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Introduction: Putting the *MIXED* back into quantitative and qualitative research in educational research and beyond: Moving toward the *radical middle*

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Abstract: *Although in the last 25 years the methodology of mixed research (also known as mixed methods research) has developed substantially, there are still many vocal critics at both ends of the methodological spectrum (i.e., at the extreme quantitative and qualitative ends). Some of these critics attempt to continue the paradigm wars. Yet, as a collection of research communities, what is needed is mutual respect among all researchers, regardless of epistemological orientation. Mixed researchers can play an important role in promoting this mutual respect. However, it is not enough for mixed methodology researchers to exist in an epistemological space that lies somewhere between the quantitative and qualitative epistemological spaces. Rather, mixed researchers should strive for what is the radical middle, which should not be a passive and comfortable middle space wherein the status quo among quantitative and qualitative epistemologies is maintained, but rather a new theoretical and methodological space in which a socially just and productive coexistence among all research traditions is actively promoted, and in which mixed research is consciously local, dynamic, interactive, situated, contingent, fluid, strategic, and generative. In this editorial, I will identify mental models that problematize the current methodological divide. In so doing, I contend that moving toward the radical middle represents an important step in uniting research communities. I will challenge mixed researchers to guide researchers from other communities toward a more constructivist view of epistemological spaces. To this end, I will outline five themes – represented by the acronym MIXED – for promoting the radical middle.*

Keywords: mixed research, mixed methods research, quantitative research, qualitative research, radical middle, paradigm deficit

It is an extremely exciting time for researchers who conduct mixed methods research (MMR) – hereafter referred to as mixed research[1] – that represents the social, behavioral, and health sciences for a number of reasons. First and foremost, currently, mixed researchers have 31 published books devoted primarily or exclusively to mixed research from which to choose to help inform their mixed methodologies, comprising two handbooks (i.e., Tashakkori & Teddlie, 2003, 2010a) and 29 authored or edited books (i.e., Andrew & Halcomb, 2009; Axinn & Pearce, 2006; Bamberger, 2000; Bergman, 2008; Bryman, 2006; Calfee & Sperling, 2010; Camerino, Castaner, & Anguera, 2012; Collins, Onwuegbuzie, & Jiao, 2010; Creswell, 2008; Creswell & Plano Clark, 2010; Greene, 2007; Greene & Caracelli, 1997; Hesse-Biber, 2010a; Johnson & Christensen, 2010; Mertens, 2004; Morse & Niehaus, 2009; Newman & Benz, 1998; Onwuegbuzie, Jiao, & Bostick, 2004; Plano Clark & Creswell, 2007; Plowright, 2011; Ridenour & Newman, 2008; Saks & Allsop, 2008; Schensul & LeCompte, 2012; Sheperis, Daniels, & Young, 2010; Spitzlinger, 2011; Tashakkori & Teddlie, 1998; Teddlie & Tashakkori, 2009; Thomas, 2003; Todd, Nerlich, McKeown, & Clarke, 2004). In addition to this exciting collection of mixed research books, mixed researchers have at their disposal two journals devoted to mixed research, namely, *Journal of Mixed Methods Research* and *International Journal of Multiple Research Approaches*, which, to date, have generated published articles that have numbered 166 and 167 (including the seven articles and three editorials in the current special issue), respectively. Further, mixed researchers can consult special issues on mixed research that have been published in other journals such as *International Journal of Social Research Methodology: Theory &*

[1] As recommended by several authors (e.g., Johnson & Onwuegbuzie, 2004; Johnson, Onwuegbuzie, & Turner, 2007), I advocate use of the term *mixed research* instead of the term *mixed methods research* because the latter term might suggest that this research approach only involves the mixing of *methods*, when indeed, this research approach involves mixing methodologies – representing a broad approach to scientific inquiry, including potentially the mixing of philosophical assumptions and stances.

Practice (Brannen & Edwards, 2005); *Evaluation and Research in Education* (Green & Preston, 2005); *Journal of Research in Nursing* (Bishop, 2006); *Quality & Quantity: International Journal of Methodology* (Schmidt, Herrmann, & Kelle, 2011); *Qualitative Inquiry* (Hesse-Biber, 2010b); *American Behavioral Scientist* (Johnson, 2012b) – as well the journal for which I serve as co-editor and Rebecca Frels serves as production editor, namely, *Research in the Schools* (Johnson, 2006). Mixed researchers also can present at and attend conferences devoted to mixed research, most notably the *International Mixed Methods Conference* (Muncey, 2012), and can join special interest groups of various professional research associations such as the *Mixed Methods Special Interest Group of the American Educational Research Association*[2] and the *Mixed Methods Topical Interest Group of the American Evaluation Association*[3]. Further, mixed researchers have access to websites devoted to mixed research, mixed research workshops at conference (e.g., Collins & Onwuegbuzie, 2012; Onwuegbuzie & Frels, 2012), and mixed research courses worldwide (e.g., Bergman, 2012).

Aside from outlets devoted specifically to mixed research, mixed researchers have access to numerous articles that have been published in an array of other journals representing the social, behavioral, and health sciences. Indeed, Ivankova and Kawamura (2010), who examined five major databases (i.e., PubMed, ERIC, PsycINFO, Academic One File, and Academic Search Premier) that represented 10 subject areas (i.e., business, communication studies, education, health and medicine, library studies, political studies, psychology, social work, sociology, women's studies) and two mixed research journals (i.e., *International Journal of Multiple Research Approaches* and *Journal of Mixed Methods Research*), from January 2000 to April 2009, reported that the number of methodological mixed research articles increased from 3 in 2000 to 26 in 2006 and 22 in 2008. Further, the number of empirical mixed research articles increased from 10 in 2000 to 243 in 2008. Further, Plano Clark (2010) identified more than 700 dissertations that she classified as representing mixed research in 2008. Also, she documented a total of 206 funded projects by National Institutes of Health and 22 other US agencies, with the number of funded projects increasing from 0 in 1996 to more than 50 in 2008.

As reported by Ivankova and Kawamura (2010), more mixed research articles are published in the health and medical field (i.e., 47%) than in any other field. According to Ivankova and Kawamura (2010), the field of education contains the second most published mixed research articles but lies at a distant second place (21%). In fact, Hibbard and Onwuegbuzie (2012), who identified 24 published prevalence rate studies, i.e., 'a line of inquiry into research methods in the social/behavioral sciences' (referring to the proportion of articles using a particular methodological approach; Alise & Teddlie, 2010, p. 104), documented that the prevalence of mixed research articles in the field of education ranged from 6% (Hutchinson & Lovell, 2004) to 39% (Collins, Onwuegbuzie, & Jiao, 2007). Table 1 documents the 12 prevalence rates from the 11 prevalence studies related to the field of education. Across these rates, the mean prevalence rate was 21.0 (SD = 10.38), which is much less than the 47% cited above for the health and medical field. Thus, strategies are needed to increase the conduct of mixed research by mixed researchers representing the field of education. This is the goal of the remainder of this editorial.

Helping to increase mixed research in the field of education

I believe that the most effective way of increasing the number of mixed research studies in the field of education is for as many mixed researchers as possible to advance further the field of mixed research as representing a distinct and credible methodological tradition. However, it is not enough for mixed researchers to exist in an epistemological space that lies somewhere between the quantitative and qualitative epistemological spaces. Rather, mixed researchers should strive for what David Pearson (University of California, Berkeley) referred to as the *radical middle* (Pearson, 1996; Pearson & Johnson, 1978). Being in the *radical middle* means moving away from holding extreme positions – that is,

[2] http://www.aera.net/SIG158/MixedMethodsResearchSIG158/tabid/12201/Default.aspx

[3] http://www.eval.org/aboutus/organization/tigs.asp

Table 1: Prevalence rates of mixed research studies across education disciplines by author(s)

Author(s)	Years/source studied	Field/discipline	Prevalence rate (%)
Ross and Onwuegbuzie (2012)	2002–2006	Mathematics education	31
Lopez-Fernandez and Molina-Azorin (2011)	2005–2010	Interdisciplinary education	9.2
Ivankova and Kawamura (2010)*	2000–2008	Education	21.2/15.0[a]
Alise and Teddlie (2010)	Journal citation reports (2005)	Education	24
Ross and Onwuegbuzie (2010)	1999–2008	Mathematics education	33
Truscott et al. (2010)		Education	14
Hart, Smith, Swars, and Smith (2009)	1995–2005	Mathematics education	29
Collins, Onwuegbuzie, and Jiao (2007)*	All years – 2006	Education	39
Collins, Onwuegbuzie, and Sutton (2007)	2000–2005	Special education	11.5
Hutchinson and Lovell (2004)	1996–2000	Higher education	6
Niglas (2004)		Education	19

*These prevalence rates represented a percentage of the total number of mixed research articles identified, as opposed to being a percentage of all empirical (i.e., quantitative, qualitative, and mixed research) articles found. [a]The two numbers before and after the slash represent the prevalence rate for empirical studies and the prevalence rate for methodological discussions, respectively. This table was adapted from Hibbard and Onwuegbuzie (2012); reprinted with kind permission of Susan T. Hibbard and Anthony J. Onwuegbuzie

moving away from being purists, who 'restrict themselves exclusively either to quantitative or to qualitative research methods' and who tend to focus on the (perceived) differences between the quantitative and qualitative traditions rather than on the similarities (Onwuegbuzie & Leech, 2005a, p. 375). Instead, I advocate that mixed researchers move toward a radical, thoughtful, and empathetic middle by adopting 'a more dynamic and situated view of language' (Gutiérez, Baquedano-López, & Turner, 1997, p. 372) in research, optimally leading to the use of a 'bilingual nomenclature' (Teddlie & Tashakkori, 2003, p. 12) – consistent with Kuhn's (1996) contention that using negotiated language can prevent a 'breakdown in communication' (pp. 200–201), thereby promoting commensurability.

Moving toward the *radical middle* represents what Gutiérez et al. (1997) referred to as a first step toward constructing the 'third space' (p. 372) where the quantitative and qualitative research traditions intersect, 'creating the potential for authentic interaction' (p. 372) and meaning making to occur. This third space represents a [new] 'sociocultural terrain' (Gutiérez et al., 1997, p. 372) wherein a space for change in what counts as meaning and meaning making is constructed. To achieve this third space, a new methodological orientation must come to the fore, namely, the *radical middle*. Indeed, the *radical middle* that I am proposing is not a passive and comfortable middle space wherein the *status quo* among quantitative and qualitative epistemologies is maintained, but rather a new theoretical and methodological space in which a socially just and productive coexistence among all research traditions is promoted actively, and in which mixed research is consciously local, dynamic, interactive, situated, contingent, fluid, strategic, and generative. I believe that conducting research in the *radical middle* will represent an important first step in conceptualizing, constructing, and maintaining new and different communities of practice or intellectual communities who engage in educational research, as advocated by Collins, Onwuegbuzie, and Johnson (2012a).

Further, moving toward the *radical middle* involves problematizing what is commonly referred to as the *paradigm wars*, in particular, by pointing out that adopting a purist stance (i.e., holding the belief that either the quantitative research tradition or the qualitative research tradition is the only appropriate tradition) represents a positivistic and (ontologically) reductionistic mental model that unjustifiably promotes the notion that a single reality exists with respect to research methodology in general and the conduct of research in particular. As such, I

challenge mixed researchers in the *radical middle* to promote the idea that regardless of research tradition (i.e., quantitative or qualitative), researchers should adopt a *constructivist view to methodology* wherein multiple, contradictory, but equally valid methodologies can exist for studying the same phenomenon (i.e., multiple realities). Simply put, mixed researchers in the *radical middle* should advance the idea that *good research is good research, whether it stems from the quantitative, qualitative, or mixed research tradition, as long as meaning ensues that represents interpretive consistency* (cf. Collins & Onwuegbuzie, in press; Collins, Onwuegbuzie, & Jiao, 2006, 2007), which denotes the degree of consistency between the methods used and the researcher's inferences and generalizations.[4] To motivate mixed researchers to operate in the *radical middle* and, ultimately, in the third space, I will debunk three of the most prevalent myths that have been perpetuated by some purists for a long time. These sets of myths are interrelated and interdependent.

Myth 1: The paradigm wars still prevail

The *radical middle* that I am proposing represents a definitive move away from oppositional discourse underpinning the so-called *paradigm wars* that has divided the research community over the last century or more. Several authors still claim the existence of paradigm wars. For example, Denzin (2010) stated the following:

> Since the 1980s there have been at least three paradigm wars: The postpositivist war against positivism (1970–1990); the wars between competing postpositivist, constructivist, and critical theory paradigms (1990–2005); and the current war between evidence-based methodologists and the mixed methods, interpretive, and critical theory schools (2005 to present). Each war has turned on a questioning of paradigm assumptions. Each war has reconfigured the relationship between paradigm, methodology epistemology, and ethics. (p. 421)

First and foremost, even if it could be argued that paradigm wars occurred during the 1980s – wherein 'There were two warring paradigm camps, the postpositivists (QUANS) and the constuctivists (QUALS); the differences between them could not be erased' (Denzin, 2010, p. 421) – I seriously question that paradigm wars currently prevail, let alone prevail with the same level of intensity. Indeed, over the last 18 years of teaching quantitative, qualitative, and mixed research courses, every one of my students has expressed disbelief when I have informed them that some authors claim the existence of paradigm wars. Indeed, among the hundreds of doctoral students that I have taught over the years – who represent the most naïve researchers – virtually every one of them has acknowledged the credibility and utility of all three research traditions (i.e., quantitative, qualitative, and mixed). Moreover, since the 1980s, the lines between quantitative and qualitative methods have become too blurred to justify the existence of a paradigm war. Yes, I concede that purists still exist who hold an extreme position regarding epistemology, ontology, axiology, and methodology, and I and my colleagues have discussed this elsewhere (e.g., Johnson & Onwuegbuzie, 2004; Onwuegbuzie, 2002, Onwuegbuzie & Leech, 2005a). However, based on the reduction in the number of works in which the incompatibility thesis ('which posits that qualitative and quantitative research paradigms, including their associated methods, cannot and should not be mixed'; Johnson & Onwuegbuzie, 2004, p. 14; cf. Howe, 1988) is advanced, it appears the number of purists is too small to justify claims of a paradigm war. In any case, how can there be paradigm wars

[4] Onwuegbuzie, Slate, Leech, and Collins (2009) have identified five major types of generalizations that researchers can make, as follows: (a) *External (statistical) generalizations* [i.e., making generalizations, inferences, or predictions on data obtained from a representative statistical (i.e., optimally random) sample to the *population* from which the sample was drawn]; (b) *internal (statistical) generalizations* [i.e., making generalizations, inferences, or predictions on data obtained from one or more representative or elite participants (e.g., key informants, politically important cases, sub-sample members)]; (c) *analytic generalizations* (i.e., 'applied to wider theory on the basis of how selected cases "fit" with general constructs'; Curtis, Gesler, Smith, & Washburn, 2000, p. 1002); (d) *case-to-case transfer* (i.e., making generalizations or inferences from one case to another (similar) case (Firestone, 1993; Kennedy, 1979; Miles & Huberman, 1994); and (e) *naturalistic generalizations* [i.e., the readers of the article make generalizations entirely, or at least in part, from their personal or vicarious experiences (Stake, 2005), such that meanings arise from personal experience, and are adapted and reified by repeated encounter (Stake, 1980; Stake & Trumbull, 1982)].

when 'paradigms are social constructions, historically and culturally embedded discourse practices, and therefore neither inviolate nor fixed' (Greene & Hall, 2010, p. 121)?

Perhaps the greatest evidence of how blurred the lines between qualitative and quantitative research traditions are can be seen from the evolution of computer-assisted data analysis software programs. For example, many computer-assisted qualitative data analysis software programs (CAQDAS; e.g., QDA Miner, NVivo, ATLAS-ti, HyperRESEARCH, MAXQDA) not only enable qualitative data (e.g., codes, nodes) to be exported to quantitative (i.e., statistical) software programs (e.g., Excel, SPSS, SAS, SIMSTAT) that can be analyzed statistically (i.e., quantizing; Miles & Huberman, 1994; Sandelowski, Voils, & Knafl, 2009; Tashakkori & Teddlie, 1998) but these software programs, at the very least, allow the computation of descriptive statistics and graphics. The software program QDA Miner even allows the analyst to conduct multivariate analyses such as correspondence analysis (cf. Provalis Research, 2011), which is an exploratory technique involving factoring or clustering categorical variables and mapping them in a property space that visually depicts their associations in multiple dimensions (Michailidis, 2007). Conversely, quantitative data can be exported from statistical software programs (e.g., Excel) to CAQDAS (e.g., QDA Miner, NVivo, ATLAS-ti, HyperRESEARCH, MAXQDA). Further, software developers who have had a very long tradition of developing statistical software programs (e.g., SPSS, SAS) are now developing text analysis software programs (e.g., SPSS text analytics for surveys, SAS sentiment analysis, SAS text miner, SAS text analytics). Thus, software program developers are leading the way in blurring the lines and making nonsensical the claims about the existence of paradigm wars and, in essence, refuting the *incompatibility thesis* (cf. Howe, 1988), in favor of the *compatibility thesis* that 'allows researchers to mix and match design components that offer the best chance of answering their specific research questions' (Johnson & Onwuegbuzie, 2004, p. 15).

In any case, as someone who has collected qualitative and quantitative data in several war zones over the last three decades (e.g., Union of Soviet Socialist Republics [USSR] in 1983 during the Cold War era; South Africa, a few months after the end of the apartheid regime and the establishment of a multi-racial democracy era that began in 1994; Gaza and the West Bank during the second Intifida [i.e., uprising]), and in an era where methodological eclecticism is rife, I am very concerned with the use of the phrases *paradigm wars* and *paradigm war* because I believe that the word *war* represents a word that is overly sensationalistic, and promotes an antagonistic-driven (i.e., *Straw Person*) context surrounding the discussion. Further, for me, the word *war* represents divisive language that connotes *domination* and implies that there must be a winner and a loser. Why does this have to be the case? Why does one research tradition have to dominate the other research tradition? Why can't researchers belonging to *both* quantitative and qualitative traditions *win* every time they conduct studies that enhance *meaning*? Why can't both sets of researchers co-exist in the third space? As surmised by Greene (2007), 'The point is to see not who wins, but what can be learned from the other' (p. 27). Further, as noted by Miles and Huberman (1984), 'epistemological purity doesn't get research done' (p. 21). Moreover, I view the word *war* as denoting a word that can be linked to *masculinity*. As contended by Hutchings (2008):

> the link between masculinity and war does not depend on the substantive meanings of either *masculinity* or *war*, or on a causal or constitutive relation between the two; rather, masculinity is linked to war because the formal, relational properties of masculinity provide a framework through which war can be rendered both intelligible and acceptable as a social practice and institution. (p. 305)

Part of being a mixed researcher in the *radical middle* who advocates for social justice includes rejecting unfounded attacks launched on mixed researchers. As noted by Greene (2007), 'A serious engagement with difference requires the rejection of old myths [and] stereotyped images' (p. 29). Also, Lee's (2003) statement about race and ethnicity in educational research also is pertinent for the cultural group of mixed researchers. According to Lee (2003), it is important that we:

> resist simplistic assumptions about the meaning of group membership and develop more nuanced and complex research agenda that work from a basic assumption that human beings always have agency,

> always have resources, and make meaning of their experience in varied ways. (p. 4)

Further, Teddlie and Tashakkori (2012) warned that 'MMR advocates must be diligent and persistent in their defense of the compatibility thesis' (p. 780). Thus, I also challenge mixed researchers in the *radical middle* to criticize use of the W word *war*, and, instead, promote use of *D* words such as *disagreement*, *debate*, *dissonance*, *difference*, *divergence*, *dialectic*, and, above all, *dialogue*. However, the *D* word that should not be stated or implied is *deficit*.

Myth 2: Dichotomies prevail

Purists representing both the quantitative tradition and qualitative tradition promote dichotomies by accentuating traditional dualisms such as the following: rationalism versus empiricism, realism versus antirealism, free will versus determinism, platonic appearance versus reality, facts versus values, subjectivism versus objectivism, foundational versus antifoundational, hard versus soft, impersonal versus personal, deductive reasoning versus inductive reasoning, rigor versus intuition, generalization versus uniqueness, rationalism versus naturalism, reductionistic versus holistic, causal versus acausal, macro versus micro, correspondence versus coherence, facts versus opinions, and numbers versus words (Johnson & Onwuegbuzie, 2004; Onwuegbuzie, 2002). Moving toward the *radical middle* means the promotion of synechism, which represents an antidualistic stance wherein these dichotomies are seen as being false and binaries are replaced with continua (Johnson & Gray, 2010) – what Newman and Benz (1998) referred to as *interactive continua*.

However, the most problematic dichotomy advanced by purists is the quantitative paradigm versus qualitative paradigm dichotomy. Yet, as noted by Schwandt (2000):

> In the view of many, myself, and many of my students included, it is highly questionable whether such a distinction [between qualitative inquiry and quantitative inquiry] is any longer meaningful for helping us understand the purpose and means of human inquiry … a*ll* research is interpretive, and we face a multiplicity of methods that are suitable for different kinds of understandings. So the traditional means of coming to grips with one's identity as a researcher by aligning oneself with a particular set of methods (or being defined in one's department as a student of 'qualitative' or 'quantitative' methods) is no longer very useful. If we are to go forward, we need to get rid of that distinction. [Emphasis in original] (p. 210)

Similarly, Onwuegbuzie and Leech (2005b), in an article entitled, 'Taking the "Q" out of research: Teaching research methodology courses without the divide between quantitative and qualitative paradigms,' advocated that 'the terms "quantitative" and "qualitative" be eliminated from research textbooks as much as possible' (p. 276). Moreover, as stated by Greene and Hall (2010):

> To use the qualitative and quantitative labels for paradigms is to reify and essentialize them and thereby disregard their constructed nature and discount the diverse histories and social locations of different kinds of qualitative and quantitative inquiry. (pp. 124 and 125)

Consistent with Greene and Hall's (2010) assertion, Biesta (2010) declared that the terms *quantitative* and *qualitative* refer to kinds of data and not to epistemologies, ontologies, methodologies, and designs that are associated with different research frameworks. Similarly, Greene (2007) stated that:

> The quantitative and qualitative labels make it too easy to focus on designs, methods, and data alone. They make it too easy to position the conversation at a technical level only, rather than at a level that encompasses issues related to the nature of knowledge, different ways of seeing and knowing, and varied purposes for social inquiry. (p. 30)

Thus, I also challenge mixed researchers in the *radical middle* not only to dismiss the numerous false dichotomies that are advanced by purists but to point out the similarities between the qualitative and quantitative traditions such as those outlined in Table 2.

Myth 3: Paradigm-deficit thinking

Unfortunately, there are still some authors who continue the practice of pointing out what they believe are the weaknesses of mixed research and/or mixed researchers in what I assume to be an attempt to demonstrate that their tradition (e.g., qualitative) is *always* a superior methodology in contrast to mixed research. I call this *paradigm-deficit thinking*. For example, Yanchar and Williams (2006) made the following unsubstantiated, provocative claims about mixed research: (a) mixed research 'is a sort of fallback position that requires little, if any, theoretical

commitment (at least at the level of method)' (p. 3); (b) mixed researchers have 'little regard for challenging issues pertaining to the nature of reality, knowledge, the good, and so on' (p. 3); (c) mixed researchers 'fail to take seriously the inescapable assumptions and values that accompany the use of method and the pursuit of practically useful results' (p. 3); (d) mixed researchers fail 'to adequately acknowledge that questions, methods, and results will nonetheless be informed by a superordinate paradigm, or at least an implicit framework of assumptions' (p. 3); and (e) because many mixed researchers contend that 'the logic of justification (an important aspect of epistemology) does not dictate what specific data collection and data analytical methods researchers must use' (Johnson & Onwuegbuzie, 2004, p. 15), mixed researchers apparently must not have a philosophical stance and mixed researchers must believe that 'the historical and philosophical context of methods would still be irrelevant to practicing researchers, who would need only match methods to questions in a way that seems appropriate' (p. 3). Lincoln (2009) – a giant in the field of qualitative research and whose book, *Naturalistic Inquiry*

Table 2: List of analogous processes in quantitative and qualitative research

Analytical process	Application to quantitative research	Application to qualitative research
Coding	Inductive coding, deductive coding, abductive coding, interpretive coding, open coding, axial coding, or selective coding of numeric data used in numeric codes	Inductive coding, deductive coding, abductive coding, interpretive coding, open coding, axial coding, or selective coding of textual/visual data
Assess consistency of findings	Computation and interpretation of score reliability coefficients; use of internal replication (e.g., bootstrap, jackknife, cross-validation)	Assessment of data saturation, informational redundancy, and/or theoretical saturation (i.e., no new or relevant information seems to emerge pertaining to a category, and the category development is well established and validated; Flick, 1998; Lincoln & Guba, 1985; Morse, 1995; Strauss & Corbin, 1990); triangulation of data: data triangulation (i.e., use of a variety of sources in a study), investigator triangulation (i.e., use of several different researchers), theory triangulation (i.e., use of multiple perspectives and theories to interpret the results of a study), and methodological triangulation (i.e., use of multiple methods to study a research problem)
Comparing findings across subgroups, groups, settings, or times	Obtaining external replication	Assessment of transferability by examining the degree to which qualitative findings can be generalized or transferred to other contexts or settings; assessment of naturalistic generalization wherein the readers make generalizations entirely, or at least in part, from their personal or vicarious experiences (Stake & Trumbull, 1982)
Analysis of one case at a time	Use of analyses such as single-subject analysis, time series analysis, or profile analysis to analyze data from one participant at a time	Use of within-case analyses (cf. Miles & Huberman, 1994)
Analysis of time	Analysis of patterns over time using techniques such as time series analysis, panel data analysis, survival analysis, and proportional hazard model analysis	Mapping of events that occur over time using analytic techniques such as event listing, critical incident chart, event-state network, activity record, decision modeling flowchart, growth gradient, time-ordered matrix, time-ordered meta-matrix, time-ordered scatterplot, and composite sequence analysis (cf. Miles & Huberman, 1994)
Analysis of non-observable data	Analysis of latent variables	Analysis of perceptions, beliefs, insights, cognition, intuition, and other sensory data

Adapted from 'Toward a new era for conducting mixed analyses: The role of quantitative dominant and qualitative dominant cross-over mixed analyses', by Onwuegbuzie, Leech, and Collins (2011b, p. 371; Copyright 2011, Sage Publications)

(Lincoln & Guba, 1985), which has been cited in more than 29,000 works [utilizing Harzing's (2009) *Publish or Perish* software and Google Scholar], has been by far the most influential qualitative research book that single-handedly shaped the field of qualitative research – made similarly unfounded claims, such as the following: (a) 'What concerns me is mixing paradigms, or metaphysical models, or, worse yet, simply declaring that one's philosophical belief system associated with research and inquiry are meaningless or irrelevant, or that one has tired of the discussion and withdraws from it, under the guise of being "pragmatic"' (p. 7); (b) 'It is not beyond the realm of possibility that some MM proponents, arguing as they do that philosophies, paradigms, and metaphysics do not matter, are part of a larger group seeking to surveil and contain interpretivist research' (p. 7); (c) 'The problem, as I see it, is that the pragmatism claimed for some MM theorists rests at the enacted level only' (p. 7); (d) 'The mixed methods (MM) pragmatists tell us nothing about their ontology or epistemology or axiological position' (p. 7); and (e) 'These questions need to be addressed. It's not enough to claim pragmatism as a stance. What does that mean in terms of researcher assumptions? What does that mean for how we *read* the research findings? For how we use knowledge to formulate policy? For how we serve the means and ends of social justice?' [Emphasis in original] (p. 7).

I do not have any problem with aspects of mixed research being criticized. In fact, I believe that criticism is good, as long as it is based on research evidence – not simply unsubstantiated opinion. For example, Yanchar and Williams (2006) did not provide a single piece of evidence for their statement that mixed researchers have 'little regard for challenging issues pertaining to the nature of reality, knowledge, the good, and so on' (p. 3). Nor did Lincoln (2009) provide any evidence for her statement that 'some MM proponents, arguing as they do that philosophies, paradigms, and metaphysics do not matter' (p. 7). Indeed, I would argue that the opposite of these statements is closer to reality. As noted by Mertens (2012), 'The MM community is awash in discussions about philosophical frameworks or paradigms that provide guidance for MMs approaches' (p. 255). Interestingly, to date, at least 13 philosophical stances associated with mixed research have been outlined (Onwuegbuzie, Collins, & Leech, in press), with the most popularized stances including pragmatism in its various forms (i.e., pragmatism-of-the-middle, pragmatism-of-the-right, pragmatism-of-the-left, dialectal pragmatism; cf. Biesta, 2010; Johnson & Onwuegbuzie, 2004; Maxcy, 2003; Putnam, 2002; Rescher, 2000; Rorty, 1991), transformative–emancipatory stance (Mertens, 2003, 2007, 2010), and dialetic stances in some form (e.g., dialectical pluralism; Johnson, 2012a); with the majority of these stances being developed many years before Yanchar and Williams's (2006) and Lincoln's (2009) articles. (For a review of 12 of these philosophical stances, I refer you to Onwuegbuzie, Johnson, & Collins, 2009.) Further, Teddlie and Tashakkori (2010) presented a typology in which many of these philosophical beliefs were sub-divided into one of the following six conceptual stances associated with mixed research: a paradigmatic, substantive theory, complementary strengths, dialectic, and alternative paradigm. Thus, I think it is very difficult to justify any claims that mixed researchers have not paid (sufficient) attention to the issue of philosophical assumptions and stances underlying mixed research, although I recognize there is always room for growth.

As mentioned earlier, Lincoln (2009) claimed that some mixed researchers are 'part of a larger group seeking to surveil and contain interpretivist research' (p. 7). Yet, no data were provided to support this serious charge. Over the years, my co-guest editors of this special issue (Kathy Collins, Alicia O'Cathain, Rebecca Frels – to whom I am most grateful for their excellent work on this special issue) and I, among us, have had the pleasure of meeting and interacting with hundreds of researchers who conduct mixed research, many of whom would acknowledge belonging to the mixed research community. Also, as part of our research agenda, we have interviewed formally numerous mixed researchers (e.g., Frels, Onwuegbuzie, Leech, & Collins, 2012; Onwuegbuzie, Frels, Leech, & Collins, 2011). Yet, we have never heard anyone declare (or read any written statement for that matter) that interpretivist research should be contained. In fact, we have often heard statements to the contrary; with many mixed researchers expressing frustration that the word count/page limit of most journals *prevents*

them from maximally documenting their interpretivist findings. I would very much like to know who Lincoln (2009) had in mind when making this statement because I have yet to hear such a paradigm-deficit view uttered by a mixed researcher.

Other statements with which I take issue as a mixed researcher operating in the *radical middle* were made by Norman Denzin (2010), another giant in the field of qualitative research. In particular, he stated the following:

> With few exceptions, the mixed methods discourse has been shaped by a community of postpositivist scholars who have moved back and forth between quantitative and qualitative research frameworks. These scholars have found utility in ethnographic, interview, case study, narrative, and biographical methodologies. They have sought to bring or combine these methods, sometimes simultaneously, sometimes sequentially, in the same or a series of studies, inquiry often framed by the use of quantitative, experimental, or survey methods (Morse, 2003, p. 190). Seldom have these scholars been trained in, or identified with, qualitative methodologies. Unlike the poaching of animals, there is nothing illegal about methodological poaching, but it does have some negative consequences.
>
> Persons who are less familiar with the rich traditions of qualitative inquiry are telling others with the same lack of experience how to do qualitative work … (p. 420)

The labeling of mixed researchers as *postpositivist scholars* is disturbing, especially when no evidence of this is provided. But what is even more disturbing are the statements that 'Seldom have these scholars been trained in, or identified with, qualitative methodologies' and 'Persons who are less familiar with the rich traditions of qualitative inquiry are telling others with the same lack of experience how to do qualitative work.' Again, where is the evidence for these sweeping generalizations? Also, do these generalizations stem beyond the West; to mixed researchers all over the world? And, I thought that a goal of qualitative research typically is to avoid making external statistical generalizations and treating people as representing a monolithic group. Further, based on this statement, what should I tell my students who enroll in my qualitative research course on the first day of class; that in taking my qualitative research course, they will be victims of 'the blind leading the blind' phenomenon? And, what do I tell my doctoral students in general when they read such unfounded provocative language? Moreover, I know numerous mixed researchers who have not only had training in and identify with qualitative methodologies but also are very qualified in teaching qualitative research – for instance, Janice Morse, Sharlene Hesse-Biber, Donna Mertens, Margarete Sandelowski, Dawn Freshwater, Tessa Muncey, and Joseph Maxwell – to name just a few. These scholars (and numerous others all over the world) not only are leaders in the mixed research community but also are leaders in the qualitative research community (e.g., having written qualitative research textbooks, served/serving as editors/associate editors of qualitative-based journals, teach qualitative research courses). As another example, the guest co-editors of the current special issue have been trained in qualitative methodologies. For instance, Kathy Collins, as part of her PhD degree, has an academic minor in qualitative analysis from the University of California Santa Barbara. Moreover, she is co-authoring as second author (with Sharlene Hesse-Biber) the third edition of qualitative textbook entitled: 'The practice of qualitative research' (Hesse-Biber & Collins, forthcoming). Rebecca Frels completed a qualitative research dissertation that exceeded 400 pages. I have a doctorate degree in educational research from the University of South Carolina wherein I was trained extensively in both quantitative and qualitative methodologies[5] that are pertinent to the field of education; hence the name of the degree. And, just because many mixed researchers embrace quantitative research methods does

[5] In addition to being hired as the official qualitative research instructor for the college of education while I worked at the University of South Florida, I have reviewed numerous qualitative research articles for qualitative-based journals such as the *International Journal of Qualitative Methods* and *The Qualitative Report*, as well as for journals that publish qualitative research such as the *American Educational Research Journal*. Also, I have served as program chair of the qualitative research section of the American Educational Research Association (AERA) division D. Last year, alongside Nancy Leech (University of Colorado Denver), I conducted a webinar, on the qualitative software program, NVivo (Version 9), which was broadcast worldwide.

not automatically make them postpositivists. In the same way, just because Lincoln and Guba (1985) stated that, 'Indeed, there are many opportunities for the naturalistic investigator to utilize quantitative data – probably more than are appreciated' (pp. 198 and 199) does not make *them* postpositivists. As I (and Nancy Leech) have noted previously (Leech & Onwuegbuzie, 2010):

> As an example, both of us not only see ourselves as mixed researchers, we also simultaneously view ourselves as qualitative researchers *and* quantitative researchers. In fact, we routinely teach beginning, intermediate, and advanced methodology courses in all three areas (i.e., qualitative, quantitative, and mixed research courses), write qualitative, quantitative, and mixed research articles that are published in a variety of journals that represent all three areas, and serve on editorial boards and review articles submitted to qualitative, quantitative, and mixed research journals for possible publication. Over the years, we have met numerous mixed researchers like us who wear all three methodological hats. Moreover, as noted by Onwuegbuzie (2010), mixed researchers embrace multiple paradigms such as post-positivism, constructivism, participatory research, and critical theory in its various forms … It needs to be made clear that mixed researchers are not the competitors or adversaries of qualitative researchers and quantitative researchers: We are partners who share a common goal – to increase our knowledge base by conducting trustworthy research that is meaningful. (p. 78)

And who decides whether a researcher has a (dominant) postpositivist research stance? In the spirit of interpretivist research, shouldn't critics of mixed research listen to the voices of the mixed researchers themselves with regard to their philosophical stance? Also, what standard is being used to classify people as being 'less familiar with the rich traditions of qualitative inquiry'? Is there a single reality here? In any case, what is to be gained by exhibiting such paradigm-deficit thinking? As a scholar of color, who has had to deal with racism in many aspects of my life, especially in higher education[6], I am particularly aware of the destructive nature of *name calling* and the limitations imposed by stereotyping. In fact, it is likely that making such provocative and unfounded claims will shut down the much needed dialogue among researchers representing *all* three traditions. This name calling reminds me of how the so-called *Birther* movement treated President Barack Obama, claiming that he does not belong to their *club*; in this case, the club being the United States. Specifically, the claim is that he is not a natural-born citizen of the United States and, as such, under article two of the US Constitution, is ineligible to be President of the United States – despite evidence provided via President Obama's pre-election release of his official Hawaiian birth certificate in 2008 (Politifact.com, 2009); verification of the original birth certificate by the Hawaii Department of Health (Reyes, 2008); birth announcements published in two Hawaii newspapers (Henig & Miller, 2008), and the April 2011 release of a certified copy of Obama's original certificate of live birth (i.e., nicknamed the *long-form birth certificate*). And just as I would call upon critics of President Obama to criticize his policies and not his credentials, I am calling on authors representing all traditions to refrain from criticizing the credentials and competence of those representing other traditions just because they happen to disagree with their research philosophical assumptions and stances and, instead, point out weaknesses in their philosophies, ideas, methodologies, models, procedures, and the like; but criticize in a constructive and respectful manner that promotes dialogue. And even if Denzin (2010) is correct in his claim that the vast majority of mixed researchers represent postpositivist researchers, this can be offset by including interpretivist researchers on the mixed research team (for a discussion of guiding principles that may be useful for diverse mixed research teams, see Collins, Onwuegbuzie, & Johnson, 2012b; Curry et al., 2012).

Another disturbing statement made by Denzin (2010) was 'Guiding the methodological conversation along postpositivist lines leaves little space for issues connected to empowerment, social justice, and a politics of hope' (p. 420). I know of numerous mixed researchers who do not merely talk about social justice but actually take steps to make a difference in this area. For example, mixed researchers like Donna Mertens, Thomas Christ, Kathy Collins, Rebecca Frels, and I have taught qualitative and mixed research courses in Africa, South America, and/or the Middle East; to name a few areas of the world. Moreover, having returned, within the last few weeks, from teaching qualitative, quantitative, and mixed research courses in: (a) Nairobi, Kenya to numerous

[6] The racism that I have experienced includes a violation of the 13th Amendment to the US Constitution.

scholars from the field of health sciences and (b) (with Rebecca Frels) in Dar es Salaam, Tanzania to senior professors involved in teaching research methodology courses for PhD candidates representing 15 African nations (e.g., Ethiopia, Kenya, Mozambique, Namibia, Rwanda, Sudan, South Sudan, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe), I can state with confidence that many researchers in Africa are using mixed research techniques to conduct social justice research.[7]

Thus, as a mixed researcher in the *radical middle*, I call for *all* authors – whether representing qualitative, quantitative, and mixed research traditions – to refrain from paradigm-deficit thinking. And when researchers feel the need to criticize researchers representing other traditions, they should be careful to provide data that support their contentions and to make every effort not to over-generalize. One way for mixed researchers in the *radical middle* to make it less justifiable for critics to focus on what mixed researchers are unable to do is to showcase what mixed researchers actually *can do* and *have accomplished* by adopting a constructivist view to methodology, as well as a constructivist view of epistemological spaces. To this end, in the following sections, I will outline five themes – represented by the acronym *MIXED* – for promoting the *radical middle*.

Putting the mixed back into quantitative and qualitative research

Being in the *radical middle* means that *MIXED* plays a vital role in research, not only because it connotes mixing or combining quantitative and qualitative approaches, but its acronym appropriately describes the role of mixed researchers who operate in the *radical middle*. In what follows, a metaphor associated with each letter in the word mixed will be presented.

M: Methodological thinker

According to Greene (2006, 2008), the development of a methodology (i.e., qualitative, quantitative, and mixed research methodology) in the social and behavioral sciences necessitates consideration of four interrelated but conceptually distinct domains: (a) philosophical assumptions and stances (i.e., core philosophical or epistemological assumptions of the methodology); (b) inquiry logics (i.e., situates the researcher in the study such that the phenomenon of interest is observed, documented, and understood or explained in defensible ways); (c) guidelines for research practice [i.e., provide specific strategies for inquiry practice (e.g., research design, sampling scheme, data collection, data analysis)]; and (d) sociopolitical commitments (i.e., specification and justification of how the research is located in society). Each of these four domains is described further in Table 3. As a set, these four domains provide a cohesive and interactive framework and an array of practical guidelines for a methodology. Although these domains have been more fully developed with respect to both the quantitative and qualitative research paradigms,

[7] And, a few years ago, when I was held at gunpoint by two Israeli soldiers who were brandishing AK-47s at the Gaza/Israel border as I smuggled out of Gaza, quantitative and qualitative data for the purpose of investigating the effects of the Israeli–Palestinian conflict on the psychological health of Gaza children and adolescents (see, for, e.g., Elbedour, Onwuegbuzie, Ghannam, Whitcome, & Abu Hein, 2007); or when I and my co-researcher broke a curfew in Ramallah (while Yasser Arafat was confined in his Ramallah compound) to collect quantitative and qualitative data, resulting in ours being the only civilian vehicle moving in the street in the whole city, and being one military tank away from almost imminent death, the last thing on my mind was that I have 'little space for issues connected to empowerment, social justice, and a politics of hope'. In fact, as we drove around Ramallah during the curfew for more than 1 hour, expecting to see a tank, whose driver might mistake us as aggressors and shoot at us, I remember declaring to my co-researcher, 'If we die tonight, at least we will do so conducting research for the sake of social justice.' How we were not killed that night, I will never know. In fact, when I awoke earlier that morning, I did not expect to survive the day. We have also conducted similar studies in Israel in which we investigated the psychological health of Israeli children and adolescents. Ultimately, my co-researchers and I believe that regardless of the side of the Israeli–Palestinian conflict on which a person might be, it is difficult to deny that the children and adolescents on both sides of the conflict are victims and deserve social justice. This is why we are conducting this series of studies. Believing that publishing articles in academic/scholarly journals represents only one step in the quest for social justice, we sent this and other articles in this area to the editor of the leading Israeli newspaper, the Haaretz, as well as to peace activist journalists and officials of various peace organizations worldwide.

Table 3: Greene's (2006) four interrelated but conceptually distinct domains that drive the development of a methodology

Domain	Description
Philosophical assumptions and stances	This domain refers to the core philosophical or epistemological assumptions of the methodology. This domain also includes stances and assumptions regarding issues such as single versus multiple-constructed realities, subjectivity versus objectivity, time-free versus time-dependent generalizations, context-free versus context-dependent generalizations, the role of values in research, and the relationship between the knower and the known. This domain 'guides the inquirer's gaze to look at particular things in particular ways and offers appropriate philosophical and theoretical justification for this way of seeing, observing, and interpreting' (Greene, 2006, p. 93)
Inquiry logics	This domain identifies appropriate research objectives, purposes, and questions; broad research designs and procedures; appropriate sampling designs and logic; criteria of quality for methodology and inferences; and standards for reporting. It discloses how the researcher is situated in the study, and involves identifying logics of justification for each of these research strategies. Each individual component must fit and operate together to enable justifiable data collection, analysis, and interpretation for a given study. It guides the researcher's 'gaze' such that 'what is important to see is observed, recorded, and understood or explained in defensible ways'
Guidelines for research practice	This domain provides specific strategies for inquiry practice. Here, the first two domains are converted into specific research procedures. Thus, guidelines for research practice represent the *how to* of social science investigations, which includes procedures pertaining to research designs, sampling schemes, data collection, and data analysis that are aligned with the general parameters stemming from Domain 2. Domain 3 also includes specific procedures for collecting (e.g., surveys, interviews), analyzing (e.g., multiple regression, method of constant comparison), interpreting, and reporting data
Sociopolitical commitments	This domain involves delineation and justification of how the research is located in society. In particular, it addresses whose interests should be served by this particular approach to social and behavioral science research, where the study is situated in society, whether the investigation contributes to collective theoretical knowledge, whether the study produces knowledge, whether it informs governmental decision makers, whether the study is situated in a protected space that is not subjected to the political dispute, and whether it is placed somewhere between competing elements that represent social critique or advocacy for particular interests and positions. It 'importantly directs the inquirer's journey toward a particular destination, as it identifies priority roles for social science in society and provides values-based rationales and meanings for the practice of social inquiry. While values are present in all four domains, they are proclaimed in Domain 4' (Greene, 2006, p. 94)

Adapted from Greene (2006). Reprinted with kind permission of the Mid-South Educational Research Association and the Editors of *Research in the Schools*

they have been developed sufficiently in mixed research to justify it being deemed as a methodology in its own right.

I really like Greene's (2007) concept of a *mixed methods way of thinking* (cf. pp. 20–30). As Greene (2007) so eloquently described:

> A mixed methods way of thinking is a stance or an orientation toward social research and evaluation that is rooted in a multiplistic mental model and that actively invites to participate in dialogue – at the large table of empirical inquiry – multiple ways of hearing, multiple ways of making sense of the social world, and multiple standpoints on what is important and to be valued and cherished. A mixed methods way of thinking rests on assumptions that there are multiple legitimate approaches to social inquiry and that any given approach to social inquiry is inevitably partial … A mixed methods way of thinking is thus generative and open, seeking richer, deeper, better understanding of important facets of our infinitely complex social world. A mixed methods way of thinking generates questions, alongside possible answers. It generates results that are both smooth and jagged, full of relative certainties alongside possibilities, and even surprises, offering some stories not yet told. (p. 20)

However, because of 'the difference between *methods* (i.e., specific strategies for implementing research) and *methodology* (i.e., broad approaches to scientific inquiry specifying how research questions should be asked and answered)' (Teddlie & Tashakkori, 2012, p. 781), and to avoid readers thinking that mixed

researchers only focus on methods, I prefer the phrase *mixed methodology way of thinking* or *mixed methodological way of thinking* rather than *mixed methods way of thinking*. In addition to what Greene (2007) stated above, a mixed methodology way of thinking means that the mixed researcher has philosophical awareness in particular and mental model awareness in general. Philosophical awareness means the researcher being cognizant of her/his epistemology, ontology, and axiology, as well as her/his belief systems with respect to the nature of knowledge, knowledge accumulation, goodness or quality criteria, values, ethics, inquirer posture, and training – as well as the role that these elements play in each mixed research study. Collins et al. (2012a) labeled this philosophical awareness as 'philosophical clarity,' which represents 'the degree that the researcher is aware of and articulates her/his philosophical proclivities in terms of philosophical assumptions and stances in relation to all components, claims, actions, and uses in a mixed research study' (p. 855).

By mental model awareness, I am referring to Greene's (2007) excellent definition:

> A mental model is the set of assumptions, understandings, predispositions, and values and beliefs with which all social inquirers approach their work. Mental models influence how we craft our work in terms of what we choose to study and how we observe and listen, what we see and hear, what we interpret as salient and important, and indeed what we learn from our empirical work. (p. 12)

As noted by Greene and Hall (2010), 'This broader and more multifaceted concept of mental model – which includes philosophical assumptions, alongside disciplinary perspectives, substantive theories, experience, values, and beliefs – works for us as a more robust frame for social inquiry than the concept of philosophical paradigm' (p. 122). Thus, being aware of one's mental model represents a mixed methodology way of thinking.

Further, assuming a mixed methodology way of thinking also means that the philosophical stance of the researcher is mapped onto each mixed research study. For example, if a mixed researcher assumes some form of pragmatist stance (cf. Biesta, 2010), then he/she likely would think pragmatically throughout the mixed research study (Greene & Hall, 2010). Alternatively, if a researcher assumes some form of dialectic stance (e.g., dialectical pluralism; Johnson, 2012a), then he/she likely would think dialectically throughout the mixed research study (Greene & Hall, 2010). Alternatively still, if a researcher assumes some form of transformative stance (e.g., transformative–emancipatory; Mertens, 2003, 2007, 2010), then he/she likely would think in a transformative way throughout the mixed research study.

Indubitably, the greatest appeal of mixed research is its ability to help researchers understand better [than can monomethod approaches] the complexity of phenomena in the social, behavioral, and health sciences, and beyond (Greene, 2007). As such, a mixed methodology way of thinking includes 'generating understandings that are broader, deeper, more inclusive, and that more centrally honor the complexity and contingency of human phenomena' (Greene, 2007, p. 21). For instance, McLafferty, Slate, and Onwuegbuzie (2010) outlined how mixed research can be used to study spiritual, ethical, and religious value issues. Whatever phenomena are studied using mixed research techniques, it is important that the researcher(s) maintain a mixed methodology way of thinking in the conceptualization, design, implementation, and dissemination phases of mixed research studies. To facilitate this thinking, I suggest that researchers in a mixed research study undergo a series of debriefings conducted by an experienced mixed researcher (or via a series of self-reflections; Hurtado, 2012), in the case of a mixed research study involving a single researcher; or by a member of the mixed research team (e.g., the most dialectic member), in the case of a study that involves multiple researchers (cf. Collins et al., 2012b; Frost, 2012). Whatever strategy is used, a mixed methodology way of thinking helps mixed researchers move toward the *radical middle*.

I: Integrative, integrated, and integral researcher

Being a mixed researcher in the *radical middle* means being a researcher who simultaneously conducts integrative, integrated, and integral research. *Integrative research* implies research that offers multiple and diverse approaches. The use of the word *integrative* connotes a centralized mode of delivery. Thus, for mixed research studies involving a single researcher, the

most effective way for a mixed researcher to become an integrative researcher is to be competent in both quantitative and qualitative research. This, in turn, can best be accomplished by having sound training in both quantitative and qualitative approaches, thereby creating a pathway for integrative research. For mixed research studies involving multiple researchers, integrative research is enhanced by incorporating a mixed research team approach wherein each researcher in the team has a minimum competency level in both qualitative and quantitative methods, coupled with expertise in one method (Shulha & Wilson, 2003; Teddlie & Tashakkori, 2003). Castro, Kellison, Boyd, and Kopak (2010) provide a methodology for conducting integrative MMR and data analyses.

In contrast, integrated research emphasizes the mixing or combining of diverse researchers and their different approaches into one research team. Indeed, *integrated* rarely would be used to characterize one researcher, but, instead, describes a team of diverse researchers. Moreover, integrated research connotes making into a whole by bringing together all the individual parts, thereby unifying the researchers on the team. Mixed researchers who promote integrated research recognize the need for, and value of, bringing diverse researchers together for the good of the field (i.e., beneficence). Integrated research may comprise integrative researchers, who serve as facilitators of the research team.

Being in the *radical middle* means promoting both integrated research and integrative research, which, in turn, can be termed as *integral research*. Indeed, integral research is both foundational and essential to integrative/integrated research. More specifically, integral research depends on the collective willingness of researchers to unite together to address the most important and most complex research questions.

Simultaneously conducting integrative, integrated, and integral research positions a mixed researcher in the third space, which 'enhances not only the generative potential of MM inquiry but also its potential to respect, appreciate, and accept variation and diversity in the substance of what is being studied' (Greene, 2007, p. 28). Figure 1 provides an example of how a mixed researcher can operate in the third space. This figure displays three dimensions that are each focused on a given set of

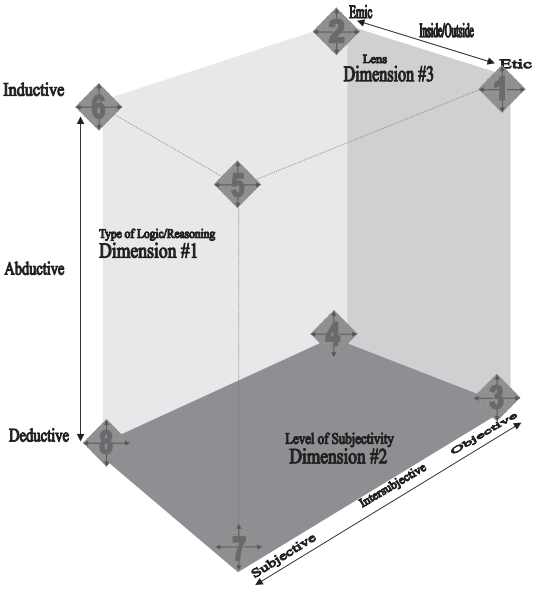

Figure 1: A three-dimensional model for categorizing and organizing cross-over mixed analyses. *Adapted from* 'Toward a new era for conducting mixed analyses: The role of quantitative dominant and qualitative dominant cross-over mixed analyses,' by Onwuegbuzie et al. (2011b, p. 369); copyright 2011, Sage Publications.

lenses, with: (a) one dimension (type of logic/reasoning) classifying the reasoning used during the mixed research process, anchored by inductive reasoning at one end of the continuum and deductive reasoning at the other end of the continuum, and the midpoint representing the place where inductive and deductive reasoning are most interactive: yielding a strong form of abductive reasoning; (b) a second dimension (level of subjectivity), anchored by subjectivity at one end of the continuum and objectivity at the other end of the continuum, and the midpoint representing the place where subjectivity and objectivity most interact: yielding a strong form of intersubjectivity; and (c) a third dimension (lens), anchored by emic perspectives at one end of the continuum and etic perspectives at the other end, with the midpoint of the continuum representing the place where *emic* and *etic* viewpoints are maximally interactive: what I call *emtic* perspectives.

A very promising and exciting way of promoting integrative, integrated, and integral research is via

Tashakkori, Teddlie, and Sines's (2012) conceptualization of mixed research methodology as a *humanistic methodology* (see also, Tashakkori & Teddlie, 2010b). In describing their concept of humanistic methodology, Tashakkori et al. (2012) state the following:

> We consider mixed methods a natural extension of the "naïve researchers" process of answering questions, more so than either of the qualitative or quantitative approaches alone (Tashakkori & Teddlie, 2010b). This humanistic image of the researcher makes room for simultaneous and/or sequential utilization of "qualitative" (emic-level, subjective, emergent, arts-based, etc.) and "quantitative" (etic-level, objective, structured, etc.) data and operations. Within such a framework, the multiplicity of worldviews does not pose a problem, since they are employed side by side in a dialectic manner (Greene, 2007; Greene & Hall, 2010), weighed against each other, or are used at different times. The human researcher does not lose this capability when taking the role of formal researcher, since mixed methodologists are free to utilize the whole spectrum of tools (from qualitative and quantitative communities/approaches) for collecting and analyzing data to answer research questions.

Interestingly, the call of Abbas Tashakkori and Charles Teddlie for humanistic methodology is consistent with how babies and toddlers learn. Specifically, they learn using both qualitative data and quantitative data drawn from the largest, the most important, and, above all, the most meaningful data set in the world; namely, the data set representing their lived experience. For example, from a very early age, they learn that having both parents in a room with them represents more people than having only one parent (i.e., frequency/quantitative data), that people talking loudly around them is different than people whispering (intensity/quantitative data), and that crying represents their best option for communication (experiential/qualitative data). It is irrelevant to babies and toddlers whether they are using quantitative or qualitative data to learn; yet, they learn relatively more during the first three years of their lives than they learn the remainder of their lives. Unfortunately, by the time they become doctoral students – and even earlier – they are given a clear message of 'the false need to pick just one side' (Greene, 2007, p. 27): either qualitative or quantitative research, which is antithetical to optimal learning. As such, I am very much looking forward to seeing this humanistic methodology, wherein 'incompatibility issues are irrelevant' (Tashakkori & Teddlie, 2010b, p. 273), developed further.

Being a mixed researcher in the *radical middle* means being vocal about the nature of research methodology courses in graduate degree programs. As I (and Nancy Leech) have stated elsewhere (e.g., Leech & Onwuegbuzie, 2010; Onwuegbuzie & Leech 2005b), I would like an elimination of the distinction between quantitative and qualitative *methods* such that core approaches and procedures can be taught in at least some research methods courses, as the need arises. Such (humanistic methodology based) courses would promote integrative, integrated, and integral research regardless of the underlying mental model.

X: Xenophilous researcher

A *xenophile* is a person who is attracted to that which is foreign. Thus, being a mixed researcher in the *radical middle* means being a xenophilous researcher. In turn, being a xenophilous researcher means keeping pace with the ever-changing world. However, nowhere has the change been more pervasive as in the area of technology. Indeed, the rapid advances in technology, especially since 1990, when the World Wide Web and Internet protocol (http) and www language (html) was created by Tim Berners-Lee, have opened up a whole world of possibilities for mixed researchers, who have at their disposal all the technological tools used by qualitative researchers and those used by quantitative researchers.

Excitingly, mixed researchers can take advantage of emerging technologies at every stage of the mixed research process (see, for e.g., Hesse-Biber & Leavy, 2008). For example, as part of the literature review process, which should occur at all phases of the (mixed) research process (i.e., research conceptualization phase, research design phase, research implementation phase, research dissemination phase), computer-mediated communication (CMC) and Web 2.0 tools can play an important role in facilitating meaning making (Onwuegbuzie & Frels, in press). Mixed researchers representing the field of education could choose from an array of library subscription databases [e.g., Education: a SAGE full-text collection (CSA Illumina); education full-text (WilsonWeb)] and Internet sources [e.g., search engines, meta-search engines; e.g., Google Scholar (i.e., www.scholar.google.com)]. As noted by Onwuegbuzie and Frels

(in press), mixed researchers also could inform their literature search via social networking forums such as the following: Friendster (circa 2002), Second Life (circa 2003), MySpace.com (circa 2003), Facebook (circa 2004), Ning (circa 2005), Bebo (circa 2005), and Orkut (circa 2008). Blogs (circa 1997) represent another source of information, as do RSS technologies (circa 1999), which allow literature reviews to be updated when new (research) works have been published. When the literature review is conducted and written by a team of two or more researchers, Web 2.0 tools such as Google Docs (circa 2005) can be used. Further, researchers can utilize bibliographic citation manager tools such as EndNote (circa 1988), Procite (circa 1999), RefWorks (circa 2001), refbase (circa 2003), Qigga (circa 2010), Mendeley (circa 2008), CiteULike (circa 2004), and Zotero (circa 2006).

At the research design phase, for example, at a click of a mouse, researchers can locate virtually any mixed research design used by previous researchers to help inform their own research designs. Researchers also have tools – some of them free (e.g., GPOWER) – to help them select an appropriate sample size for the quantitative phase(s) of their mixed research studies (i.e., appropriate statistical power) or can use listservs to identify members of special populations for the quantitative and/or qualitative phases of their mixed research studies.

At the research implementation phase, for instance, researchers can take advantage of the various web survey development tools for collecting quantitative data (and some forms of qualitative data) such as SurveyMonkey (circa 1999) and Qualtrics (circa 2002), as well as various online modes for collecting qualitative data (and some forms of quantitative data) such as Skype (circa 2003), Second Life (circa 2003), GoToMeeting (circa 2004), and Google Talk (circa 2006). Also, there are numerous software tools for conducting computer-assisted qualitative data analyses [e.g., QDA Miner, NVivo, MAXQDA, ATLAS-ti, HyperRESEARCH, XSight, Aquad, Qiqqa, Transana, Dedoose, RQDA, Compendium, Coding Analysis Toolkit (CAT), quantitative (i.e., statistical)] analyses (e.g., SPSS, SAS, Excel, R, SimStat, BMDP, GenStat, LISREL, Minitab, MLwin, Stata, Statgraphics, STATISTICA, Systat, M-PLUS, S-PLUS, SUDAAN, XLStatistics), and mixed analyses (e.g., QDA Miner, WordStat, NVivo, MAXQDA, HyperRESEARCH, Dedoose). Simply put, the possibilities are almost endless for utilizing computer hardware and computer software, as well as Web 2.0 and CMC tools. (For a framework for utilizing Web 2.0 tools for data collection and data analysis in mixed research, see Burgess & Onwuegbuzie, 2009.)

Being a xenophilous researcher who operates in the *radical middle* means not being afraid to use Web 2.0 tools with which we are unfamiliar to conduct research, however frightening this might be at the onset. For instance, once we were made aware of the potential of geographic information systems (GIS) to transform mixed research by helping mixed researchers to increase the dimensionality of their analyses and interpretations by enabling them to think spatially when conceptualizing, designing, and implementing their mixed research studies (e.g., Fielding & Cisneros-Puebla, 2009), Rebecca Frels and I decided to learn GIS as much as we could and as quickly as we could. As a first step, we flew to Georgia to take a one day course in GIS. Further, we read books on GIS (e.g., Elwood & Cope, 2009; Steinberg & Steinberg, 2006), as well as numerous research articles (e.g., Fielding & Cisneros-Puebla, 2009). Also, Rebecca's son, Jason Frels, who is an expert in GIS, mentored Rebecca and I through our GIS journey. Once we had required a basic knowledge of GIS, we decided to take our knowledge to another level by writing an article on it, which was published subsequently in the *International Journal of Multiple Research Approaches* (i.e., Frels, Frels, & Onwuegbuzie, 2011) and have used it to inform several of our studies (e.g., Frels, Onwuegbuzie, & Slate, 2010). As I (and Nancy Leech) have declared elsewhere:

> We believe that these Web 2.0 [and other] tools have great potential for taking mixed research to another level. As such, we encourage mixed researchers to become familiar with as many of these tools as possible. Indeed, the best ways for mixed researchers to learn Web 2.0 technologies are: (a) To introduce them as research tools to students in their mixed research courses; (b) to use them to conduct mixed research studies; and (c) to study environments within Web 2.0 technologies in which research questions are derived from the Web 2.0 environment (Who? Why? When? Where? How? e.g., Melissa Burgess's dissertation mixed research question: How can Web 2.0 technologies enhance literacy applications?). (Leech & Onwuegbuzie, 2010, p. 83)

E: Empowerer

An extremely important role of a mixed researcher in the *radical middle* is actively to conduct research that represents an application of Guba and Lincoln's (1989) five authenticity criteria that embody constructionist understanding, namely: (a) fairness: the extent that data incorporate participants' constructions and underlying values, as well as the extent to which each stakeholder's constructions (e.g., experiences, thoughts, perceptions, opinions, feelings) are voiced authentically in the report written by the researcher; (b) ontological authenticity: the extent that participating in the research study has increased each participant's or group's level of consciousness such that each participant is more enlightened or informed with respect to the underlying phenomenon as a result of study participation; (c) educative authenticity: the extent that each participant is conscious of constructions and values held by stakeholders outside of the participant's own group, and the extent that the study's impact fosters each participant's empathy and understanding regarding other group members; (d) catalytic authenticity: the extent that decisive actions are facilitated and stimulated by participants; and (e) tactical authenticity: the extent that participants act based on the results and subsequent understanding from a given study, thereby leading to empowerment. Of these five criteria, the criterion that has the longest-lasting impact is tactical authenticity, which leads to empowerment. It is this empowerment that mixed researchers in the *radical middle* actively should facilitate. As is the case for promoting a mixed methodology way of thinking, I recommend that researchers in a mixed research study undergo a series of debriefings conducted by an experienced mixed researcher (or via a series of self-reflections; Hurtado, 2012), in the case of a mixed research study involving a single researcher; or by a member of the mixed research team (e.g., the most dialectic member), in the case of a study that involves multiple researchers (cf. Collins et al., 2012b; Frost, 2012). I suspect that as a participant illustrates being empowered, this, in turn, will empower (further) the researcher. Rebecca Frels's dissertation provides a good example of how both the researcher (Rebecca) and participants were empowered as a result of her study (cf. Frels & Onwuegbuzie, 2012).

Over the last two decades of presenting research, my greatest moment occurred when I co-presented a research study at the *International Mixed Methods Conference* two years ago in Baltimore with a 15-year-old high school student, Kasey Mallette, and her mother Marla Mallette (Onwuegbuzie, Mallette, & Mallette, 2010), whereby Kasey presented her two mixed research studies, one which she conducted as a middle-grade student at Unity Point School, Carbondale, IL, while in the seventh grade (Mallette, 2008), and a follow-up study that she conducted the following year, while she was in the eighth grade (Mallette, 2009).[8] Marla by herself,

[8] In her first study, Kasey investigated how the way in which a stimuli is encoded affects retrieval from long-term memory among seventh- and eighth-grade students ($N = 118$), using experimental techniques, consisting of two experimental groups and one control group. Kasey collected both quantitative data and qualitative data, with her analysis including an analysis of variance of the quantitative data and a classical content analysis of the qualitative data. Her findings provided support for the importance of retrieval cues. In her follow-up study (Mallette, 2009), Kasey examined the difference between episodic memory and semantic memory among eighth-grade students as they took a field trip to Springfield, IL, to study Illinois history and government. As part of her study, Kasey developed a 12-item test on the US Constitution and an open-ended test that allowed the participants to explain the details of their field trip. Kasey used a qualitative analysis that revealed six common and basic events. Also, she conducted a dependent samples *t* test and a correlation analysis to examine the relationship between episodic and semantic memory, as well as differences as a function of gender and self-reported ability. Kasey reported an array of results, including the finding that participants' mean scores were statistically significantly higher on the semantic test than on the episodic test, with a small-to-moderate effect size. Deservedly, both of Kasey's applied psychology studies received an outstanding paper award in both the local science fair and the regional science fair. Also, her papers received the highest honor at the state of Illinois science fair. Remarkably, Kasey was able to get consultation from leading scholars in the field – Dr. Jack Snowman, Professor Emeritus at Southern Illinois University Carbondale, who consulted her on her 2008 study; and Dr. Endel Tulving, OC, FRSC, FRS, Professor Emeritus at the University of Toronto and a Visiting Professor of Psychology at Washington University, who consulted her on her 2009 study. Dr. Tulving is a Canadian neuroscientist with a specialty in episodic memory, one of his major contributions being his theory of *encoding specificity*. Also, her mother, Marla, and I provided Kasey with some mentorship during her two studies.

or Marla and I as a team, could have showcased Kasey's study at the *International Mixed Methods Conference*. However, we realized that it would be much more empowering for Kasey if she was to present her own findings at this conference. And, to my knowledge, Kasey is the youngest person not only to present at the *International Mixed Methods Conference* but at any international conference.

At the same *International Mixed Methods Conference*, I co-presented a research paper with Rebecca Frels, and her son, Jason (Frels, Frels, & Onwuegbuzie, 2010), who served as lead presenter. Jason presented on the topic of GIS, as described earlier. What was most impressive about this presentation was that Jason did not possess a graduate degree at the time.

The experiences I had presenting with Kasey and Jason, and seeing how empowered they were presenting to mixed researchers from all over the world,[9] inspired Rebecca Frels and I so much that, since then, our research philosophy has evolved into one in which we promote empowerment to the maximum degree possible for the purpose of addressing issues of social justice, namely, via what we call *critical dialectical pluralism*. As Rebecca and I outline in our forthcoming editorial entitled, "Towards a new research philosophy for addressing social justice issues: Critical dialectical pluralism 1.0," critical dialectical pluralism, which was inspired by Johnson's (2012a) dialectical pluralism, operates under the assumption that, at the macro level, social injustices are ingrained in every society. Hence, critical dialectical pluralists are committed to research that promotes and sustains an egalitarian society, aim to promote both universalistic theoretical knowledge and local practical knowledge, and promote culturally progressive research. Critical dialectical pluralism privileges worldviews that promote research that focuses directly on the lives, experiences, and perceptions of marginalized persons or groups (e.g., transformative–emancipatory stance; Mertens, 2003, 2007, 2010) and worldviews that promote research examining the relationship between societal structures (e.g., economic, political) and ideological patterns of thought that impede a person or group from identifying, confronting, and addressing unjust social systems (e.g., critical theory stance; Morrow & Brown, 1994). However, rather than the researcher presenting the findings (e.g., conferences, journal articles, books, technical reports), the researcher assumes a research-facilitator role that empowers the participants to assume the role of participant-researchers, who, in turn, either perform the findings themselves (e.g., using Web 2.0 applications; presenting at conferences) or co-perform the findings with the research-facilitator(s). This is different to other social justice-based philosophical stances, wherein the researcher – and not the participant(s) – presents the findings. As such, Rebecca and I believe that critical dialectical pluralism is extremely apt for mixed researchers in the *radical middle*. We refer readers to our forthcoming editorial for a more extensive discussion about critical dialectical pluralism.

D: Development

Another important role of a mixed researcher in the *radical middle* is actively to use mixed research techniques to develop further procedures that have already been established within either the qualitative or quantitative tradition. Examples of this include using mixed research techniques to develop: (a) literature reviews/research syntheses (e.g., Combs, Bustamante, & Onwuegbuzie, 2010; Dellinger & Leech, 2007; Gaber, 2000; Harden & Thomas, 2005, 2010; Heyvaert, Maes, & Onghena, 2011; Leech, Dellinger, Brannagan, & Tanaka, 2010; Onwuegbuzie, Collins, Leech, Dellinger, & Jiao, 2010; Onwuegbuzie & Frels, in press; Onwuegbuzie, Leech, & Collins, 2011a, 2012; Pawson, Greenhalgh, Harvey, & Walshe, 2005; Pluye, Gagnon, Griffiths, & Johnson-Lafleur, 2009; Sandelowski, Voils, & Barroso, 2006; Sandelowski, Voils, Leeman, & Crandell, 2012; Whittemore & Knafl, 2005); (b) quantitative instruments (Durham, Tan, & White, 2011; Luyt, 2012; Onwuegbuzie, Bustamante, & Nelson, 2010); (c) focus groups (Onwuegbuzie, Dickinson, Leech, & Zoran, 2010); (d) qualitative interviews (Frels & Onwuegbuzie, 2013); and (e) video data analysis (DeCuir-Gunby, Marshall,

[9] For example, Professor Nigel G. Fielding, University of Surrey, Guildford, England, a prolific author who co-authored the article on GIS that was published in the *Journal of Mixed Methods Research* (i.e., Fielding & Cisneros-Puebla, 2009), was one of the audience members who watched Jason G. Frels present a paper on GIS at the *International Mixed Methods Conference*.

& McCulloch, 2012; Jacobs, Kawanaka, & Stigler, 1999). These mixed research-based developments represent what Greene (2007) referred to as a 'broad analytic concept' (p. 153) of 'using aspects of the analytic framework of one methodological tradition in the analysis of data from another tradition' (p. 155), which lead to cross-over mixed analyses [i.e., one or more analysis types associated with one tradition (e.g., qualitative analysis) are used to analyze data associated with a different tradition (e.g., quantitative data); Onwuegbuzie & Combs, 2010] or some form of integrated/integrative analysis (Bazeley, 2009; Bazeley & Kemp, 2012; Castro et al., 2010; Jang, McDougall, Pollon, Herbert, & Russell, 2008). Teddlie and Tashakkori (2009) declared that applying aspects of analytical frameworks of one tradition to data analysis within another tradition represents 'one of the most fruitful areas for the further development of MM analytical techniques' (p. 281).

Similarly, mixed researchers in the *radical middle* might embrace the transformation of traditional qualitative designs into mixed research designs, such as Johnson, McGowan, and Turner's (2010) MM version of grounded theory (i.e., which they labeled as 'MM-GT'; p. 65), which demonstrated that:

> Grounded theory can be tailored to work well in any of the 3 major forms of mixed methods research (i.e., qualitative dominant, equal status, and quantitative dominant). In equal-status MM research, MM-GT works well in connecting theory generation with theory testing, linking theory and practice, and linking general/nomological description/explanation with idiographic understandings of the human world.

Another example of a transformed qualitative design is Mayoh and Onwuegbuzie's (2012) MM version of phenomenological research (i.e., MMPR). The use of such designs, as well as the employment of cross-over and integrated/integrative mixed analysis techniques, has the potential to blur further the divide among qualitative research, quantitative research, and mixed research, making it even more nonsensical to use these terms: *MMR* and *mixed research*. Thus, I have a dream that, in time, we will enter a *fourth wave* or *fourth research movement*, where in the terms *qualitative research*, *quantitative research*, and *mixed research* are replaced with the term *research*, which 'embodies various disciplines with rich histories of perspectives and practice and is directly linked to the human condition simply because it involves people' (Frels, 2012, p. 190) that 'evolves from the practical applications of investigators' (Collins, 2012, p. 341) and that is framed by researchers' mental models at which point, instead of calling for *mixed researchers in the radical middle*, I can call for *researchers in the radical middle*. However, until then, I will continue to call for *mixed researchers in the radical middle*.

Conclusion

As can be seen, *mixed* is a very appropriate word for the mixed research community because it embodies the methodological thinker, the integrative/integrated/integral researcher, the xenophilous researcher, the empowerer, and the developer. In order to continue further this five-element conceptualization, I decided to map each of the seven excellent articles in this special issue onto the five attributes of mixed research. Specifically, I coded each special issue manuscript via a constant comparison analysis (Glaser & Strauss, 1967) using *a priori* coding (Constas, 1992) that was based on the five mixed research attributes. After coding all seven manuscripts, I subjected the themes extracted from each manuscript to a correspondence analysis, which is a technique for conducting a mixed analysis of themes (cf. Michailidis, 2007). I used the QDA Miner 4.0 software program (Provalis Research, 2011) to conduct the correspondence analysis. As such, my analysis represented a form of *cross-over mixed analysis* (Onwuegbuzie & Combs, 2010), consistent with the *radical in the middle* goal of being a developer.

My coding revealed that Oksana Parylo's article, which examines trends in mixed research in articles across eight peer-reviewed journals over a 10-year period, appears to represent the attribute of developer, as does Loraine Cook's article, wherein the author examined the efficacy of using mixed research techniques to explore differences in teaching approaches between teachers with an internal locus of control and those with an external locus of control. The article by Mary Kathryn Sheard, Steven Ross, and Alan Cheung, which provides a critical reflection of the use of mixed and blended methods in the first two years of a three year social and emotional

intervention program in schools in a religiously and cultural diverse region of Northern Ireland, appears to represent the attributes of methodological thinker, integrative/integrated/integral researcher, and empowerer. The article by Johannes Van der Walt and Ferdinand Potgieter, in which the authors used the metaphor of a picture frame to outline the four sides or *panels* of the philosophical frame typifying a researcher's research method, appears to represent the attribute of methodological thinker. Maja Miskovic's and Susan Gabel's article, wherein the authors explored methodological/epistemological tensions associated with combining qualitative and quantitative approaches and theoretical tensions arising from different ideological logics of justification that render the medical and social model of disability as being incongruent, appears to represent the attributes of methodological thinker and empowerer. Cheryl-Anne Poth's article, in which she compared two multi-year mixed research studies aimed at improving the post-secondary, large-class teaching and learning environments as a means of highlighting the role of a mixed methods practitioner (MMP) via the processes undertaken by the educational research teams, appears to represent the attributes of methodological thinker, integrative/integrated/integral researcher, empowerer, and developer. Finally, the article by Anna Fletcher and Greg Shaw, wherein they explored how primary school students engage in learning when they are able to identify their own learning goals and to determine their assessment criteria, and how they demonstrate mastery of learning outcomes, appears to represent the attribute of empowerer. Thus, the seven articles combined represented four of the five mixed research attributes, namely: methodological thinker, integrative/integrated/integral researcher, empowerer, and developer. However, the attribute of xenophilous researcher was not represented by any of the seven articles. Figure 2 displays the correspondence analysis of the five mixed research attributes relating to each article.

As noted by Per Kurowski (n.d.), the former executive director of the World Bank for Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Spain, and Venezuela (2002–2004), 'The radical middle or the extreme center is not any wishy-washy place to be, in a world where swimming to any of the ideological shores provides for a much calmer shelter.' In this introduction, I have attempted to position myself as a mixed researcher who is moving toward the *radical middle*, which represents a new theoretical and methodological

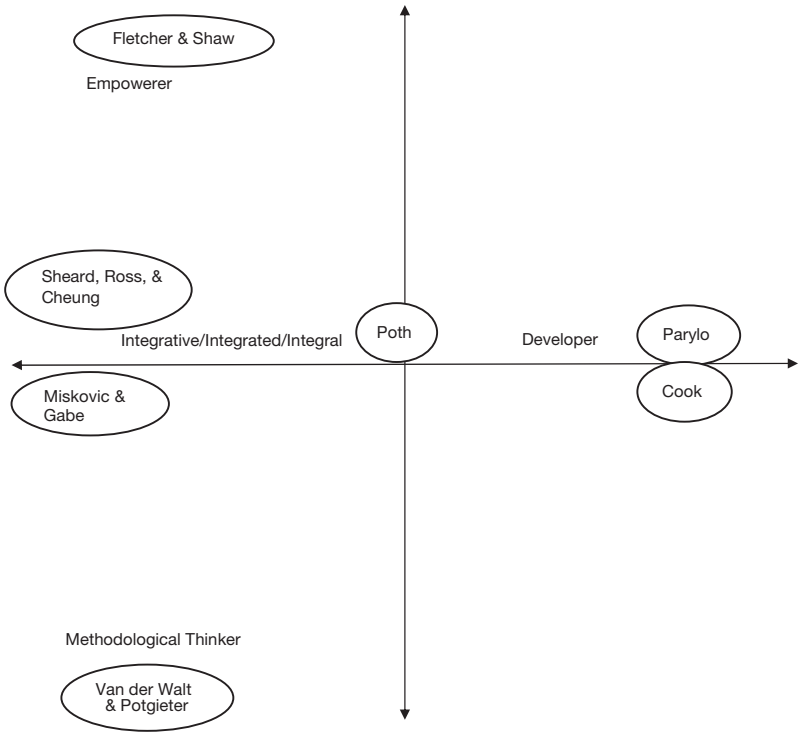

Figure 2: Correspondence analysis of the seven articles representing the special issue with respect to the themes of Methodological thinker, Integrative/integrated/integral researcher, Xenophilous researcher (not represented), Empowerer, and Developer

space in which a socially just and productive coexistence among all research traditions is actively promoted, and in which mixed research is consciously local, dynamic, interactive, situated, contingent, fluid, strategic, and generative. I identified mental models that problematize the current methodological divide. In so doing, I contend that moving toward the *radical middle* represents an important step in uniting research communities. I challenge mixed researchers to guide researchers from other communities toward a more constructivist view of epistemological spaces. In particular, by outlining five themes – represented by the acronym *mixed* – for promoting the *radical middle*, I provided a framework for putting the *mixed* back into quantitative and qualitative research in educational research and beyond.

In the postmodernist tradition, with the goal of deconstructing (i.e., opening space) the paradigm wars literature, I will end with an interpretive poem—or what some authors have called a found poetry (e.g., Prendergast, 2006), research experience poem, poem from the field, or data poem (cf. Lahman et al., 2010)—that captures some of the major themes of this article, which I have entitled:

Generation Q: A Dream for Mixed Researchers in the Radical Middle

QUAN researchers on one side;
QUAL researchers on the other;
Anyone in-between
ends up being smothered.

A research field built on division,
turmoil and tears.
Much blood has been spilt
throughout the years.

QUAN and QUAL researchers
claim the other tradition is flawed;
But when it comes to methodological tolerance
good practices are ignored.

QUAN and QUAL research
often has been segregated
And for those wanting unity,
this has been ill-fated.

Scholars from other fields
are extremely surprised;
for many can see through
this paradigmatic disguise.

All educational researchers
I think you will find,
compared to other fields
are many years behind.

Mixed research in some journals
has been virtually forbidden;
to publish in these journals
mixed research identities must be hidden.

Yet, the only sure way
for our field to survive,
is if we all make the effort
to change our research lives.

With so many unanswered questions,
it would be a shame
if our current research practices
remained the same.

All QUAN and QUAL researchers
must alter their ways;
relinquish the tensions
by ending all affrays;

QUAN and QUAL researchers
must forgive and forget
QUAN and QUAL researchers
must not pose as a threat.

QUAN and QUAL researchers
must move on from the past
and aim for a future
in which mixed research lasts.

Too many conflicts
have taken its toll—
It's imperative that researchers
reverse their role.

Grant funding agencies
must no longer be pandered;
by conducting mixed research,
we can change the Gold standard.

It is our duty
to act as their guides;
words are not enough
to help turn the tide.

Researchers in the radical middle
must work as a team;
for it is not too late
to fulfill our mixed research dream.

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