 0 0 0 2015 33	30 0 6 0 0 0 0 2016 43	24 0 10 0 0 0 0 2017 44	27 0 11 1 0 0 1 2018 46	37 2 8 3 0 0 0 0 2019 37	30 1 8 1 0 0 0 0 2020 43	Posters per Decade
Historical Quantitative Qualitative Lit Review Theory Analysis Philosophy Descriptive Historical	18 0 4 0 2 0 0 2011 27 2	25 0 6 0 1 0 0 2012 32 1	33 0 9 0 0 0 0 2013 29 0	22 0 7 0 2 0 0 2 0 0 2014 31 2	27 0 11 0 0 0 2015 33 1	30 0 6 0 0 0 0 2016 43 0	24 0 10 0 0 0 2017 44 2	27 0 11 1 0 0 1 2018 46 2	37 2 8 3 0 0 0 0 2019 37 0	30 1 8 1 0 0 0 2020 43 2	Posters per Decade 36.7
Historical Quantitative Qualitative Lit Review Theory Analysis Philosophy Descriptive Historical Quantitative	18 0 4 0 2 0 0 2011 27 2 8	25 0 6 1 0 0 2012 32 1 1	33 0 9 0 0 0 0 2013 29 0 10	22 0 7 0 2 0 0 0 2014 31 2 13	27 0 11 0 0 0 0 2015 33 1 9	30 0 6 0 0 0 0 2016 43 0 4	24 0 10 0 0 0 2017 44 2 6	27 0 11 1 0 0 1 2018 46 2 14	37 2 8 3 0 0 0 0 2019 37 0 17	30 1 8 1 0 0 0 0 2020 43 2 5	Posters per Decade 36.7 Mean #
Historical Quantitative Qualitative Lit Review Theory Analysis Philosophy Descriptive Historical Quantitative Qualitative	18 0 4 0 2 0 0 2 0 1 2 2 1 2 8 2	25 0 6 1 0 0 2012 32 1 11 2	33 0 9 0 0 0 0 2013 29 0 10 10	22 0 7 0 2 0 0 2 0 0 2 0 14 31 2 13 5	27 0 11 0 0 0 2015 33 1 9 3	30 0 6 0 0 0 0 2016 43 0 4 2	24 0 10 0 0 0 2017 44 2 6 1	27 0 11 1 0 0 1 2018 46 2 14 2	37 2 8 3 0 0 0 0 2019 37 0 17 4	30 1 8 1 0 0 0 2020 43 2 5 3	Posters per Decade 36.7 Mean # Posters
Historical Quantitative Qualitative Lit Review Theory Analysis Philosophy Descriptive Historical Quantitative Qualitative Lit Review	18 0 4 0 2 0 0 2011 27 2 8 2 1	25 0 6 1 0 0 2012 32 1 11 2 5	33 0 9 0 0 0 0 2013 29 0 10 10 1	22 0 7 0 2 0 0 2 0 0 2 0 14 31 2 13 5 1	27 0 11 0 0 0 0 2015 33 1 9 3 0	30 0 6 0 0 0 0 2016 43 0 4 2 3	24 0 10 0 0 0 2017 44 2 6 1 3	27 0 11 1 0 0 1 2018 46 2 14 2 14 2 6	37 2 8 3 0 0 0 0 2019 37 0 17 4 3	30 1 8 1 0 0 0 0 2020 43 2 5 3 3 3	Posters per Decade 36.7 Mean # Posters per
Historical Quantitative Qualitative Lit Review Theory Analysis Philosophy Descriptive Historical Quantitative Qualitative Lit Review Theory Analysis	18 0 4 0 2 0 0 2 0 0 2 011 27 2 8 2 1 0	25 0 6 0 1 0 0 2012 32 1 11 2 5 0	33 0 9 0 0 0 0 2013 29 0 10 1 1 1 0	22 0 7 0 2 0 0 2 0 0 2 0 14 31 2 13 5 1 0	27 0 11 0 0 0 0 2015 33 1 9 3 0 0	30 0 6 0 0 0 0 2016 43 0 4 2 3 0	24 0 10 0 0 0 2017 44 2 6 1 3 0	27 0 11 1 0 0 1 2018 46 2 14 2 14 2 6 0	37 2 8 3 0 0 0 2019 37 0 17 4 3 0	30 1 8 1 0 0 0 2020 43 2 5 3 3 3 0	Posters per Decade 36.7 Mean # Posters per Decade
Historical Quantitative Qualitative Lit Review Theory Analysis Philosophy Descriptive Historical Quantitative Qualitative Lit Review	18 0 4 0 2 0 0 2011 27 2 8 2 1	25 0 6 1 0 0 2012 32 1 11 2 5	33 0 9 0 0 0 0 2013 29 0 10 10 1	22 0 7 0 2 0 0 2 0 0 2 0 14 31 2 13 5 1	27 0 11 0 0 0 0 2015 33 1 9 3 0	30 0 6 0 0 0 0 2016 43 0 4 2 3	24 0 10 0 0 0 2017 44 2 6 1 3	27 0 11 1 0 0 1 2018 46 2 14 2 14 2 6	37 2 8 3 0 0 0 0 2019 37 0 17 4 3	30 1 8 1 0 0 0 0 2020 43 2 5 3 3 3	Posters per Decade 36.7 Mean # Posters per

Such increases in a variety of methodologies may indicate a tendency toward those specific methods, or perhaps may indicate a greater awareness of the diversity of methodological options currently available to researchers. Increases in reviews of related literature may also suggest that music education research itself has reached an age in which there are bodies of existing research that can be summarized. Perhaps we have reached a critical mass of related studies, making reviews of literature common and valuable. Glances at the content of recent issues of *Update: Applications of Research in Music Education* would echo a prevalence of publishing reviews of literature. The discerning reader may also notice other trends and changes in methodologies used over the past four decades. Research is indeed, a changing process.

Why descriptive rather than quantitative? Are these categories accurate? Do papers prepared as abstracts for poster sessions differ in some way from those that are submitted for publication in research journals? Was there a difference in content or focus when abstracts rather than complete papers were no longer required? Researchers interested in content analyses of various journals such as those completed by Lane (2011), Millican (2017), and Diaz and Silveira (2014) might consider comparisons of the broad categories of quantitative and descriptive research over time.

Topics Presented Based on Research Titles at TMEA Poster Sessions

Categorization and analysis of the issues presented at the TMEA Research Poster sessions are perhaps the most subjective of all the analyses in this paper. As such, the results are the most open to alternative interpretations. Using the standard qualitative processes (Merriam & Tisdell, 2015; Saldana, 2015) of assigning a topic category (or sometimes multiple categories) to a specific research title, then collapsing those initial topics into larger categories, I developed six overarching themes: Pedagogy, Psychology, Legislation, Technology, Philosophy and History. Starting in 2013, posters were placed into categories by the Research Chair to make it easier for attendees to find specific topics and to encourage conversation among like-minded researchers. These categories were published in the TMEA Convention Programs, allowing me to use those categories as my initial starting point. See Table 8.

Table 8

Overarching Themes		Categories: Ens Instrument/Cla		Торіс	
Pedagogy	387	Choral/Vocal	191	Inclusion/Music Thera	ov 69
Psychology	349	Elementary	133	Multicultural/Race	52
History	56	Instrumental	73	Gender/Identity	22
Legislation	41	Strings	71	Improvisation	21
Technology	36	Band	57	Composition	18
Philosophy	4	Piano	12	Health	18
		Jazz	11	Music theory	12

Frequency of Themes, Categories, and Topics of Research in TMEA Research Poster Sessions

Although it is beyond the scope of this single paper to examine the topics in great detail (certainly an interesting area for future research), please allow me a few observations. The division between Pedagogy and Psychology stayed relatively consistent across time, as did focus on Inclusion. Technology remained relatively stable, but the topics involving Technology changed notably. Early studies focused on computer-aided instruction (CAI) and video. For example, Antoinette Corbet (1981) "Criteria for the Development of Music CAI for the Community Choir" and Diane Persellin (1987) "Bridging the Gap between the College Music Methods Course and Student Teaching: Video-Technology as a Valid Instructional Tool." Later studies evaluated the effects of technology, e.g., Cynthia Benson (2001) "The Effects of Technology in Music: A Review" or Colleen Petty and Michele Henry (2014) "The Effects of Technology on the Sight-Reading Achievement of Beginning Choir Students."

Examination of titles and topics allowed some interesting historical conclusions. For example, Improvisation appeared throughout the decades, but notably, only 3 of the 21 studies involved any population except children, and those three did not appear until after 2004. Gender appeared as a topic in early years, Linda Hartley (1995) "A Preliminary Study of Gender Among College Band Directors." But the first mention of LGBTQ and gender identity was much later: Don Taylor (2016) "Mentorship Between LGBTQ Student Teachers and Successful LGBTQ Educators: An Examination of Informal Learning." The relationship between topic and time would be a worthy area of further extensive research.

Future Research and Concluding Thoughts

Additional research possibilities are extensive within a dataset like this one; chief among them is the question of changes in research topics and methodologies over time. Early topics specifically involved music theory and studio teaching in the early poster years. Several references to multicultural topics appeared in the 1980s; perhaps today's tendency toward the examination of diversity is similar to what researchers in the 1980s called multicultural. Vocabulary and the change in definition over time is an interesting area that begs exploration. Several other additional possibilities occur. Why the apparent growth in research apparent in these forty years? It is possible that research as a way of knowing is increasing in importance, and the growth of the TMEA research poster session reflects that increase in importance. A closer examination of the role of research in early College Division conferences (1952) leading to the establishment of a research poster session (1981) should be conducted since I was unable to gain access to that information. A careful examination of how research findings as presented at research poster sessions are disseminated to K-12 practitioners and how those careful research findings can inform practitioners is an ongoing area of importance.

I hope this paper is an example of how existing documentation of events can be developed into a sortable data set that allows deeper consideration of why researchers were inspired to participate in a poster session. For example, we have not touched on the effect of tenure and promotion might have on research topics selected. The data are waiting to be explored.

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Keywords: Research poster sessions, *Texas Music Education Research*, scholarly productivity, affiliated institutions productivity

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